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EXHIBIT 1

JOINT STATEMENT FROM ELECTED PROSECUTORS PLEDGING TO WORK TOWARDS THE ELIMINATION OF THE DEATH PENALTY

February 2022

We are a bipartisan group of elected prosecutors representing communities across every region of the country. We come from large cities as well as small rural communities and we bring to our elected positions a wide range of backgrounds and decades of experience in the field of prosecution. We share a joint vision for a more fair, just, and accountable criminal legal system.

Many of us have been on the frontlines of the effort to reform the American death penalty. Others have witnessed — and in some cases been directly involved in — prosecutorial efforts to seek capital punishment. Although we hold varied opinions surrounding the death penalty and hail from jurisdictions with different starting points on the propriety of this sentence, we have all now arrived at the same inexorable conclusion: our country’s system of capital punishment is broken. It is time to work together toward systemic changes that will bring about the elimination of the death penalty nationwide.

The United States was one of only 18 countries, the only Western democracy, and the only country in the Americas to use the death penalty in 2020.¹ Not only do we continue to separate ourselves from our peer nations by imposing the death penalty, but we do so in a way that is — on a national scale — arbitrary and capricious. Today, we have a capital punishment system that costs taxpayers over \$1 million per death sentence, runs counter to our constitutional ban against cruel and unusual punishment and guarantees of due process and equal protection, fails as an effective deterrent, and does not reduce crime.²

Based on these and other concerns, 23 states to date have abolished the death penalty outright, while decades of Supreme Court precedent have limited its use. However, even as use of the death penalty continues to wane, far too many cases offer troubling examples of its application in situations that should concern us all. We stand together in urging all prosecutive leaders to, at a minimum, refuse to seek death sentences against individuals with cognitive impairments or otherwise diminished culpability, and to work to remedy past cases that resulted in unjust capital sentences.

¹ Death sentences and executions 2020, Amnesty International (2021), [amnesty.org/en/documents/act50/3760/2021/en/](https://www.amnesty.org/en/documents/act50/3760/2021/en/).

² Torin McFarland, The death penalty vs. life incarceration: A financial analysis Susquehanna University Political Review (2016), scholarlycommons.susqu.edu/cgi/viewcontent.cgi?article=1026&context=supr (calculated in 2015 dollars) (other studies have calculated costs in some states to be significantly higher; see the Death Penalty Information Center’s Facts About the Death Penalty for an overview of additional research at https://www.supremecourt.gov/opinions/urls_cited/ot2016/16-5247/16-5247-2.pdf); Michael Radelet & Traci Lacock, Do Executions Lower Homicide Rates: The Views of Leading Criminologists (2009), <https://scholarlycommons.law.northwestern.edu/cgi/viewcontent.cgi?article=7323&context=jclc>.

When the Supreme Court revived the death penalty in 1976, it did so on the premise that it would affect only the so-called “worst of the worst” — people who “commit a narrow category of the most serious crimes” and demonstrate “extreme culpability.”³ Yet today, nearly 50 years and countless reform efforts later, the death penalty still targets not the worst of the worst, but rather the unluckiest of the unluckiest: people who endured sexual abuse and other unspeakable trauma as children; people with long histories of severe mental illness or traumatic brain injuries, including people struggling with PTSD after serving in the military; people who committed crimes during a psychotic break they can’t even remember; people who, because of incomplete cognitive development or other intellectual disability, have never been able to fully function as adults; people with trial lawyers so derelict in their duties and obligations that they never bothered to uncover long histories of illness and trauma. This, tragically, is the profile of death row in America.

We have also seen that racial biases are embedded deep within our system of capital punishment. People of color have accounted for a disproportionate 44% of executions in the United States since 1976 and 58% of defendants currently awaiting execution are people of color.⁴ Black defendants accused of crimes against white victims are far more likely to receive the death penalty than other groups.⁵ Strikingly, while about 76% of all death penalty cases involve white victims, only one-half of all murder victims are white.⁶

The U.S.’s acceptance of capital punishment is particularly unconscionable given that we know our system too often convicts innocent people. At least 186 people on death row have been exonerated over the last half-century; for every nine people who have been executed since 1976, at least one condemned person has been exonerated.⁷ While we will never know how many innocent people we have executed, the National Academy of Sciences estimates that over 4% of current death row prisoners are innocent.⁸ And, even in cases that do not lead to a death sentence, the mere prospect of capital punishment can corrupt and corrode the workings of the justice system, compelling innocent people to plead guilty and witnesses to deliver false testimony. In fact, the use or threat of the death penalty was a factor in more than 13% of exonerations across the U.S. in 2019.⁹

³ *Gregg v. Georgia*, Oyez, [oyez.org/cases/1975/74-6257](https://www.oyez.org/cases/1975/74-6257); *Kansas v. Marsh*, Oyez, [oyez.org/cases/2005/04-1170](https://www.oyez.org/cases/2005/04-1170); *Roper v. Simmons*, Justia, supreme.justia.com/cases/federal/us/543/551/.

⁴ Death Penalty Information Center, Executions by Race and Race of Victim, deathpenaltyinfo.org/executions/executions-overview/executions-by-race-and-race-of-victim; Death Penalty Information Center, Current U.S. Death Row Population by Race, deathpenaltyinfo.org/death-row/overview/demographics.

⁵ ACLU, Race and the Death Penalty, aclu.org/other/race-and-death-penalty.

⁶ *Id.*

⁷ Executions by state and region since 1976, Death Penalty Information Center, deathpenaltyinfo.org/executions/executions-overview/number-of-executions-by-state-and-region-since-1976; Innocence, Death Penalty Information Center (2021), deathpenaltyinfo.org/policy-issues/innocence.

⁸ S.R. Gross et al., Rate of false conviction of criminal defendants who are sentenced to death, 111 Proceedings of the National Academy of Sciences 7230–7235 (2014), pnas.org/content/111/20/7230.

⁹ DPIC analysis: Use or threat of death penalty implicated in 19 exoneration cases in 2019, Death Penalty Information Center (2020), deathpenaltyinfo.org/facts-and-research/dpic-reports/dpic-special-reports/dpic-analysis-2019-exoneration-report-implicates-use-or-threat-of-death-penalty-in-19-wrongful-convictions.

We are duty-bound to counter these egregious injustices and we pledge to use our power as prosecutors, whenever and however it may be appropriate, to do so. For those of us in states where the death penalty is still permitted, we will uphold Supreme Court precedent and the interests of justice by refusing to seek the death penalty against people with intellectual disabilities, post-traumatic stress disorder, histories of traumatic brain injury, or other intellectual or cognitive challenges that diminish their ability to fully understand and regulate their own actions. We will support efforts to identify individuals currently on death row in our jurisdictions who experienced these challenges and to seek commutations or other just resolutions. We will also support efforts to overturn existing death sentences in cases that feature a colorable claim of innocence, racial bias, egregiously inadequate or negligent defense counsel, discovery violations, or other misconduct that render us unable to stand by the sentence in good faith. This is the bare minimum that justice demands of us.

As elected prosecutors, we serve as ministers of justice and are obligated to seek outcomes that advance equity, fairness, community safety, and the rule of law. And we are also obligated to reject arbitrariness, racism, and cruelty. We pledge to abide by these obligations by refusing to seek the death penalty against individuals with cognitive impairments or otherwise diminished culpability. And we further commit to work toward the elimination of our nation's failed death penalty system, once and for all.

Respectfully,

Buta Biberaj

Commonwealth's Attorney, Loudoun County, Virginia

Chesa Boudin

District Attorney, City and County of San Francisco, California

Aisha Braveboy

State's Attorney, Prince George's County, Maryland

John Choi

County Attorney, Ramsey County (St. Paul), Minnesota

Laura Conover

County Attorney, Pima County (Tucson), Arizona

Dave Clegg

District Attorney, Ulster County, New York

John Creuzot

District Attorney, Dallas County, Texas

Satana Deberry

District Attorney, Durham County, North Carolina

Parisa Dehghani-Tafti

Commonwealth's Attorney, Arlington County and the City of Falls Church, Virginia

Steve Descano

Commonwealth's Attorney, Fairfax County, Virginia

Thomas J. Donovan Jr.

Attorney General, Vermont

Michael Dougherty

District Attorney, 20th Judicial District (Boulder), Colorado

Mark Dupree

District Attorney, Wyandotte County (Kansas City), Kansas

Matt Ellis

District Attorney, Wasco County, Oregon

Keith Ellison

Attorney General, Minnesota

Ramin Fatehi

Commonwealth's Attorney, City of Norfolk, Virginia

Kimberly M. Foxx

State's Attorney, Cook County (Chicago), Illinois

José Garza

District Attorney, Travis County (Austin), Texas

George Gascón

District Attorney, Los Angeles County, California

Sarah F. George

State's Attorney, Chittenden County (Burlington), Vermont

Sim Gill

District Attorney, Salt Lake County, Utah

Deborah Gonzalez

District Attorney, Western Judicial Circuit (Athens), Georgia

Eric Gonzalez

District Attorney, Kings County (Brooklyn), New York

Mark Gonzalez

District Attorney, Nueces County (Corpus Christi), Texas

Christian Gossett

District Attorney, Winnebago County, Wisconsin

Andrea Harrington

District Attorney, Berkshire County, Massachusetts

Jim Hingeley

Commonwealth's Attorney, Albemarle County, Virginia

John Hummel

District Attorney, Deschutes County, Oregon

Elizabeth K. Humphries

Commonwealth's Attorney, Fredericksburg, Virginia

Natasha Irving

District Attorney, 6th Prosecutorial District, Maine

Kathy Jennings

Attorney General, Delaware

Melinda Katz

District Attorney, Queens County, New York

Alexis King

District Attorney, 1st Judicial District, Colorado

Lawrence Krasner

District Attorney, Philadelphia, Pennsylvania

Rebecca Like

Acting Prosecuting Attorney, County of Kaua'i, Hawaii

Edward E. Manisuban

Attorney General, Northern Mariana Islands

Brian S. Mason

District Attorney, 17th Judicial District, Colorado

Beth McCann

District Attorney, 2nd Judicial District (Denver), Colorado

Stephanie Morales

Commonwealth's Attorney, Portsmouth, Virginia

Jody Owens

District Attorney, Hinds County, Mississippi

Alonzo Payne

District Attorney, 12th Judicial District, Colorado

Joseph Platania

Commonwealth's Attorney, City of Charlottesville, Virginia

Bryan Porter

Commonwealth's Attorney, City of Alexandria, Virginia

Karl Racine

Attorney General, District of Columbia

Jeff Rosen

District Attorney, Santa Clara County, California

Marian Ryan

District Attorney, Middlesex County, Massachusetts

Dan Satterberg

Prosecuting Attorney, King County (Seattle), Washington

Eli Savit

Prosecuting Attorney, Washtenaw County (Ann Arbor), Michigan

Mike Schmidt

District Attorney, Multnomah County (Portland), Oregon

Carol Siemon

Prosecuting Attorney, Ingham County (Lansing), Michigan

David Sullivan

District Attorney, Northwestern District, Massachusetts

Shannon Taylor

Commonwealth's Attorney, Henrico County, Virginia

Suzanne Valdez

District Attorney, Douglas County (Lawrence), Kansas

Matthew Van Houten

District Attorney, Tompkins County, New York

Andrew Warren

State Attorney, 13th Judicial Circuit (Tampa), Florida

Todd Williams

District Attorney, Buncombe County (Asheville), North Carolina

EXHIBIT 2

Identifinders INTERNATIONAL

Colleen Fitzpatrick, PhD
Identifinders International
18198 Aztec Ct., Fountain Valley, CA 92708
Cell: (714) 296-3065

SPECIAL PROJECTS

2010-Present Identifinders International, Forensic Genealogist on Cold Cases for Law Enforcement Agencies

Key successes: Sarah Yarborough homicide, first case attempted using genetic genealogy, and the Phoenix Canal Murders, the first case solved using genetic genealogy. Both cases placed fifth in the Gordon, Honeywell, Thomas Cold Case Hit of the Year competition. Sarah Yarborough (2020), 5th out of 50 cases from 20 countries; Phoenix Canal Murders (2018), 5th among 64 cases from 14 countries. Many other successes.

Over 300 cold case homicides, serial killer, and John/Jane Doe cases including: Grim Sleeper (LA Sheriff's Office), Golden State Killer (multiple CA LE agencies), Oberholzer-Schnee murders (Park Co CO Sheriff's Office), Bennett murders (Aurora CO PD), The Boy in the Box (Philadelphia PD), Carlton Man (Victoria Australia Inst For Sci). List provided upon request.

Develop't of new Y-DNA and autosomal SNP testing techniques for generating leads in cold cases. Clients include NYPD, Office of the Chief State's Attorney for CT, Orange Co CA Sheriff's Office, Snohomish Co. Sheriff's Office, San Diego Co DA's Office Cold Case Homicide Team, Philadelphia Medical Examiner's Office and more.

2017-2020 Co-Executive Director & Co-Founder, DNA Doe Project, Orange County, CA

Applying innovative DNA analysis techniques to the resolution of decades-old John and Jane Doe cases. Clients include US Marshall's Office of N Ohio, Meriden CT PD, Snohomish Co., WA Medical Examiner's Off, Lawrence Co, OH Coroner's Off. Many other success stories.

Jun'13-Dec'16 Forensic Genealogist, Lori Ruff Identification

Identified identity theft Lori Erica Kennedy, using genetic genealogy. Efforts by the FBI and the SSA fraud division had not been successful.

Apr '15-Pres Forensic Genealogist, Somerton Man Identification

Forensic genealogist on the identification of the body found on Somerton Beach near Adelaide in 1948. Program Manager: Dr. Derek Abbott of University of Adelaide.

Oct '10-Pres Forensic Genealogist, Abraham Lincoln DNA Project

Forensic genealogist advisor on DNA analysis and obtaining project funding to investigate Abraham Lincoln's extended family for DNA testing.

Mar '09-Pres Forensic Genealogist and Co-Director, *The Mascot*, Potential Holocaust Fraud

Team leader and strategist on potential Holocaust literary fraud *The Mascot* by Mark Kurzem based in Adelaide, Australia.

Sep 2008 Forensic Genealogist, Herman Rosenblat Holocaust Fraud Exposure

Strategist and researcher for team that exposed Herman Rosenblat's soon-to-be-published and Oprah-touted best-selling "apple over the fence" Holocaust memoir as a fraud

- Mar 2008** **Chair and Organizer**, Forensic Science Workshop and Panel Discussion, Defense and Security Symposium, SPIE Optical Society, Orlando, FL
- Feb 2008** **Forensic Genealogist Misha Defonseca Holocaust Fraud Exposure**
Strategist and researcher for team that exposed Misha Defonseca's best-selling Holocaust memoir *Surviving with Wolves* as a fraud
- 2008-Pres** **Forensic Genealogist, Independent Consultant, the Search for Amelia Earhart**
Located a family reference for Fred Noonan, Amelia Earhart's navigator for DNA testing the remains found on Gardner Island in the Pacific.
- 2007-2008** **Forensic Genealogy Consultant, US Armed Force DNA Id'n Laboratory, Rockville, MD**
- **Identification of the Unknown Child on the Titanic**
- **The Hand in the Snow (Northwest Flight 4422) Project** - Identification of remains of a merchant mariner killed in crash of Northwest Airlines Flight #4422, Alaska, Mar 18, 1948
- Mar 2007** **Chair and Organizer**, Forensic Science Workshop and Panel Discussion, Defense and Security Symposium, SPIE Optical Society, Orlando, FL
- 2006-2008** **Forensic Genealogy Consultant, Hebron Investments, Scottsdale, AZ**
Locating owners of unclaimed property based on a name and a last known address sometimes over 20 years old. Specializing in international locations including Taiwan, Japan, Hong Kong, Venezuela, Argentina, Panama, Guatemala, the US, Canada, the Netherland Antilles, Estonia, Lebanon, Morocco, France, Italy, and England.

EDUCATION

PhD	Duke University	Nuclear Physics	1983
MS	Duke University	Physics	1983
BA	Rice University	Physics	1976

MEMBERSHIPS AND HONORS

2022	Affiliate, Victoria Institute of Forensic Medicine, Victoria, Australia
2022	Member, Australia New Zealand Forensic Science Society (ANZFSS)
2021	Member, TX Off of the Att'y Gen Cold Case and Missing Persons Unit Advisory Committee
2020	5 th Place, Gordon, Thomas, Honeywell Cold Case DNA Hit of the Year
2020	Member, American Academy of Forensic Science
2020	Vidocq Society Member
2019	Citizen of the Year, US Marshal of N. Ohio Violent Fugitive Task Force
2015	5 th Place, Gordon, Thomas, Honeywell Cold Case DNA Hit of the Year
2011 - 2014	Adjunct Professor, Boston University
2007 - 2010	Fellow SPIE optical society (retired)
1985 - 2010	SPIE optical society

GENEALOGY AWARDS

Spring 2010	International Society of Family History Writers and Editors (ISFHWE) First Place, Article Category, "One Man, Two Names, Three Families", <i>Ancestry Magazine</i> , July/August 2009
Spring 2008	International Society of Family History Writers and Editors (ISFHWE) First Place, Article Category, "Clues Around the House", <i>Ancestry Magazine</i> , May/June 2007

- Sept 2007 Armed Forces DNA Identification Laboratory Service Medal for success in identifying the remains of a serviceman found in the wreckage of the 1948 Alaskan plane crash of Northwest Flight 4422
- Spring 2007 International Society of Family History Writers and Editors (ISFHWE) Second Place, Article Category 2006, “Genealogy Meets CSI”, *Family Tree Magazine*, April 2006

EMPLOYMENT HISTORY

- 2010-Present Founder, Identifinders International, Fountain Valley, CA**
Development of innovative DNA analysis techniques for cold cases and the identification of John and Jane Does. Cold case work for numerous police departments, sheriff offices, and medical examiners throughout the US. Responsible for solving the 2010 Lori Ruff Case and the 1991 Phoenix Canal Murders. Consultant to various media companies.
- 2017-2020 Executive Director & Co-Founder, DNA Doe Project, Orange County, CA**
With genetic genealogist Margaret Press, founded the DDP to identify John and Jane Does using genetic genealogy and to develop innovative methods of DNA identification. DDP was the first to make forensic identification using genetic genealogy, weeks before the Golden State Killer identification was announced.
- 2005-2016 Author and Consultant, Andrew S. Yeiser & Associates, Huntington Beach, CA**
Consultant on forensic identification projects such as The Hand in the Snow (Crash of Northwest Flight 4422), the Identification of the Unknown Child on the Titanic, and the Amelia Earhart project. The exposure of three international Holocaust literary frauds. Publishing, marketing, and book sales relating to Forensic Genealogy. Independent consultant for international searches for owners of unclaimed property.
- 1989 – 2005 Founder and Partner, Rice Systems, Inc., Huntington Beach, CA**
Independent contractor to NASA, the Department of Defense, the National Science Foundation, the National Institutes of Health, DARPA, and other government and civilian agencies on the development of high resolution laser and optical measurements techniques. Subcontractor on sensor system design to Northrup Grumman on the Jupiter Icy Moon Orbiter (JIMO) project.
- 1987-1989 Senior Scientist and Project Manager, Spectron Development Laboratories, Costa Mesa, CA**
Principal Investigator, NASA Lite Laser, the first laser on the Space Shuttle, to be used for lidar spectroscopy off cloud tops; Development of innovative high resolution laser measurement system for aero optic measurements on the High Endoatmospheric Interceptor (HEDI) program and for nondestructive testing of the Tow missile warhead rocket motor body.
- 1984-1987 Member of the Technical Staff, Rockwell International, Seal Beach, CA**
Task leader, Coherent Optical Radar Amplifier (CORA) program. Bi-Directional Reflection Function (BRDF) test station development. Software modeling of re-entry vehicle reflection geometries; micro array processing.

1982-1984 **Lecturer, Division of Chemistry and Physics, Sam Houston State U, Huntsville, TX**
 Developed new courses and laboratories in graduate and undergraduate physics. Taught all levels of coursework from introductory physics to graduate level quantum mechanics.

LIST OF SPEAKING ENGAGEMENTS AND SEMINARS ORGANIZED BY INDUSTRY

Law Enforcement Training, Workshops and Seminars

20 Jul 2022	Idaho State Police Headquarters, Meriden, ID
May 17-Jun 17, 2022	Third Australian FGG Training Workshop, Australian Federal Police
Apr 26-28, 2022	Wilmington University Violent Crime Training Seminar, Wilmington DE
Apr 5-19, @2022	Second Australian FGG Training Workshop, Australian Federal Police
Oct 14-19, 2021	South East Homicide Investigator's Association, San Antonio, TX
Oct 27, 2021	North Carolina Homicide Investigations Association, Carolina Beach, NC
Oct 19, 2021	California Association of Criminalists, Scotts Valley, CA
Jun 7-8, 2021	North Carolina Special Bureau of Investigation, Raleigh, NC
May 12-13, 2021	Blue Line Training Group, Myrtle Beach, SC
Feb-Mar 2021	Pilot Workshop on FGG, Australian Federal Police
Feb 15, 2021	American Academy of Forensic Science – Forensic Genealogy Workshop (Virtual)
Dec 2, 2020	Blue Line Training Group Forensic Science Training Seminar (Virtual)
Sep 22, 2020	Idaho National Forensic Science Webinar
Jul 15, 2020	Vidocq Society Webinar
Mar 9-13, 2020	Rocky Mountain Information Network, Pocatello, Meridian, Coeur d'Alene, ID
Dec 18, 2019	Ventura County Forensic Genealogy Training Seminar
Dec 4-6, 2019	National Forensic Academy, Knoxville, TN
Nov 20, 2019	Forensic Genealogy Training Seminar, Seattle WA
Oct 31, 2019	Institute for Forensic Science, Houston, TX
Oct 28, 2019	Blue Line Group Forensic Science Training Seminar, Georgetown TX
Aug 27-28, 2019	Arizona 2d Annual Cold Case Training Seminar, Phoenix, AZ
Sep 25, 2019	Best Practices for Cold Cases
Sep 24, 2019	International Symposium on Human Identification, Palm Springs, Genetic Genealogy as a Tool for Solving Cases Tabletop Discussion
Sep 23, 2019	International Symposium on Human Identification, Palm Springs, CA Family Ties: Using Genetic Genealogy to Solve Violent Crimes
Sep 15-18, 2019	International Symposium on Human Identification, Palm Springs, CA
Aug 27, 2019	Missing and Unidentified Persons Conference, Las Vegas, NV
Jul 31-Aug 1, 2019	Arizona Homicide Investigators Association, Chandler, AZ
Jul 21-25, 2019	Governor's Council on Public Safety, Las Vegas, NV
Jun 6, 2019	International Asso of Coroner's & Medical Examiners Conf, Las Vegas, NC
May 7, 2019	Sexual Assault Kit Initiative Grantees Meeting, Washington DC
May 3, 2019	Washoe County Sheriff's Office Seminar, Reno, NV
Apr 5, 2019	Arizona Forensic Science Academy, Chandler, AZ
Jan 31, 2019	Nevada State DNA Analyst Meeting, Las Vegas, NV
Jan 22, 2019	Orange County Homicide Association, Santa Ana, CA
Dec 11, 2018	National Forensic Academy Webinar
Dec 10, 2018	Orange County, CA District Attorney's Training Workshop, Santa Ana, CA
Dec 4, 2018	San Diego County District Attorney's Office Training Workshop
Oct 25, 2018	2018 Palm Beach County Homicide Conference, Palm Beach, CA
Oct 10, 2018	Northeast Association of Forensic Scientists (NEAFS), Bolton Landing, NY
Sep 6, 2018	National Forensics Academy Webinar San Diego Law Enforcement Lunch Seminar

Aug 8, 2018	California Dept of Justice, Richmond, CA
Jun 15, 2018	National Sheriff's Association Conference, Washington DC
Jun 12, 2018	Florida Sheriff's Association Cold Case Advisory Committee, Pasco Co., FL
May 7, 2018	National Forensic Academy Webinar
Feb 5-6, 2018	Arizona Cold Case Conference, Phoenix, AZ
Sep 25, 2017	Arizona Forensic Science Academy Genetic Genealogy Webinar
Apr 24, 2017	Simsbury, CT Police Department and Forensic Science Academy
Jan 26, 2017	National Forensics Academy Symposium, Knoxville, TN
Jan 12, 2017	San Diego Co. Cold Case Homicide Investigators, San Diego, CA
Oct 21, 2016	Enfield, CT Police Department
May 21, 2015	Phoenix Police Department, Phoenix AZ

Scientific Organizations

Aug 4, 2022	Texas Innocence Project, Austin, TX
Jan 21-25, 2022	American Academy of Forensic Science, Seattle, WA
Oct 5, 2021	SAKI Conference, (Virtual)
Sep 16, 2021	International Symposium on Human Identification, Orlando, FL
May 19, 2021	ANZFSS and the Australian federal Police (Virtual)
Feb 18, 2021	American Academy of Forensic Science The Last Word Society (Virtual)
Feb 16, 2021	American Academy of Forensic Science Evening Session (Virtual)
Dec 4, 2020	Henry C Lee Institute of Forensic Science, Keynote Speaker, Forensic Genealogy
Sep 14-16, 2020	International Symposium on Human Identification (ISHI) Virtual Conference
Feb 16-21, 2020	American Academy of Forensic Science, Anaheim, CA
Dec 9, 2019	University of North Texas Invited Lecture, Denton, TX
Oct 18-20, 2019	Banbury Conference, Cold Spring Harbor Landing, NY
Sep 22-26, 2019	International Symposium on Human Identification (ISHI), Palm Springs, CA
Feb 21, 2019	American Academy of Forensic Science, Baltimore, CA
Sep 23-27, 2018	International Symposium on Human Identification (ISHI), Phoenix, AZ
Feb 22, 2018	American Academy of Forensic Science, Seattle, WA (Three talks)
Oct 4, 2017	International Symposium on Human Identification (ISHI), Seattle, WA
Feb 16, 2017	American Academy of Forensic Science, The Last Word Society, New Orleans, LA
Oct 24, 2016	West Virginia University Dept of Forensic Science, Morgantown, WV
Sep 28, 2016	International Symposium on Human Identification (ISHI), Minneapolis, MN
Feb 26, 2016	American Academy of Forensic Science (Chaired Session), Las Vegas, NV
Nov 7, 2015	Triangle Universities Nuclear Lab 50 th Anniversary Celebration – Durham, NC
Oct 14, 2015	International Symposium on Human Identification (ISHI), Grapevine, TX
Sep 30, 2014	International Symposium on Human Identification, Phoenix Poster, AZ
May 29, 2014	New Zealand Forensic Society, Wellington, NZ
Apr 23, 2014	Louisiana Association of Forensic Scientist, Baton Rouge, LA
Feb 20, 2014	American Academy of Forensic Science, Seattle, WA
Jan 16, 2014	N Texas State University Center for Human Identification Fire Talk, Ft Worth, TX
October 9, 2013	International Symposium on Human Identification, Atlanta, GA
April 26, 2011	SPIE Defense Security Symp, Women in Optics Featured Speaker, Orlando., FL
Apr 6, 2011	Hartford Police Dept, Hartford, CT
November 7, 2010	5th Eur. Bioinformatics Inst Conf on Cheminformatics, Goslar, Germany (Keynote)
October 11, 2010	International Symposium on Human Identity, San Antonio, TX
June 8, 2010	Forensic Consultants Association, San Diego, CA
October 2009	International Symposium on Human Identity, Las Vegas, NV
March 2009	Annual Meeting of the American Chemical Society, Salt Lake City, UT
April 24, 2008	Triangle Universities Nuclear Laboratory (TUNL), Duke University
March 2008	RUSAL Co., Aughinish Island, Co. Limerick, Ireland
March 2007	Defense Security Symposium, Orlando, FL

March 2008	Defense Security Symposium, Orlando, FL
July 11, 2006	Jet Propulsion Laboratory, Pasadena, CA
January 2004	41 st Aerospace Scis Meeting-Amer Inst Aeronautics & Astronautics, Reno, NV
January 2003	40 th Aerospace Sciences Meeting-AIAA, Reno, NV
June 2001	35 th Thermophysics Conference, AIAA, Anaheim, CA
November 2000	Army Science Conference, Baltimore, MD
September 2000	AIAA Space 2000 Conference and Exposition, Long Beach, CA
November 1999	Joint Services Data Exchange, Norfolk, VA
November 1998	Joint Services Data Exchange, Anaheim, CA
September 1997	International Conference on Optical Holography and its Applications, Kiev, Ukraine
September 1997	Fringe '97, Bremen, Germany
June 1997	European Symposium on Lasers and Optics in Manufacturing, Munich, Germany
November 1996	Joint Services Data Exchange, Orlando, FL
May 1992	International Conference on Lasers and Optoelectronics, Beijing, China
1991-2003	Annual presentations given at Laser & Optics Society for Photoinstrumentation Engineers (SPIE), San Diego, CA
1991-2003	Annual presentations given at Photonics West Society for Photoinstrumentation Engineers (SPIE), San Jose, CA

Historical Societies

Apr 30, 2016	Titanic Historical Society, Boston, MA
April 25, 2015	Mayflower Society of Orange Co., Fountain Valley, CA
July 13, 2013	MacGiolphadraig Historical Society, Kilkenny City, Ireland
July 10, 2010	MacGiolphadraig Historical Society, Kilkenny City, Ireland
October 14, 2008	Garway Historical Society, Garway, Herefordshire, United Kingdom
May 10, 2008	Sons of the American Revolution, Orange Co., CA
November 17, 2007	Orange Co., Mayflower Society, Orange Co., CA
October 15, 2007	Mojave Chapter, DAR, Fullerton, CA
July 4, 2007	County Louth, Ireland, Historical Society
July 7, 2007	MacGiolphadraig Historical Society, Kilkenny City, Ireland
June 17, 2007	Scottish Highland Games, Oak Brook, IL
June 16, 2006	Scottish Highland Games, Oak Brook, IL
January 28, 2006	American History Society of Germans from Russia, Long Beach, CA

Nonprofit Organizations and Education and Religious Groups

Oct 14, 2021	Rotary Club of Orange County
May 27, 2021	Rotary Club of Orange County Webinar
Mar 21, 2021	Mensa of Orange County Webinar
Mar 14, 2021	PEO Women's Club, Huntington Beach, CA Webinar
Nov 6, 2020	New Jersey Institute of Technology, Forensic Science Guest Webinar
Oct 13, 2020	Univ of South Florida, Cold Case Guest Lecture of Forensic Genealogy Webinar
Jul 7, 2020	Temple Emanu-El-Beth Sholom, Montreal, Canada Webinar
Mar 17, 2020	PEO Women's Group, Huntington Beach, CA
Feb 27, 2020	International Committee of the Red Cross Webinar, Tbilisi, GA Webinar
Feb 23, 2020	Orange County Sisters in Crime, Irvine, CA
Jan 26, 2020	Orange County MENSA Speaker's Forum
Oct 17, 2019	Rotary Club of Orange County, Anaheim, CA
Oct 12, 2019	Family History Center of Orange County Keynote, Orange, CA
Oct 2, 2019	Forensic Institute for Research & Education, Middle TN State U, Murfreesboro, TX
Sep 28, 2019	PEO Women's Group, Costa Mesa, CA
Aug 9, 2019	PEO Women's Group, Costa Mesa, CA

April 16, 2019	PEO Women's Group, Huntington Beach, CA
Mar 29, 2019	Duschesne University, Pittsburgh, PA (Keynote)
Feb 4, 2019	Evolutionary Anthropology Program, California State University, Fullerton
Jan 17, 2019	Covenant Presbyterian Church Women's Fellowship Luncheon & Prog, Orange, CA
Sep 21-22, 2019	Kin Finder Symposium, Washington DC
Aug 2, 2018	Rotary Club, Orange Co., CA
May 11, 2018	Truckee Valley Community College Webinar
Apr 26, 2018	Orange Co Public Library, Rossmore, CA
Mar 30, 2018	Truckee Valley Community College Webinar
Mar 16, 2018	San Clemente Library, San Clemente, CA
Nov 9, 2017	Women's League of Orange County, CA
Aug 10, 2017	Rotary Club of Orange Co., Tustin, CA
Apr 2, 2017	Patchogue-Medford Library, Patchogue, NY
Mar 1, 2017	SPEO, Villa Park, CA
Feb 22, 2017	Patrick F. Taylor Science and Technology Academy, Avondale, LA
Feb 14, 2017	Fountainbleu School, Mandeville, LA
Feb 13, 2017	Louisiana State Archives, Baton Rouge, LA
Jan 26, 2018	National Forensic Academy, Oak Ridge, TN
Sep 9 2016	Sunshine Club, Leisure World, Seal Beach, CA
July 24, 2016	Sunshine Club, Leisure World, Seal Beach, CA
July 17, 2015	Sunshine Club, Leisure World, Seal Beach, CA
Jun 18, 2016	Computer Assisted Genealogy Group of Northern Illinois Webinar
Jun 9, 2016	Rotary Club of Orange Co., Tustin, CA
May 1, 2015	Learning is for Everyone (LIFE), Oceanside, CA
April 20, 2015	Auckland Central Library, Auckland, New Zealand
April 14, 2015	National Trust of Australia, Adelaide, Australia
October 14, 2014	Aviara Women's Society, Carlsbad, CA
October 1, 2014	Phoenix Police Department
June 28, 2012	Rotary Club of Orange Co., Costa Mesa, CA
July 18, 2011	Southwestern Manuscripters, Manhattan Beach, CA
March 19, 2011	Los Angeles Public Library, Los Angeles, CA
October 26, 2010	Santiago Canyon College, Orange, CA
June 24, 2010	Temple Beth Emet, Anaheim, CA
December 28, 2009	Temple Beth Emet, Anaheim, CA
November 12, 2009	Rooster's Club, Costa Mesa, CA
November 5, 2009	Coto de Caza Rotary Club, Coto de Casa, CA
October 20, 2009	Paine Elementary School, Garden Grove, CA
October 17, 2009	Los Angeles Archives Bazaar
September 12-14, 2008	Mensa Education and Research Foundation Conference, Salt Lake City
June 18, 2007	St. Andrew's Society, Scottish Hall, Chicago, IL
October 15, 2006	Los Angeles Public Library, Los Angeles, CA
August 5, 2006	Bluebonnet Library, Baton Rouge, LA
June 14, 2006	Scottish Hall, Chicago, IL
April 24, 2006	Louisiana State Archives, Baton Rouge, LA
April 19, 2006	Jefferson Women's Auxiliary, Metairie, LA
April 18, 2006	Jefferson Parish Public Library, Metairie, LA

Genealogical Societies

2021

Jul 17, 2021	Friends of the Plano Library Webinar
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Apr 11, 2021

Czech Area Genealogy Club Webinar

2020

Jan 26, 2021

North San Diego Genealogical Society Webinar

Sep 15, 2020

Conejo Valley Genealogical Society Webinar

Jul 18, 2020

South Orange County Genealogical Society Webinar

Jun 20, 2020

North San Diego Genealogical Society DNA Group Webinar

Jan 28, 2020

North San Diego Genealogical Society, Carlsbad, CA

2019

Nov 4, 2019

Chicopee Public Library, Chicopee, MA

Nov 3, 2019

Jewish Genealogical Society of Greater Boston, Boston, MA

Nov 2, 2019

Polish Genealogy Society of Massachusetts 30 Anniversary, Chicopee, MA

Oct 6, 2019

Czech Area Genealogical Society, Anaheim, CA

May 15, 2019

Genealogy Society of North Orange County CA, Yorba Linda, CA

2018

Sep 21-23, 2018

Kin Finders Seminar, Arlington, VA

Sep 15, 2018

Friends of the Plano Libraries, Plano, TX

Aug 18, 2018

Fitzpatrick Clan Society International Gathering, Portlaoise, Laois, Ireland

May 23, 2018

Leisure World Genealogy Club, Seal Beach, CA

Apr 18, 2018

Genealogical Society of N Orange Co, CA, Yorba Linda, CA

2017

Oct 17, 2017

Placentia Library and Orange Co. CA Genealogical Society, Placentia, CA

Oct 9, 2017

Laguna Village Genealogy Club, Laguna Woods, CA

May 20, 2017

Los Angeles County Public Library, Los Angeles, CA

May 6, 2017

Orange County, CA Genealogical Society, Huntington Beach, CA

Mar 18, 2017

Southern Orange Co CA Genealogical Society, Mission Viejo, CA

Mar 12, 2017

Jewish Genealogical Society of San Diego, San Diego, CA

Feb 14, 2017

New Orleans Genealogical Society, Jefferson Parish, LA

Jan 29, 2017

Czech Area Genealogical Society, Santa Ana, CA

Jan 18, 2017

Georgia Genealogical Society Webinar

Jan 4, 2017

Western MA Genealogical Society Webinar

2016

Oct 22, 2016

Polish Genealogical Society of CT and NE

Oct 20, 2016

Polish Genealogical Society of MA

Sep 19, 2016

Laguna Woods Village Genealogy Club, Laguna Woods, CA

May 18, 2016

South Bay Cities Genealogical Society, Torrance, CA

May 7, 2016

Orange County California Genealogical Society, Huntington Beach, CA

Apr 23, 2016

Qualcum Genealogical Society, Nanaimo, British Columbia, Canada

Feb 17, 2016

Georgia Genealogical Society Webinar via Internet

2015

Sept 26, 2015

Finlandia University Webinar, via Internet

June 24, 2015

Seal Beach Genealogy Club, Seal Beach, CA

June 9, 2015	Family History Library, Salt Lake City, UT
April 22, 2015	An Afternoon with Colleen Fitzpatrick, Forensic Genealogist, NZSG, Auckland, NZ
April 19, 2015	New Zealand Society of Genealogists, Auckland, New Zealand
April 18, 2015	Queensland Fam Hist Soc & Genealogical Soc of Queensland, Brisbane, Australia
April 15, 2015	S. Australian Society of Genealogy and Heraldry, Unley, Australia
April 12, 2015	VICGUM and the Genealogical Society of Victoria, Melbourne, Australia
April 9, 2015	Botany Bay Genealogical Society, Botany Bay, Australia
April 7, 2015	Australian Society of Genealogists, Sydney, Australia
Mar 31, 2015	Heraldry and Genealogy Society of Canberra, Canberra, Australia
Mar 26-30, 2015	14 th Australiasian Congress on Genealogy and Heraldry, Canberra, Australia
Mar 8, 2015	Jewish Genealogical Society, San Diego, CA
Feb. 8, 2015	Czech Area Genealogy Club, Anaheim, CA
Jan 31, 2015	Southern California Genealogical Society, Burbank, CA

2014

October 3-4, 2014	Lincoln-Lancaster County Genealogical Society, Lincoln, NE
June 20, 2014	Auckland, NZ Chapter Society of New Zealand Genealogists
June 18, 2014	Hamilton, NZ Chapter Society of New Zealand Genealogists
June 17, 2014	Rotorua, NZ Chapter Society of New Zealand Genealogists
June 14, 2014	Invercargill, NZ Chapter Society of New Zealand Genealogists
June 12, 2014	Dunedin, NZ Chapter Society of New Zealand Genealogists
June 10, 2014	Oamaru, NZ Chapter Society of New Zealand Genealogists
June 8, 2014	Christchurch, NZ Chapter Society of New Zealand Genealogists
June 5, 2014	Nelson, NZ Chapter Society of New Zealand Genealogists
May 30 – June 2, 2014	New Zealand Society of Genealogists, Wellington (Keynote)
April 16, 2014	South Bay Cities Genealogical Society, Torrance, CA
March 29, 2014	North San Diego Genealogical Society, Carlsbad, CA
March 22, 2014	Clark County Genealogical Society, Las Vegas, NV
March 18, 2014	Wisconsin State Genealogical Society Webinar
March 15, 2014	Williamson County Genealogical Society, Round Rock, TX
March 1, 2014	Orange County, CA Genealogical Society, Huntington Beach, CA
February 19, 2014	Association of Professional Genealogists, Heartland Chapter Webinar
February 14, 2014	New Orleans Genealogical Society, New Orleans, LA

2013

November 2, 2013	Orange County California Genealogical Society, Huntington Beach, CA
September 16, 2013	Los Angeles Jewish Genealogical Society, Los Angeles, CA
August 5, 2013	International Association of Jewish Genealogical Societies Conference, Boston, MA
July 13, 2013	Fitzpatrick Clan Society International Gathering, Kilkenny, Co. Kilkenny, Ireland
June 2, 2013	Czech Area Genealogical Society, Anaheim, CA
May 8-11, 2013	National Genealogical Society National Conf, Las Vegas, NV – Featured Speaker
April 25-27, 2013	Ohio Genealogical Society Conference, Cincinnati, OH - Featured Speaker
April 17-21, 2013	New England Regional Genealogical Conf, Manchester, NH - Featured Speaker
January 22, 2013	North San Diego County Genealogical Society, Carlsbad, CA

2012

October 27, 2012	St. Tammany Parish Genealogical Society, St. Tammany, LA (webinar via Skype)
October 7, 2012	Czechoslovak Area Genealogical Society (CAGS), Anaheim, CA
June 1-3, 2012	Ontario Genealogical Society, Kingston, Ontario, Canada – Keynote Speaker
May 6, 2012	Jewish Genealogical Society of Los Angeles, Los Angeles, CA

April 2, 2012	VicGum Genealogical Society, Melbourne, Australia
March 31, 2012	Port Adelaide Nautical Museum, Port Adelaide, South Australia
March 28-31, 2012	13 th Australasian Congress on Genealogy and Heraldry, Keynote Speaker, Adelaide,
February 24, 2012	North San Diego County Genealogical Society, Carlsbad, CA
February 11, 2012	Pinellas County Genealogical Society, Pinellas, FL
February 4, 2012	Hill County Genealogical Society, San Antonio, TX

2011

October 29, 2011	Louisiana Book Festival, Baton Rouge, LA
October 25, 2011	St. Tammany Genealogical Society, St. Tammany, LA
September 24, 2011	Permian Basin Genealogical Society, Odessa, TX
September 17, 2011	RELIC Genealogical Society, Manassas, VA
July 18, 2011	Southwest Manuscripters, Los Angeles, CA
June 10, 2011	Friends of the Cornette Library, West Texas A&M University, Amarillo, TX
May 21, 2011	Seattle Genealogical Society, Seattle, WA
April 30, 2011	Milwaukee Genealogical Society, Milwaukee, WI
April 17, 2011	Genealogical Society, Edmonton, Alberta, Canada
April 6-10, 2011	New England Regional Genealogical Conference, Springfield, MA
March 22, 2011	North San Diego Genealogical Society, Carlsbad, CA
March 19, 2011	Los Angeles County Public Library, Los Angeles, CA
February 5, 2011	Orange County California Genealogical Society, Huntington Beach, CA
January 8, 2011	Jewish Genealogical Society of San Diego, San Diego, CA

2010

October 9, 2010	Amarillo Genealogical Society, Amarillo, TX
October 6, 2010	Durham-Orange Genealogical Society, Durham, NC
September 17-19, 2010	Saskatchewan & Manitoba Genealogical Societies, Yorkton, Saskatchewan, Canada
September 9, 2010	Roots Cellar Genealogy Society, Sacramento, CA
July 27-29, 2010	Brigham Young University Family History & Genealogy Conference, SLC, UT
July 11, 2010	Fitzpatrick Clan Society International Gathering, Kilkenny, Ireland
June 6, 2010	Czechoslovakian American Genealogical Society, Anaheim, CA
May 22, 2010	North Arizona Genealogy Society, Prescott, AZ
May 8, 2010	Alberta Family Histories Society, Calgary, Alberta, Canada
March 23, 2010	North San Diego Genealogical Society, Carlsbad, CA
February 6, 2010	Orange County, CA Genealogical Society, Huntington Beach, CA
January 21, 2010	Palmia Genealogical Society, Mission Viejo, CA

2009

October 17, 2009	Los Angeles Archives Bazaar, Los Angeles, CA
October 10, 2009	Amarillo Genealogical Society, Amarillo, TX
Sep 18-19, 2009	British Isles Family History Society of Greater Ottawa, Ottawa, Canada
July 15, 2009	South Bay Cities Genealogical Society, Torrance, CA
June 20, 2009	Santa Barbara Genealogical Society, Santa Barbara, CA
June 19, 2009	Los Angeles Westside Genealogical Society, Marina del Rey, CA
May 30, 2009	Kootenai County Genealogical Society, Hayden, ID
April 23-25, 2009	The New England Regional Genealogical Society Conference, Manchester, NH
April 20, 2009	New Orleans Genealogical Society, New Orleans, LA
April 18, 2009	Louisiana Genealogical and Historical Society, Baton Rouge, LA
March 13, 2009	Conference on Computerized Family History and Genealogy, BYU, Provo, UT
February 27, 2009	St. George Family History Expo, St. George, UT

February 24, 2009 North San Diego County Genealogical Society, San Diego, CA
 February 8, 2009 Jewish Genealogical Society of San Diego, San Diego, CA
 January 31, 2009 Palm Springs Genealogical Society, Palm Springs, CA
 January 15, 2009 Saddlebrooke Genealogical Society, Tucson, AZ

2008

November 16, 2008 Questing Heirs Genealogical Society, Long Beach, CA
 November 14, 2008 Mesa Family History Expo, Mesa, AZ
 October 23, 2008 RTE Ireland television network Nationwide television program interview
 October 6, 2008 Temecula Valley Genealogical Society, Temecula, CA
 September 20, 2008 Littleton Colorado Genealogical Society, Littleton, CO
 August 17-22, 2008 International Association of Jewish Genealogical Societies, Chicago, IL
 August 3, 2008 Czech Genealogical Society, Anaheim, CA
 Jun 27-29, 2008 Burbank Genealogical Jamboree, Burbank, CA
 June 19, 2008 Palmia Genealogical Society, Mission Viejo, CA
 May 29-Jun 1, 2008 Ontario (Canada) Genealogical Society Conference, Toronto, Ontario
 April 26, 2008 Quad Cities Genealogical Society, Rock Island, IL
 April 19, 2008 Lancaster Family History Conference, Lancaster, PA (Keynote Speaker)
 April 5, 2008 Whidbey Island Genealogical Society, Whidbey Island, WA
 March 15, 2008 Arizona State Genealogical Society, Tucson, AZ
 February 27, 2008 Leisure World Genealogy Club, Seal Beach, CA
 February 26, 2008 North San Diego County Genealogical Society, San Diego, CA
 February 23, 2008 Oregon Genealogical Society, Eugene, OR
 February 16, 2008 San Diego Computer Genealogy Society, San Diego, CA
 January 24, 2008 Leisure World Genealogy Club, Seal Beach, CA

2007

November 18, 2007 Questing Heirs, Long Beach, CA
 October 8, 2007 Murietta Hot Springs Colony Genealogical Club, Murietta, CA
 October 6, 2007 San Luis Obispo Genealogical Society, San Luis Obispo, CA
 September 29, 2007 Detroit Soc for Gen Research, 2d Annual Family History Festival, Detroit, MI
 September 20, 2007 Napa Genealogical Society, Napa, CA
 August 15, 2007 South Bay Cities Genealogical Society, Torrance, CA
 August 11, 2007 Lafouche Heritage Society, Lafouche Parish, LA
 July 27, 2007 Fitzpatrick Clan Society International Gathering, Portlaoise, Co. Laois, Ireland
 July 20, 2007 Mid-Michigan Genealogical Society
 June 19, 2007 Conejo Valley Genealogical Society, Thousand Oaks, CA
 June 9, 2007 Southern California Genealogical Society, Burbank, CA
 May 31, 2007 Southern California Genealogical Society DNA Special Interest Group, Panel Discussion, Burbank, CA
 May 16, 2007 North Orange County Genealogical Society, Yorba Linda, CA
 May 12, 2007 Santa Barbara Genealogical Society Annual Spring Seminar, Santa Barbara, CA
 April 28, 2007 New England Regional Genealogical Conference, Hartford, CT
 April 25, 2007 Wayne County PA Historical Society, Honedale, PA
 April 24, 2007 New York Genealogical and Biographical Society, New York, NY
 April 21, 2007 Friends of the Plano Library Annual Spring Seminar, Plano, TX
 March 25, 2007 British Isles Genealogical Society, Santa Monica, CA
 March 19, 2007 Jewish Genealogical Society of Portland, Portland, OR
 March 20, 1007 Genealogical Forum of Oregon, Portland OR
 March 19, 2007 Seattle Jewish Genealogical Society, Seattle, WA
 March 17, 2007 Whittier Area Genealogical Society, Whittier, CA

March 10, 2007	Family History Society of Arizona Annual Spring Seminar, Tempe, AZ
February 27, 2007	North San Diego Genealogical Society, Carlsbad, CA
February 24, 2007	California African American Society of Los Angeles Genealogical Event
January 27, 2007	Santa Barbara Genealogical Society, Santa Barbara, CA
January 19, 2007	Los Angeles Westside Genealogical Society, Marina del Rey, CA

2006

November 28, 2006	North San Diego County Genealogical Society
October 21, 2006	POINT Sacramento Chapter, Sacramento, CA
October 19, 2006	Napa Genealogical Society, Napa, CA
October 15, 2006	Los Angeles County Public Library, Los Angeles, CA
October 6, 2006	POINT Italian Genealogy Conference, Hermosa Beach, CA
September 20, 2006	North Orange County Genealogical Society, Yorba Linda, CA
September 10, 2006	Village Books, Bellingham, WA
September 9, 2006	Whatcom Genealogical Society Annual Genealogical Seminar, Bellingham, WA
September 7, 2006	Bend Genealogical Society, Bend, OR
June 29, 2006	Southern California Genealogical Society DNA Special Interest Group Burbank, CA
June 18, 2006	Conejo Valley Genealogical Society, Thousand Oaks, CA
May 13, 2006	San Diego Genealogical Society, San Diego, CA
May 6, 2006	Southern California Genealogical Society Jamboree, Burbank, CA
April 29, 2006	Chula Vista Genealogical Society, Chula Vista, CA
April 20, 2006	Lafayette Genealogical Society, Lafayette, LA
April 18, 2006	St. Tammany Parish Genealogical Society, Covington, LA
April 15, 2006	Friend of the Plano Library, Plano, TX
March 18, 2006	Ventura County Genealogical Society, Ventura, CA
February 18, 2006	South Orange County Genealogical Society, Mission Viejo, CA

2005

November 12, 2005	Southern California Genealogical Society, Burbank, CA
October 23, 2005	British Isles Family History Society, Santa Monica, CA
October 15, 2005	Whittier Genealogical Society, Whittier, CA
October 13, 2005	Jefferson Genealogical Society, Metairie, LA
October 11, 2005	St. Tammany Parish Genealogical Society, Covington, LA
September 24, 2005	Antelope Valley Genealogical Society, Lancaster, CA
September 21, 2005	South Bay Cities Genealogical Society, Torrance, CA
August 21, 2005	Questing Heirs, Long Beach, CA

Forensic Genealogy Workshops

April 23, 2017	Holocaust Survival and Reunion Stories, Boston University, Funded by a grant from the Elie Wiesel Center for Jewish Studies, Boston University.
Jul 28-Aug 1, 2014	Advanced Forensic Genealogy Workshop, Boston Univ, Genealogy Certificate Prog
Aug 5-9, 2013	Advanced Forensic Genealogy Workshop, Boston Univ, Genealogy Certificate Prog
Jan 14-18, 2013	Advanced Forensic Genealogy Workshop, Salt Lake City Institute of Genealogy
July 30-Aug 3, 2012	Advanced Forensic Genealogy Workshop, Boston Univ, Genealogy Certificate Prog

June 1, 2012	DNA Workshop, Ontario Genealogical Society
June 1, 2012	Photograph Identification Workshop, Ontario Genealogical Society
March 2008	Chair and Organizer, Forensic Science Workshop and Panel Discussion, Defense and Security Symposium, SPIE Optical Society, Orlando, FL
March 2007	Chair and Organizer, Forensic Science Workshop and Panel Discussion, Defense and Security Symposium, SPIE Optical Society, Orlando, FL

TELEVISION SERIES

February 2021, Blood Relative, Paramount Studios – Model for main character Louise Kelley.

PRESS CONFERENCES

Jan 14, 2020	Baby David Paul Press Conference, Meriden, CT
Jul 29, 2019	Belle in the Well Press Conference, Ironton, OH
Jun 17, 2019	Gwen Miller Homicide Press Conference, Rapid City, SD
May 7, 2019	Sheep Flats Jane Doe, Washoe County Sheriff's Office, Reno, NV
Jun 21, 2018	Joseph Newton Chandler III, US Marshal N Ohio, Cleveland, OH
Apr 11, 2018	Buckskin Girl, Miami Co Sheriff's Office, Troy OH
March 2008	Hand in the Snow Press Conference, Georgetown U, Washington DC

JOURNAL ARTICLES

Odile M. Loreille, Ryan L. Parr, Kevin A. McGregor, Colleen M. Fitzpatrick, Chriss Lyon, Donya Y. Yang, Camilla F. Speller, Michael R. Grimm, Michael J. Grimm, Jodi A. Irwin, Edward M. Robinson, *"Integrated DNA and Fingerprint Analyses in the Identification of 60-Year-Old Mummified Human Remains Discovered in an Alaskan Glacier"*, J. Forensic Sci., April 2010.

BOOKS

Forensic Genealogy, Rice Book Press, ISBN 9767160-0-3, April 2005

DNA & Genealogy, Rice Book Press, ISBN 976716-1-1, November 2005, coauthored with Andrew Yeiser, sponsored by Family Tree DNA for the 2nd International Conference on Genetic Genealogy, National Headquarters, Washington, D.C.

Dead Horse Investigation: Forensic Photo Identification for Everyone, ISBN 0-9767160-5-4, Rice Book Press, April 2008

Forensic Genealogy Revised Edition, Rice Book Press, ISBN 978-0-9767160-7-5, May 2013

The DNA Detective, Rice Book Press, ISBN 978-0-9767160-6-8, May 2013

NEWS ARTICLES

J-Wire, Jewish Online News from Australia and New Zealand

“The Mascot” – Truth or Fiction
September 16, 2012

MAGAZINE COVER ARTICLES

One Man, Two Names, Three Families, *Ancestry Magazine*, August 2009

CSI Meets Roots, *Games Magazine*, November 2007

This Photo is OK!, *Internet Genealogy*, July 2007

Uncovering the Past in Rushville, NE, *Internet Genealogy*, April 2007

Forensic Genealogy Online, *Internet Genealogy, Online Bonus Edition*, June 2006

Genealogy Meets CSI, *Family Tree Magazine*, April 2006

Forensic Genealogy, A Case Study in Digital Detective Work, *Family Chronicle*, October 2005

MAGAZINE ARTICLES

The Dead Horse Investigation, *Games Magazine*, April 2010

Where When Why Who? CSI Meets Photography, *Games Magazine*, July 2009

Fake Photos in Your Family Tree, *Ancestry Magazine*, July/August 2009

The Dead Horse Investigation, *Family Chronicle*, May/June 2009

Spotting the Missing Children in Your Family Tree, *Ancestry Magazine Online*, January 26, 2009

How the Internet Didn't Help Solve This Genealogy Photo Quiz, *Ancestry Magazine Online*, February 27, 2009

Who? What? Where? When? Why?, *Games Magazine*, November 2008

Forensic Genealogy Celebrates Its 100th Photo Quiz!, *Dead Fred Newsletter* (March 2007)

Exploring Age Progression using Forensic Genealogy, *Dead Fred Newsletter* (October 2006)

ANCESTRY MAGAZINE MONTHLY COLUMN

The Old Fashioned Way, *Ancestry Magazine*, January/February 2010

Time to Guess, *Ancestry Magazine*, November/December 2009

Dating Old Pictures with Clothes?, *Magazine*, September/October 2009

Are Those Fakes in Your Shoebox?, *Ancestry Magazine*, July/August 2009

Children of the Battlefield, *Ancestry Magazine*, May/June 2009

Running Out of Time, *Ancestry Magazine*, March/April 2009

Parley Vous Francais?, *Ancestry Magazine*, January/February, 2009

Crossing the Bridge, *Ancestry Magazine*, November/December 2008

Where Were You?, *Ancestry Magazine*, September/October 2008

Juxtaposition, *Ancestry Magazine*, July/August 2008

Details, Details, Details, *Ancestry Magazine*, May/June 2008

The Really Big Picture, *Ancestry Magazine*, March/April 2008

Constanza or Not Constanza, *Ancestry Magazine*, January/February 2008

Cigarettes and Easter Eggs, *Ancestry Magazine*, November/December 2007

Good News/Bad News, *Ancestry Magazine*, September/October 2007

The Whole Family, *Ancestry Magazine*, July/August 2007

Clues around the House, *Ancestry Magazine*, May/June 2007

Five or More Children?, *Ancestry Magazine*, March/April 2007

E-ZINE ARTICLES

The Digital Detective, Explore, www.explore.ie, February 2007

The Digital Detective , Explore -Travel in Ireland, June 2005
www.explore.ie/features/index.php?aID=81

BOOK CHAPTERS AND FORWARDS

Solving Crimes using Relatives' DNA: Forensic Genetic Genealogy (FGG) and Familial DNA Searching (FDS) Applications for Casework, *Forensic Reconstruction: Theory to Practice*, eds. Henry C. Lee and Elaine M. Pagliaro, Oxford University Press, in press, Fall 2021.

The Emerging Discipline of Forensic Genealogy, *Forensic Genetic Approaches for the Identification of Human Skeletal Remains*, ed. Angie Ambers, PhD, Elsevier Press, in press, Spring 2021

Forward to Ein hooiberg bol spelder (A Needle in a Haystack)
Lex Muelenbroek and Diederik Aben, January 2020

The Key is the Camera, *The Desperate Genealogist's Idea Book: Creative Ways to Outsmart Your Elusive Ancestors*, ed. Jeannette Balleza, March 2006

PARTIAL LIST OF INTERVIEWS AND NEWS ARTICLES

BBC Radio, 8/17/2021 & 8/22/2021

Genetics and the Longer Arm of the Law

<https://www.bbc.co.uk/programmes/m000ysvq>

True Crime Arizona Podcast, 9/19/2021

The Phoenix Cana Murders

<https://www.facebook.com/watch/?v=433669514572518>

AV Watchman Podcast, Jun 18, 2021

<https://www.youtube.com/watch?v=BFHOdqex2XA>

Dateline Australia, 5/21/2021

Forensic Genetic Genealogy US

<https://www.sbs.com.au/news/dateline/episodes>

The Clown and the Candyman, 3/14/2021

Investigation Discovery

<https://www.investigationdiscovery.com/crimefeed/podcasts/the-clown-and-the-candyman>

Forensic Magazine, 3/1/2021

Slowly but Surely: Taking Genetic Genealogy to the Next Level

<https://www.forensicmag.com/573705-Slowly-but-Surely-Propelling-Genetic-Genealogy-to-the-Next-Level/>

German Public Radio, 2/17/2021

Sarah Yarborough Homicide

<http://tiny.cc/e6iiuz>

Gray Hughes Investigates, 12/29/2020

Forensic Genealogy

<https://www.youtube.com/watch?v=8URzJZAqSwA>

The History Channel

History's Greatest Mysteries Episode 4, 12/5/2020

Did John Wilkes Booth Die in the Barn?

Forensic Magazine, 11/20/2020

Genetic Genealogy Confirms Story of Alex Kurzem, the Nazi's Little Jewish 'Mascot'

<https://www.forensicmag.com/570262-Genetic-Genealogy-Confirms-Story-of-Alex-Kurzem-the-Nazi-s-Little-Jewish-Mascot/>

Finding Genius Podcast, 11/9/2020

Forensic Genealogy, Host Lucian Gutica

<https://findinggeniuspodcast.com/podcasts/modern-forensic-genealogy-with-colleen-fitzpatrick-of-identifinders-international/>

The Smithsonian Channel, 9/20/2020

The Curious Life and Death of...

Identification of the Titanic Baby

WGME Channel 13, Portland ME
Maine family grateful after 52-year-old cold case murder solved
<https://wgme.com/news/local/maine-family-grateful-after-52-year-old-cold-case-murder-solved>

The New York Times, 7/23/2020
A Half Century Later, Police Identify a Homicide Suspect and His Victim
<https://www.nytimes.com/2020/07/23/us/anita-louise-piteau-johnny-chrisco.html>

Mind over Murder Podcast with Bill Thomas, 6/22/2020

Vox Highlight, 8/19/2020
The Man without a Name
<https://www.vox.com/the-highlight/21361536/dna-true-crime-robert-ivan-nichols-zodiac-killer>

The New York Times, 8/1/2020
Why a Data Breach Has Privacy Experts Worried
<https://www.nytimes.com/2020/08/01/technology/gedmatch-breach-privacy.html>

The Los Angeles Times, 7/23/2020
DNA solves Orange County's Coldest Case
<https://www.latimes.com/california/story/2020-07-23/dna-solves-orange-countys-oldest-cold-case-identifying-jane-doe-and-suspected-killer>

Buzzfeed, 7/22/2020
A Security Breach Exposed More Than One Million DNA Profiles On A Major Genealogy Database
<https://www.buzzfeednews.com/article/peteraldhous/hackers-gedmatch-dna-privacy>

Mind Over Murder Podcast, 5/21/2020

People Magazine, 5/8/2020
Ohio Teenager's Body Was Found Strangled on Road 32 Years Ago — and DNA Ties Suspect to Rape, Murder
<https://people.com/crime/barbara-blatnik-ohio-teenager-1987-cold-case-killing-arrest/>

USA Today, 5/7/2020
DNA samples lead to arrest in 1987 murder of 17-year-old Ohio girl: 'Great to see justice'
<https://www.usatoday.com/story/news/nation/2020/05/07/barbara-blatnik-cleveland-ohio-man-arrested-1987-murder-girl/3090708001/>

The Cleveland Scene, 5/6/2020
Arrest Made in 1987 Cold Case Murder of Barbara Blatnik Thanks to Genetic Genealogy
<https://www.clevescene.com/scene-and-heard/archives/2020/05/06/arrest-made-in-1987-cold-case-murder-of-barbara-blatnik-thanks-to-genetic-genealogy>

The Texas Observer, 5/4/2020
The Disappeared

Forensic Magazine, 4/20/2020
The Women Behind DNA Doe Project Inspire New Drama Series
<https://www.forensicmag.com/563430-The-Women-Behind-DNA-Doe-Project-Inspire-New-Drama-Series/>

Physics Today, 4/9/2020
Q&A: Colleen Fitzpatrick, a physicist who cracks cold murder cases

<https://physicstoday.scitation.org/doi/10.1063/PT.6.4.20200409a/full/>

Cheddar News, 3/16/2020
Live Interview

Hartford Courant, 2/7/2020
DNA tests on Hartford Circus Fire victims don't match missing Vermont woman

NBC News, 2/4/2020
Target testing for forensic genealogy

Bayerischer Rundfunk, German Public Radio, 1/29/2020
Forensic Genealogy

The Texas Observer, 1/21/2020
Forensic Genealogy

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EXHIBIT 3

Declaration of Charles Don Flores

My name is Charles Don Flores, my date of birth is October 31, 1969, and my current address is TDCJ Polunsky Unit, 3872 FM350 S, Livingston, Texas 77351. I am over the age of eighteen and competent to make this declaration. I could testify to the following facts under oath in a court of law if called upon to do so. This declaration is based on my personal knowledge:

1. I was born in Big Springs, Texas, then grew up in Midland. My parents were Lily and Caterino Flores. They have both passed away while I have been on death row.
2. I grew up with four older brothers in a loving home. I was raised in the Church of Christ as my father was an elder, minister and hymn leader at Cherry Lane Church of Christ where we attended. I was a happy child and very loved by my parents and siblings. I enjoyed school and went from kindergarten to tenth grade with the same group of students. I was popular and had many friends. I also played football and loved sports. But there was a dark side to my childhood as well. My older brothers at some point began to use drugs, smoking marijuana, sniffing gasoline and spray paint and drinking alcohol. Because I was a "cool little kid" and would not tell on them they'd include me in these activities. This drug use began when I was six or seven years old. By the time I was eleven or twelve years old they no longer needed to include me. I was doing these things myself. By this time my brothers had moved out of the house and were adults completely addicted to drugs and alcohol.
3. When I was sixteen years old, my father lost his roofing and construction business and we were forced to move to Irving, Texas. My brother Jose (Joe) moved with us and Juan Elias (Johnny) and Julian Edward (Eddie) followed us shortly thereafter. I began tenth grade at Nimitz highschool in Irving. But I was the new kid and had trouble adjusting. We had lost everything and it was a very difficult time for me. I had few friends in the beginning and stopped going to school. When I was eighteen, I went to American Trades Institute and took autobody where I learned to do autobody repair. I also worked part time with my brothers and father at his new roofing and construction business. And the worst thing that could have happened to me occurred. I began to hang around my older brothers all the time. They were completely addicted to hard drugs and would essentially work to party and get high and I began to do the same. This ruined my life.
4. Because my father was a christian man, he would not allow anyone to live in house and drink alcohol and do drugs. I moved out when I was nineteen and lived in the Dallas/Ft. Worth area. I ultimately began to work full time with my father as a foreman and jobsite general manager. I always had a job and always made a paycheck.
5. In the early 1990s, a couple move into the house across the street from my parents' house on Waldrop Street in Irving. They were a guy name Ric Childs and his girlfriend Jane.

Ric owned several hot rods and a dune buggy. He was often outside working on his cars. Because I was into cars too, we struck up a conversation and became friendly. He also had a mechanics stall in North Dallas, but I never went there. Aside from cars, Ric likes to smoke marijuana, as did I at the time. I also had a hot rod El Camino that I was rebuilding in my parents driveway so we were often outside in the evening and weekends doing that. We'd share a few beers and a smoke and chat. That was the extent of our friendship. I never met any of Ric's family members or knew anything about the rest of his life. I just enjoyed hanging out with him.

6. In 1994, I was on probation for drug possession and got in trouble again with the law. My older brother Joe and me had collected our pay checks and cashed them after work on a Friday and I bought a twelve pack of beer. We went back to my father's place of business and listened to the stereo in my car and drank the beer. Joe was living with me in Arlington at this point so we left to go home. It was Joe's turn to buy the next round of beers so we stopped at the corner store next to our apartment complex. Joe went in to get the beer and I waited in the car. At this point in his life, Joe had a bad habit of stealing things. He saw the store was full and thought he could just walk out and not pay for the beer. He had eight-hundred dollars in his pocket but walked out without paying. I did not know he did this and when people followed him out to my car I thought they were looking for a fight and I gave it to them. I punched one guy and threatened the other. WE jumped in my car and drove off and only then did I learn that Joe did not pay for the beer. The people who followed Joe out were the store clerks and they were trying to get Joe to stop. We were both charged with robbery and arrested. I ultimately decided to take a plea bargain of two years in state prison for robbery by threat and drug possession. I was given a serve all and completed my sentence day for day.
7. When I got out of prison I was determined to do right and went to work for my father. He was older now and needed help so I worked as office manager, salesman and when needed jobsite foremen. Upon my release in November 1996, until the following summer in 1997 I did my best to work with my father and brother Eddie. Ultimately we had a falling out and I quit. I started drinking more and my drug use increased as well.
8. In the fall of 1997, I met Waylon Dunaway at a girl named April's apartment. Me and Waylon became fast friends and I also met his mother Cynthia who was a paralegal. They had moved from the apartment complex where April lived in south Irving, to the rented house on Glenwick in Irving. Waylon and Cynthia were good friends of mine we'd sit around their house and watch sports on their big screen TV and rented movies. They lived near a street called Crystal Court where Homero Garcia's mother lived. I had known Homero since high school. That is how I met Myra Wait. She was living with her mother Connie and younger brother Jonathan on Crystal Court too. I soon found out that Myra was a single mom trying to raise three little girls on her own. I really fell in love with Myra and wanted to help her raise her girls. Myra had been laid off from a job doing IT for GTE, she was really smart not just pretty. While I was in Dallas County Jail Myra began working for my father and quickly became the office manager helping them run the family business.

9. This whole group was doing drugs, and I soon became the person who was supplying them because I was the only one with some discipline to not overdo it, make a little profit, and be able to sleep daily.
10. My group of friends didn't just do drugs. We also held down jobs and worked, gathered on Sundays to watch football games and barbecue, attended rock concerts, worked on rebuilding hot rod cars and more. But we all had problems with drugs taking over our lives.
11. During that time, I still went to my parents' house every day to see my mom. They were still living on Waldrop Street at that time. Jane was still living across the street, but I hadn't see or heard of Ric in years. One day, I saw a new truck parked across the street at Jane's house. She called me over and introduced me to a man named Ray Graham. Ray was from Farmers Branch. He also knew Ric Childs. He had a mechanics stall up on Royal Lane where Ric had his. Ray and Jane were both meth users. At that time it was referred to as "Ice" or "Crank". Jane and Ray were not just using, they were shooting up meth.
12. By 1997, Myra and I started living together. First, I moved into her mother's house on Crystal Court. That was too much. That family was totally dysfunctional. So, Myra and I and her girls moved into a trailer nearby at 2729 Sagebrush Trail. This was at the Big Texas Trailer Park. I enjoyed the routine we had. My father had a friend named Alvaro from his church that owned a used car lot. Alvaro had a dealer's license who would buy used cars at auctions. As I became friendly with him I would attend auto auctions with Alvaro and was learning more and more about the used car business. I hoped to start a used car lot business and would spend much of my time doing this. While Myra was focused on taking care of the girls, taking to and from school etc.. We were soon a little family and we planned on getting married. I bought her a ring.
13. We were working some, but our drug use increased. Myra kept her drug use to the weekends and I made sure that I slept every night. In addition to Myra's girls, one thing that kept me in check was seeing what happened to the people I knew who were shoot up. For instance, Ray Graham had shot up so much that he blew the veins in his arm out. I then saw him switch to shooting directly into his neck. I saw him nearly die from this one time. He later died of a heart attack as a result of his drug use.
14. Some time in the fall of 1997, I heard from Ray's step-daughter Tressie that Ric Childs was asking about me and was wanting to meet. I had good memories of hanging out and working on hot rods with him, so I agreed. But when I saw him, I realized he was pretty far gone. He said something about how we had been friends so why not be business partners? I assumed he did not have the money to buy his own drugs and sell enough to make a profit. But I felt sorry for him. So, I agreed to give him a small amount to see if he could be trusted to bring the money back. He did okay, but pretty soon, he owed me a lot of money. I saw him maybe once a week but we did not really hang out much because Myra did not like him. Through him I met one of his girlfriends named Vanessa. I remember her complaining about someone she was living with, and told her she could come stay with us for a while if she needed to. But she never come to the trailer, with or without Ric. And I never smoked meth with her at Ric's grandmother's house.

15. Ric had a lot of girlfriends. Aside from Vanessa, I knew Deborah Howard, who went by the nickname "Red", because she also lived in south Irving and she was friends with Ray Graham's step-daughter, Tressie. But almost every time I saw Ric, he was with a different girl.
16. In mid-January of 1998, Ric come around wanting more drugs from me but the supplier I relied on was out. Another week or so after that, Ric come by the trailer on Sagebrush, saying he could get a supply of meth if I would put up the money. I am not sure why I didn't ask any questions. I think I did not believe Ric had a source. But in the middle of the night on January 29, 1998, he came by after Myra and the girls were asleep. I was hanging out with Myra's brother Jonathan and their cousin Jamie Dodge having a few beers and listening the the stereo. At some point Homero come by too. Then Ric showed up. Ric used the phone to make calls to someone. My understanding was that I'd buy a $\frac{1}{2}$ pound of meth for \$3700.
17. Around 2:00 a.m. or so, Ric offered to take me to do the deal in Farmers Branch when I refused to let him take my money and do it alone. Jamie and Jonathan left around the same time in Jamie's Car. Ric drove me in his Volkswagen Beetle. We went to this house about twenty miles away. I thought we were going straight to Ric's source but I was wrong. We got to a house and went in and I realized that Ric did not have a supplier. He knew someone who had a source and this middle man was Jackie another one of his girlfriends. I had heard her name before because Ric would take the drugs he got from me to her house and sell it from there. Ric clearly did not tell Jackie I was going to be with him to do the deal because she was not happy. Nor was I happy that a middle man was involved much ^{less} one who was obviously strung out on meth.
18. We got in an El Camino. Jackie drove, Ric was in the middle, and I was by the passenger's window. Jackie took us to this apartment complex over by Love Field. Something felt off about the whole thing, like it might be a set up or something. I just wanted to get out of there as fast as possible. Before we went inside, I gave Ric the money and then sat back on the couch. Ric joined Jackie's "dealer" Terry Plunk at a small kitchen table. Ric took a small amount of the meth and shot it into his arm to try it out and make sure it was good. He shot up too much and as the drugs hit his system he could not concentrate on weighing the product. I Did not see the scale register that we had been given only a $\frac{1}{4}$ pound. But I thought it seemed short, even though you can't really tell just from looking at it. Ric gave Terry Plunk the money and we took the drugs and left.
19. When we left, Ric Drove. While we were on Highway 183 headed back to my trailer, Ric said he had keys to a car and wanted to pick up something. He drove to an apartment complex off of O'Connor Boulevard and 183. He pulled up next to a Camaro Z28. Ric used the key to get into the car but did not have the ignition key. He tried to get it started and failed. Ric did not explain to me what he was doing and I didn't ask it was late and I wanted to get back home. After a few minutes, we left and started headed toward the trailer park. On the way, we stopped at my friend Waylon's house on Glenwick, which was just a few blocks away from the trailer. I'd promised Waylon when I got more meth I would stop by and drop some off with him. Ric and I went in and I gave Waylon a small amount of drugs out of the supply we had bought from Terry Plunk. Jackie stayed in the car. We were in and out in a few minutes time. I also picked up a long gun that resembled an AR-15 style rifle I'd recently bought. I took this long gun home to put in a gun safe I had installed in the bedroom closet at the tralier house.

20. When we got back to the trailer, I wanted to weigh the drugs I had bought from Plunk. Myra was asleep in the girls room and all three of us went into the back bedroom. I took out the scales. It was then clear that we had only gotten $\frac{1}{4}$ pound, not $\frac{1}{2}$ pound. I started yelling at Ric. Jackie later said that I pulled out a gun and was waving it around and pointed it at her head. That never happened. I was mad at Ric, because it was his deal as far as I was concerned. Jackie agreed to call Plunk and to complain about the shortage. I then got on the phone with Plunk and told him he had shorted us. But Plunk insisted that we had gotten exactly what we'd paid for.
21. All of the yelling woke Myra up. She gave me a look and told me to make Ric and the woman with him leave. I told them to leave and said we would deal with this later. Ric and Jackie drove off in the El Camino.
22. I sat in the front room for a while, mad at myself for getting ripped off and feeling stupid for getting involved with people I did not know. After I calmed down, I crawled into bed beside Myra and went to sleep. I slept for a couple of hours then got up and made breakfast for Myra and her three girls. I then took two of the girls to school.
23. Later that morning, my friend Mary come by and hung out for a while so I could work on her Cadillac. At some point Ric called asking if I still had some of the drugs we had bought from Plunk. He asked if he could come by and pick some up. Meanwhile, another friend of mine named Tommy Lee Phillips called, saying he wanted to drop by. That was how I did business: A handful of people I knew would "drop by" to buy or trade for some drugs from my larger supply until it was gone. Then I would try get more.
24. It was late morning when Ric got there. He had left a motorcycle at the trailer the night before and was back in his purple-and-pink Volkswagen Beetle. He was sitting in the living room when Tommy Lee Phillips showed up with a friend of his from Terrel. After Tommy and his friend left, I reminded Ric that we needed to take care of that situation with Terry Plunk. Ric gave me \$400 for a $\frac{1}{2}$ ounce of meth and left.
25. Later that afternoon, I was shopping with Myra and her girls in her car. She then drove a Suzuki Sidekick. We were planning to move because of a series of weird incidents including a gas leak that freaked us out. We planned to move in with one of my cousins who lived nearby on 6th Street and Hilltop. While we were out, I got another call from Ric. Ric said he was with some girl named Melissa. He wanted to know if he could drop by the trailer and leave his Volkswagen because she was going to drive him around in her Mustang. I had no problem with that, because I had not heard anything about a murder or that the police were looking for Ric's car. When I got home from shopping, we saw Ric's purple-and-pink Volkswagen Beetle parked out back on Glenwick Lane just at the edge of the trailer park.
26. Two days later, I got a call from Ray Graham. He told me that Ric had been arrested for capital murder and that the police were looking for his Volkswagen. As I was listening to this, I looked out the window of the trailer at the Volkswagen Ric had left there two days before. I started freaking out and just wanted to get rid of that car, but I didn't have the keys. Myra's brother Jonathan was at the trailer helping us get ready to

move. Jonathan checked and saw that the car doors had been left open and the steering column was not locked, so we could tow it. We then used Myra's Sidekick to tow the car to my dad's roofing company's office in Grand Prairie. I then tried to spray paint it black since the paint scheme was so noticeable. That did not work so well. By then, it was dark. So, we tied it up behind Myra's Sidekick again. I drove the Sidekick while Jonathan sat in the Volkswagen to steer it. We took it to a service road entrance on Interstate-30 near NW 19th Street. We got out, poured some gasoline on it, and tried to set it on fire on the shoulder of the freeway. Then, this car pulled up in front of the Sidekick. I ran back to the driver's side and Jonathan got in the back seat. We sped off but the driver of that car started following us. While I was driving, Jonathan rolled down the driver's side rear window and fired shots in the air back toward the car that was chasing us. But the driver continued to chase us even after we exited the freeway. I did a bunch of crazy maneuvers and finally lost the guy who was following us at a high speed. I later learned during my trial that the driver was a man named James Jordan.

27. The next day, February 1, 1998, Myra and I went forward with out plans to get married. She found this place on Shady Grove where a Dallas state court judge named Ovard performed ceremonies in a chapel on the ground floor of his Irving townhouse. Jonathan was there, along with Myra's three girls, Jessica, Morgan, and Alex. A few days later, we rented a storage unit in the USA Storage building between Estes and Beltline at Highway 183 use during our move. We were in Irving over the next several days, moving things back and forth between the trailer and my cousin's house on Hilltop.
28. A few days later, I got a call early in the morning from my Dad, saying he had just heard on KRLD radio that I was wanted for capital murder. After I got off the call, I told Myra that I had some things to take care of but I had not done this thing. I told her that it seemed that something Ric had done was being pinned on me.
29. Later that day, Myra decided that she had to go to her mother's house on Crystal Court to pick up some things for the girls. She never come back. That is when I really panicked. I was sure the police had likley detained Myra and I needed to get lost. So I left some money for Myra with my cousin and I drove through the night to Mexico and stayed with some family friends. But after a few months I felt like it was not worth it. I got home sick, I missed my parents and Myra and decided I was going to go back to Dallas. I knew I was wanted and that the Border Patrol Agents were very good at picking out individuals who were nervous when they tried to cross the border. So I used a old trick illegal immigrants used to use, I drank a six-pack of beer before I tried to cross to be calm and cool. It worked, I crossed over with no problem but I kept on drinking beer on my drive up to Dallas. I was driving fast and got pulled over in Hays County and resisted arrest. After being taken to the jail, I gave them my older brother's name instead of mine because I had his social security card. THEN I called my mom. She drove with Myra to Hays County and helped post bond for me.
30. A few days later, I went to visit my friend Waylon on Glenwick. Myra met me there. But as soon as I left, it was clear that I was being followed. At that point, I panicked and was very afraid that the police might kill me or send me to prison forever so I ran. I tried to get away and after a police chase I crashed my car and hurt my knee.

Because I got injured, they took me to Parkland Hospital. Two Farmers Branch officers showed up and started asking me questions about Mrs. Black's murder. I refused to talk to them.

31. At the Dallas County Jail, I was put on the medical floor because I was in a wheelchair. One day I was taken to an office. An officer then picked up the telephone, dialed a number, and handed me the phone. Myra was on the other end crying uncontrollably, saying that she was being threatened with having her kids taken from her and that we were both going to prison. I tried to calm her down, saying they were just messing with her head because I had not done this crime. The officer then took the phone away from me and hung up. Not long after that, I found out the Farmer's Branch PD had also arrested my parents and were threatening to prosecute them too.
32. In the first couple of months, my parents and Myra came to visit me in the jail and told me how they were being hounded by law enforcement and members of the DA's Office. I met the lawyer who had been appointed for me, Brad Lollar, before I was arraigned but he didn't come to the jail and meet me with to discuss my case. I complained to him about how my loved ones were being treated and he just said "they can do that."
33. At some point while I was still in the wheelchair, they took me from the jail to Parkland Hospital. While sitting in the county jail I realised how well I had been set up to take the fall for Mrs. Black's murder and that the DA's Office and the police were willing to do anything to convict me then execute me. These wild thoughts overwhelmed me and suddenly I decided to try to escape. I wrestled the transport officer to the floor and took his gun so he would not shoot me. I had the gun but did not want to shoot him with it and he soon pinned me to the floor. A doctor come and took the gun away from me. We continued to wrestle and the officer pulled out his mace. As he started to spray it, I flailed around and bit his hand. I got the mace and started spraying it. Pretty soon, others came and threw me in handcuffs.
34. I don't remember talking to my lawyers about what happened at Parkland. But it was pretty clear to me that Mr. Lollar did not believe me when I told him that I had not been involved in Mrs. Black's murder. I told him that I was sleeping in a trailer in Irving, TX with Myra when the shooting supposedly happened. But he kept demanding that I "come clean" saying the prosecutor, Jason January, would offer me a life sentence if I would plead guilty. But I refused to do that. Then Mr. Lollar told me that the jury was going to find me guilty of something because they were going to hate me because of everything I had done to avoid being captured. He said that it was okay if the jury thought I might have been present at the scene because the State could not prove who had shot Mrs. Black and he would try to convince the jury that Ric had acted based on an "independant impulse." And it was better for me to be convicted of burglary than capital murder. I was not in the court room when they talk about the jury charge, so I do not know what arguments he made. But Lollar and Doug Parks told me and my parents that we should go for a burglary conviction. They never explained the "law of Parties." So, I did not know that what they were suggesting made not sense. And up until trial, I kept trying to convince my lawyers to put on my alibi defense and let me testify.
35. During trial, as I was listening to all of these lies, Lollar kept telling me that I might get acquitted because the State had no physical evidence that connected me to the scene.

The State had no way to prove who had shot Mrs. Black. But Mr. Lollar said they were going to see me guilty anyway, so he would convince them to go for a "lesser included offense" instead of capital murder. Lollar also said that Myra, my only alibi witness, was tainted because she had helped me try to evade arrest. And Lollar also said that her lawyer would not let her testify if she got indicted, which Jason January was still trying to do.

36. Mr. Lollar repeatedly told me and my parents that he thought there was no way the State could prove capital murder, so a maximum 20-year sentence for burglary would be far better outcome than the death penalty.
37. I was really upset about the way my loved ones were being treated because of me. The idea of a bunch of FBI agents raiding my elderly parents' house was horrible. My other was a diabetic. My father was a very religious man. Before this, neither of them had ever been in trouble with the law or spent a minute inside a jail cell. And they were being treated like criminals for helping me. Myra was terrified she was going to have her kids taken from her and her own mother was wanting to take them. She had reason to be afraid, when Myra was first arrested the police gave her mom Connie temporary custody of her three girls.
38. Just before trial, we learned that the State was rounding up people to get them to testify. That was when we found out that Homero Garcia had been interrogated and signed a statement saying that I confessed to him that I had been there but had "only shot the dog," and "Ric shot an old lady." When Lollar showed me Homero's statement I could not believe it. He was one of my best friends and to see that he was lying on me was devastating. I could not believe he would use me to help avoid going to prison and help the State convict me and send me to death row. His statement says that I told him this when I gave him a Browning .380 that he was arrested with on January 30, 1998. I did not say these things to Homero. I did not even know about the murder or that people were looking for Ric's Volkswagen until I heard from Ray Graham on January 31, 1998, that Ric had been arrested. That's when I freaked out and tried to get rid of Ric's Volkswagen.
39. I continued to resist Mr. Lollar's and my loved one's attempts to go for a lesser included offense because I did not murder Mrs. Black nor did I have anything to do with it. I was still planning to testify and somehow contest the State's case against me until Homero Garcia showed up at trial and lied on me. Then when Jill Barganier was suddenly able to testify and say she thought she saw me at the scene I gave up. I knew it was over and that I was never going home.
40. During trial, Lollar told me that testifying myself would be suicide. So, he proposed "Plan B." Plan B was to just emphasize how the State's case did not add up and let the jury convict me of burglary. I never agreed, lawyer standing up in court and stating that I had been at the Blacks' house because that was not true. One way he convinced me not to testify myself was telling me that I could still be able to appeal my conviction and insist on my innocence if I did not testify.

41. There were so many things that I did not understand and throughout the trial I was very distracted because the Sheriff's Deputies made me wear a stun belt in the courtroom and I had an officer behind me telling me he was going to shock me if I moved too much. For example, I wore glasses back then (and still do) to see. So, I never thought to point out to my attorneys that the person James Jordan described standing by the Volkswagen trying to burn it did not match my appearance. Jordan did not say anything about the person wearing glasses, and I was definitely wearing glasses because I could not see without them. I did not have dark hair down to my collar. I have always wore my hair short and shaved on the sides. I did not have a beard or mustaches and in fact have never been able to grow any. It was probably Jonathan Wait that Jordan saw, and Jonathan is the one who shot at him. But I did not think this was important because it was true I had tried to destroy the Volkswagen. And have that officer continually telling me I was making him nervous and he was going to shock me because I was moving too much would not allow me to concentrate on what was happening during trial. So I did not even realize I should have been pushing my trial lawyers to challenge this.
42. I do not remember meeting the second lawyer on my case, Doug Parks, until we started jury selection. HE did not tell me that he knew Ric's lawyer or that they shared office space.
43. After I was convicted and sentenced to death, both Lollar and Parks told me they would always be there to help me if I needed anything. When I was sent to death row I wrote them and got one or two letters back from them and then never got another reply to the letters I sent them. On death row, I met guys who understood criminal appeal law and they started telling me what to read and what to ask my appeal lawyers to include in my appeals. I also started to understand how incompetent my trial attorneys were. I was then appointed a direct appeal attorney and state habeas lawyers and they were worse. The direct appeal lawyer filed an appeal brief that had another death row prisoner's name throughout the arguments. He also squandered a Batson issue by raising the issue incorrectly. The state habeas lawyers were worse. After promising me the moon they did nothing. No investigation, no experts, nothing. When I wrote my district court judge to inform the court that the lawyers who were supposed to represent me were not doing their job they turned on me like a rabid dog. Mr. Roy Greenwood become my adversary and instead of representing me throughout the state habeas writ process he abandoned me. He wrote me a letter and told me he had done all he was going to do on my case, if I wanted anything else done to do it myself. Greenwood filed the incomplete state habeas writ against my wishes using a blank declaration that he got me to sign before we become enemies. My state level appeal lawyers were even worse than my trial lawyers. I did not think that would be possible but it was.
44. I never received a copy of the State's answer to the state habeas writ that Mr. Greenwood filed. I did not know it existed or see the affidavits that the State had gotten from Lollar, Parks, January and Davis until my federal habeas lawyer, Bruce anton, showed them to me. By this time I really understood criminal appeal law and knew that Lollar could not explain his declar~~ation~~ing to the jury that I was at the scene of the crime. To do so in a

law of parties case like mine was suicide. So he lied, they all lied to cover their tails. Suddenly everything was clear to me. For years I did not know these affidavits existed and every appeal court, clerk and judge had seen them while my appeal was before them. And to remember how hard I fought against and resisted Lollar's attempts to get me to go along with Plan B and not present an alibi defense was crushing. To think of how hard I fought to have Myra Wait be called to testify I was in bed with her when Mrs. Black was murdered, then to have Lollar say she could not testify as my alibi because I told him I was at the scene was devastating. I was down and depressed for a long time after I discovered just how much all these lawyers betrayed me. I did not know if I would be able to overcome such treachery but I did and I'm standing still.

45. I would testify under oath about any of the information in this declaration.

I have read this declaration. I affirm that, to the best of my knowledge and under penalty of perjury, the foregoing is true and correct.

Executed in Polk County, in the State of Texas, on the 18th day of January, 2021.

Charles Don Flores

Charles Don Flores
Declarant

EXHIBIT 4

Declaration of Judith Haney

My name is Judith K. Reeves Haney. I was born on February 20, 1945. I am competent to make this declaration and I declare as follows:

1. In the 1990's, I was good friends with Terry Plunk. Terry was a drug dealer. *we were both drug dealers.* He would give me drugs. I also knew Jackie Roberts from the drug scene in Dallas. I am no longer a part of that scene.

I had also known Gary Black for a long time.

2. One night in 1998, Terry, Jackie, and two other guys who I'd never seen before showed up at my apartment to do a drug deal. I didn't invite them over and I didn't give them permission to do a deal in my house.

3. The two guys that Jackie was with were acting like they were big-time drug dealers. It seemed like the two guys thought they were in the movies, like Miami Vice. It was weird because they weren't even dealing with that large an amount of drugs.

4. At one point during the deal, the two guys that Jackie was with got into an argument with Terry. One of the two guys pulled out a gun. I didn't want this deal happening in my house, so I pulled out my own gun. I put my gun down on the table and told the two guys to get out. Jackie seemed scared. After I pulled my gun out, Jackie and the two guys left.

5. After that night, I heard the two guys who were with Jackie were prosecuted for the murder of an old lady, Mrs. Black. I heard they left directly from my house after the drug deal to go do it.

6. After the *two* guys were arrested, I met with the prosecutor, Jason January, in his office to talk about that murder case. He was the head prosecutor on the case. In exchange for my testimony in that murder case, Mr. January arranged for a drug charge I had pending to be knocked down to a lesser charge. It was my understanding that the prosecutors were going to charge me with distribution of a controlled substance but since I would be testifying, the prosecutors lowered the charge to only possession of a controlled substance.

7. I haven't been in touch with those people involved in the Dallas drug world in a long time. Shortly after everything happened with this murder, I decided it was time to get out of the drug game. I moved to a different town, changed my number, and tried to leave it all behind me.

8. I've never been contacted by anyone about my testimony in Charles Flores's case before this.

I have read and reviewed this 2-page declaration. I declare under penalty of perjury that the forgoing is true and correct. Executed on this 22 day of July, 2019, in Tarrant County, Texas.


JUDITH K. REEVES HANEY

EXHIBIT 5

Declaration of William Waylon Dunaway

My name is William Waylon Dunaway, my date of birth is June 28, 1975, and my address is 1331 E Lancaster Ave, Fort Worth, Texas 76102. I am over the age of eighteen and competent to make the following declaration. I could testify to the following facts under oath in a court of law if called upon to do so. This declaration is based on my personal knowledge:

1. I met Charles Don Flores around 1995. I call him "Charlie." At the time, I was living with my mom in Irving, Texas on Glenwick Drive. I met Charlie through a mutual friend who lived nearby.
2. Charlie was one of the best friends I ever had. I have always been a shy person. But Charlie was easy to be with. He treated me like he was my big brother. I was already addicted to drugs at that time, but Charlie was good to me and my mother. He was protective. We enjoyed going out to bars together and listening to music. He protected me one time when two big guys jumped me for no reason in a mosh pit. No one had ever stepped up for me like that.
3. Some time in 1997, Charlie moved in with me and my mother for a while. By that time, everyone had gotten involved with meth. Charles did not do as much meth as the rest of us did. He kept his composure. He took care of us. My mother loved him a lot for that. She had a job and was supporting us, but I was kind of lost.
4. Around this time, I met Homero Garcia, who went by the nickname "Metal," and the girl who became Charlie's girlfriend, Myra Wait. They lived just down the street from my mother's house.
5. Metal was a little guy. He was also a drug addict. He was the kind of guy who would say whatever he thought he needed to to get out of trouble.
6. Charlie was really in love with Myra, but it seemed to happen so fast—going from dating to talk about getting married. I think it was because of her little girls. Charlie wanted to help take care of them. And I think Myra may have been in it for the drugs. She was smart, though, like Charlie.
7. I eventually met Richard "Ricky" Childs through Charlie too. I did not like Ricky. He seemed like a dirty, trashy, biker-wannabe. We were all doing drugs then, but Ricky was shooting up meth and did not seem to care about anything other than himself. I got a very bad vibe from him. I just assumed he was one of Charlie's customers.

8. I first heard about the shooting in Farmers Branch from a friend, not from Charlie. I did not see Charlie for several months after that. Then, in the spring of 1998, he pulled into my garage in his mother's Volvo. He was there for a few hours. I was really happy to see him even though I knew the police were after him. Myra came over at some point while he was there. But then Charlie got really jumpy. He got in that car and took off. It turns out that the cops were down the road watching, and they arrested him that day.
9. Later that same day, I was in the house alone when, suddenly, six men showed up. Three were FBI agents, and three were with the Irving SID. This was the first time I had had any encounter with law enforcement. They asked if they could search the house, and I gave them permission because I did not think I had anything to hide. They claimed they found some meth under the bed in a little package. They claimed they knew it was Charlie's and knew he had just been there. But they said they had to charge me because I was on the premises when it was found. I was charged with possession of 16 grams of methamphetamine, but I was not arrested.
10. I was surprised that they found that meth because it was not mine. It wasn't like I wasn't using drugs, but what they found was not mine.
11. After that, every couple of weeks, the cops would show up again at my house. They wanted information about Charlie. When they filed charges against me some time around January 1999, I sold a car to get a lawyer. I then had to go to the courthouse about once a month to check in with the court. After a couple of months of this, my lawyer told me that we were going to go talk to some guys who "might be able to help me out." We went to an office in the courthouse. Two guys were there. One of them was one of the six officers who had raided my house. The other one was a prosecutor. I do not remember his name. He was a clean-cut guy with grayish hair. He was an asshole. He told me that they could make my possession case "go away" if I gave them helpful information. They pulled out this big flat gun that was there in the office and demanded to know if I had seen it before. They wanted to know if I had seen Ricky or Charlie with it. I told them I had never seen that gun before in my life and that Charlie never carried anything bigger than what would fit in his pocket. I was only in the office for about twenty minutes. It became clear they only wanted information about that gun. The prosecutor said he didn't believe me and then repeated that they could get me off if I told them what they wanted to hear. But I had nothing to say. I had never seen that gun before.
12. I am not sure what kind of gun it was that they showed me, but it definitely could have been a .44 Magnum. It was definitely not a revolver.
13. After that, I continued to go to court for the possession case. Eventually, I got a sentence of six years of deferred adjudication. This was my first offense. I made it

through without having my probation revoked. But I continued to have an addiction problem.

14. I have struggled with depression for a long time. After my mother died in 2018, it hit me really hard. I tried to kill myself, but the attempt failed. I felt this was a sign from God that He wasn't ready for me yet. I committed myself to recovery and got on medication for my depression and anxiety disorder. It has made a huge difference.

15. It is now many years since that time with Charlie. But some things I will never forget, such as how I was treated by that prosecutor to try to scare me into providing testimony.

16. If I had ever been called to the stand to testify, I would have told the truth as described above. And if I were ever called upon to testify in court in the future about any of the information in this declaration, I would do so truthfully.

I have read this declaration. I affirm that, to the best of my knowledge and under penalty of perjury, that the foregoing is true and correct.

Executed in Tarrant County, State of Texas, on the 13 day of OCTOBER, 2020.

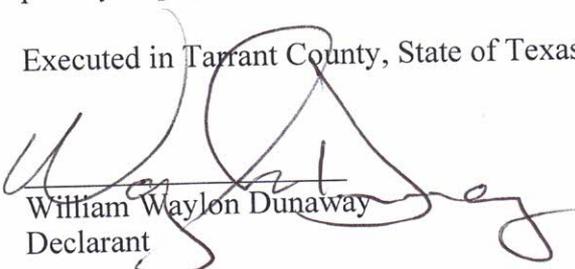

William Waylon Dunaway
Declarant

EXHIBIT 6


LABORATORY REPORT - FORENSIC IDENTITY
CASE DATA:

Referring Agency: Dallas Co. District Attorney
 Agency Reference #: 76915-01
 Case Victim's Name: Elizabeth Black
 Case Suspect's Name: Richard Childs, Charles Flores
 GeneScreen Case #: FOR2074C
 Report Date: March 25, 1999

1. Evidence Received

Accession #	Sample Description	Receipt Date Method of Delivery
FOR2074-907	piece of chewed gum	2/11/99 Picked up by J. Floyd
FOR2074-920	EDTA blood-Richard L. Childs	2/22/99 Drawn at GeneScreen by J. Knighten
FOR2074-921	EDTA blood-Charles D. Flores	
FOR2074-928	Oral swabs-Dakota Brochman	2/26/99 Swabbed at GeneScreen by J. Floyd
FOR2074-929	Oral swabs-Dalton Brochman	
FOR2074-930	Oral swabs-Reece Barganier	3/15/99 Swabbed at GeneScreen by J. Floyd
FOR2074-935	Oral swabs-Nathan Taylor	3/16/99 Swabbed at GeneScreen by J. Floyd
FOR2074-936	Oral swabs-Nicolas Taylor	

2. Results

DNA was extracted from specimen FOR2074-907 (piece of chewed gum) and typed using the DQA1+PM Amplitype Kit and Promega's PowerPlex 1.1 Kit. The genetic profile of this specimen was compared to profiles obtained from the above reference specimens. The following results were obtained:

Specimen #	DQA1	LDLR	GYPA	HBGG	D7S8	GC
2074-907	1.2,2	B	A	AB	A(B)	C
2074-920	1.2,4.1	B	A	AB	AB	AC
2074-921	4.2,4.3/ 4.2,4.3	A	AB	B	B	AC
2074-928	1.1,3	B	A	AB	A	C
2074-929	1.1,1.2	B	A	AB	AB	C

() Indicates fainter typing

Specimen #	CSF1PO	TPOX	TH01	vWA	D16S539	D7S820	D13S317	D5S818	AMEL
2074-907	10,12	8,11	6,8	14,15	11,12	9,11	12,14	11,12	XY
2074-930	12	8,9	8,9.3	17	10,13	10,12	11,13	11,12	XY
2074-935	11,12	8	9,9.3	18	13	11,12	12	12	XY
2074-936	11,12	8	9,9.3	18	13	11,12	12	12	XY

All of the individuals tested are excluded as possible contributors of the DNA found on the gum.

3. Statistical Analysis - PCR

Since the reference specimens do not match the evidence, no statistical data will be issued.

4. Disposition of Evidence

Please contact GeneScreen Forensic Personnel concerning disposition of evidence in this case.

Complete chain of custody documentation has been maintained by GeneScreen from receipt of evidence to disposition.

The results and conclusions described in this report have been reviewed by the individuals below.

Judith I. Floyd

Judith I. Floyd, BS - Forensic Laboratory Supervisor

William J. Watson

William J. Watson, MS - Forensic Scientist

S I G N E D under oath before me this 25th day of March, 19 99.

Guadalupe Hidalgo

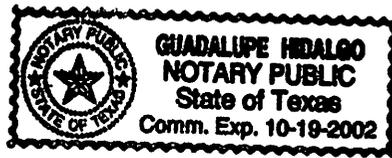


EXHIBIT 7

REPORTER'S RECORD

VOLUME 6

WRIT NO. W98-02133-N (B)

TRIAL COURT CAUSE NO. F98-02133-N

EX PARTE	*	IN THE 195TH
Charles Don Flores	*	JUDICIAL DISTRICT COURT
	*	DALLAS COUNTY, TEXAS
APPLICANT	*	

WRIT HEARING

On the 16th day of October, A.D., 2017, the following proceedings came to be heard in the above-entitled and numbered cause before the HONORABLE HECTOR GARZA, Judge Presiding, held in Dallas, Dallas County of Texas:

Proceedings reported by computerized stenotype machine; Reporter's Record produced by computer-assisted transcription.

Velma R. Loza, CSR NO. 5811
 Official Court Reporter - 195th Judicial District Court
 133 N. Riverfront Blvd.
 Dallas, Texas 75207

1 Q. And psychology is a broad field; is that correct?

2 A. That's correct.

3 Q. What particular areas of expertise do you have
4 within that broad scientific field?

5 A. Expertise associated hypnosis, dissociation, trauma,
6 memory, forensic psychology. I have a fairly broad interest.
7 Those would be my major interests at this time.

8 Q. Do you see patients?

9 A. I do, so I do have interests in psychotherapy.

10 Q. And do you -- you teach classes?

11 A. I do.

12 Q. Do you conduct research studies?

13 A. I do.

14 Q. What percentage of your time is allocated on these
15 different professional tasks, more or less?

16 A. I would say 35 percent would be research and
17 writing. About 30 percent would be teaching and supervision
18 and some consultation. I also do some clinical work on my
19 own. I do have a private practice, and I would say that's
20 perhaps 15 percent.

21 I do some consultation with the media and --
22 and work with students in varying informal capacities, as
23 well as formal capacities and I would say miscellaneous sorts
24 of things, like consultation with outside agencies, for
25 example, which is a relatively small percentage of my total

1 work, which is -- is maybe 5 percent. I'm probably leaving
2 something out, so -- so please add up the percentages.

3 Q. Well -- well, let me --

4 A. I'm not very good at doing that in the morning, so
5 that would be helpful.

6 Q. Well, let me clarify. It sounds like you do not
7 spend a huge percentage of your time serving as an expert
8 witness in court?

9 A. No, not at all. I do that on a very occasional
10 basis.

11 Q. You have been accepted as an expert by courts
12 before?

13 A. I have.

14 Q. And on what topics?

15 A. If you wouldn't mind, I would like to pull my vitae
16 out --

17 Q. That's fine. I think that would be help- --

18 MS. SWEEN: And, in fact, if -- if I can
19 approach?

20 A. -- but I can summarize at this time, but that would
21 be helpful for a more complete answer.

22 MS. SWEEN: Well, if, if -- Your Honor, if I
23 may approach the witness with what's been marked as
24 Exhibit 6, which is the witness's current curriculum vitae.

25 A. I'd appreciate that.

1 Q. (BY MS. SWEEN) Here you are, Dr. Lynn.

2 A. Thank you. Thank you, and if you give me just a
3 moment, I have another brief document that would be helpful.
4 I apologize for the delay.

5 Q. Now, your CV looks to be about 48 pages, and I
6 promise not to go over every page. I would just like you to
7 walk us through some of the professional highlights.

8 A. Sure. I would be happy to do that.

9 Q. But starting with -- I wanted to ask you if you'd
10 ever been accepted as an expert by any courts, and I believe
11 you said yes?

12 A. I have. I've testified in -- in nine cases, and
13 five of those cases were criminal cases and four were civil
14 cases.

15 Q. Thank you. And I failed to offer Applicant's 6,
16 which -- do you recognize this as your current vitae,
17 Dr. Lynn?

18 A. My eyesight is not quite that good.

19 Q. Can you take a look and confirm?

20 A. I would be very happy to. Would you like to
21 approach me or --

22 Q. Oh. That's the one I just handed you.

23 A. Oh. Okay. Well, I -- I can't see that one, so it
24 would be difficult to --

25 THE COURT: It's to your right.

1 A. Oh. I apologize. Yes. It looks -- it looks like
2 it's the same document.

3 MS. SWEEN: All right. So at this time, we
4 offer Applicant's 6.

5 (Applicant's Writ Exhibit No. 6 offered.)

6 MS. OTT: No objection.

7 THE COURT: All right. Applicant's -- State's
8 Ex- -- Applicant's Exhibit -- Writ Exhibit Number 6 is
9 admitted.

10 (Applicant's Writ Exhibit No. 6 admitted.)

11 Q. (BY MS. SWEEN) So, Dr. Lynn, looking at your CV, it
12 looks like you've published in the fields of hypnosis,
13 pseudoscience and psychology, generally; is that correct?

14 A. That's correct.

15 Q. Can you estimate how many books you've published on
16 these topics?

17 A. I'd be happy to. I've rendered and edited six
18 hypnosis books with six topics on pseudoscience, four
19 textbooks. One is an introductory site textbook in its
20 fourth edition, a text on psychotherapy, abnormal psychology
21 and a hypnosis textbook in its second edition and another
22 textbook on hypnosis in its first.

23 I published one book on -- on memory and one
24 book on dissociation. Out of a total of 27 books, 23 are
25 published. One is in press, and -- and three are in contract

1 or in progress.

2 Q. And in addition to these 27-plus books, have you
3 written articles on these same topics, hypnosis,
4 pseudoscience, memory?

5 A. I have.

6 Q. And that's approximately how many?

7 A. Well, it would be 196 total articles on hypnosis.
8 41 are theoretical. 15 are laboratory studies, articles,
9 going into forensic hypnosis with number 26, and articles on
10 clinical hypnosis would be 42 with the remainder of articles
11 on different topics.

12 Q. You've mentioned laboratory studies. Dr. Lynn, do
13 you actually have a history of conducting laboratory studies
14 on hypnosis?

15 A. I do.

16 Q. And we'll talk about some of those later.

17 A. I'd be happy to.

18 Q. But, now, let me ask you about your leadership and
19 academia. Do you serve on any editorial boards?

20 A. I do. I'm a nominal editor, meaning I started a
21 journal called Psychology of Consciousness during research
22 and practice, which is in APA Journal. And I'm on, I
23 believe, nine or ten different editorial boards.

24 Q. Can you explain to us what an APA journal is?

25 A. It's an American -- it's -- it's a journal that is

1 published by the American Psychological Association, which is
2 the largest professional organization associated with
3 psychologists.

4 Q. About how many research laboratory studies just on
5 hypnosis and memory and age regression have you supervised?

6 A. 15.

7 Q. Now, on your CV, I noted that there are a number of
8 awards for your scholarship.

9 A. Uh-huh.

10 Q. I'd just like to ask you about a couple of them.

11 A. Sure. Please.

12 Q. It seems like just -- in 2005, you got the best
13 paper for a historical topic on hypnosis from the American
14 Journal of Clinical Hypnosis?

15 A. That's correct.

16 Q. What is the American Journal of Clinical Hypnosis?

17 A. That's a journal on clinical hypnosis published in
18 America, and that is not meant to be a flippant answer. But
19 it is one of the first hypnosis journals, and it is
20 associated with the American Society For Clinical Hypnosis.

21 Q. And I misspoke. I think that was in 2015.

22 A. I would have to double-check that, please.

23 Q. Okay. They go back for several decades, these
24 awards, so I'm just going to highlight a few of them.

25 A. Please.

1 Q. You also got a best paper award from the Society of
2 Psychological Hypnosis in 2014; is that correct?

3 A. I believe it's -- well, yes. The societies have
4 rather similar names, so that's correct.

5 Q. And this is an award for the best theoretical or
6 applied paper?

7 A. Correct.

8 Q. What is -- what is the difference between
9 theoretical and applied science?

10 A. A theoretical paper would be a paper that -- that
11 proffers a theory to account for a particular phenomenon. An
12 applied paper is a paper that's rant and more toward --
13 toward clinical and applied work with people.

14 Q. Now, you mentioned your books. I want to ask you
15 about one that won the PROSE Award from the American
16 Publishers Award for Professional and Scholarly Excellence.
17 This was in 2010, the 50 Great Myths of Popular Psychology --

18 A. Uh-huh.

19 Q. -- Shattering Widespread Misconceptions About Human
20 Behavior.

21 A. Yes.

22 Q. Can you give us a brief abstract of that book?

23 A. Our intention in this book was to educate the
24 general public regarding popular myths that are -- are widely
25 held by -- by the broader public across the -- the full range

1 of -- excuse me -- mistaken beliefs and misunderstanding
2 regarding psychological phenomenon processes.

3 MS. SWEEN: And if I may approach the witness
4 with what's been marked as Applicant's 7 and with some water?

5 THE COURT: You may.

6 MS. SWEEN: Thank you. I have one copy.
7 Your Honor, I will get you a copy.

8 A. Thank you.

9 Q. (BY MS. SWEEN) Do you recognize this, Dr. Lynn?

10 A. I do.

11 Q. What is it?

12 A. This -- this looks to be an electronic copy of my
13 book, 50 Great Myths of Popular Psychology.

14 Q. And this is the one we were just discussing that was
15 recognized as a -- for its PROSE writing?

16 A. It was.

17 Q. I -- I haven't read the whole thing, but in reading
18 it, it looks like it was geared towards a general audience,
19 as opposed to an audience of academics; is that fair to
20 say?

21 A. Yes. It was our intention in writing that book for
22 it to reach a broad audience.

23 MS. SWEEN: At this time, we'd like to offer
24 Applicant's 7.

25 (Applicant's Exhibit No. 7 offered.)

1 MS. OTT: No objection.

2 THE COURT: All right. Applicant's 7 is
3 admitted.

4 (Applicant's Exhibit No. 7 admitted.)

5 Q. (BY MS. SWEEN) So this book was published in 2010;
6 is that correct?

7 A. That is correct.

8 Q. Are any of the 50 Great Myths that are referred to
9 in the title of your book relevant to the proceeding today?

10 A. I would say that they are.

11 Q. Can you identify which ones they are?

12 A. Myth 11 is -- is human memory works like a tape
13 recorder or video recorder, camera and accurate events we
14 experience. And I am afraid the rest of that title is
15 blocked out, but I think it would be something -- accurate
16 events are faithfully represented.

17 Q. So the -- the -- the myth that you were -- one of
18 the myths you were debunking in this work is about human
19 memory working like a tape recorder or video camera?

20 A. Yes, because that -- that notion has -- has been
21 widely -- widely criticized and is no longer accepted by
22 cognitive scientists.

23 Q. But --

24 A. It would be no different today, but that's not the
25 case.

1 Q. And any other myths that you would like to highlight
2 that are relevant to this particular proceeding?

3 A. Sure. The next one would be Hypnosis is Useful for
4 Retrieving Memories of Forgotten Events.

5 Q. So does that mean that it is your position that
6 hypnosis is not useful for -- as a retrieval device for
7 forgotten memories?

8 A. I'd say overall there are serious problems with the
9 reliability of hypnosis. As I'll share in my testimony
10 later, it can yield some accurate memories as well as some
11 inaccurate memories. But there are other rather serious
12 problems that can be associated with its use.

13 Q. So your research as of 2010 was that this common but
14 false assumption that hypnosis could be used reliably to
15 retrieve accurate memories of forgotten events is something
16 you wanted to educate the general public about?

17 A. That's correct.

18 Q. Is this book mentioned in the affidavit you prepared
19 for this case?

20 A. It is mentioned there.

21 MS. SWEEN: And I believe, Your Honor, that
22 Applicant's 5 has already been admitted, but if I may
23 approach the bench and the witness with a copy?

24 THE COURT: You may approach.

25 (Document tendered to the Court.)

1 MS. SWEEN: Thank you, Your Honor.

2 Q. (BY MS. SWEEN) In case you need to refer to that,
3 Dr. Lynn.

4 A. I appreciate that. Thank you.

5 Q. And before we move off the 50 Great Myths, if you
6 can turn in Exhibit 7, there's -- there's some Bates labels
7 at the bottom where it says, scholarship. And then there's a
8 number, which is just a page number.

9 If you could go to Scholarship 634. I'd just
10 like to read a paragraph and see if this conforms with --
11 this is Exhibit 70 [sic], the electronic copy of your book,
12 The 50 Great Myths.

13 A. I'm with you.

14 Q. Okay. And I just want to see if this particular
15 excerpt conforms with your current views about memory. This
16 is from the chapter on Myth 11, how human memory works like a
17 tape recorder or video camera. I'm starting at moreover.

18 Moreover, eyewitnesses sometimes misidentify
19 innocent individuals as criminals even though these
20 eyewitnesses often express their inaccurate opinions in the
21 the courtroom with utmost confidence.

22 You cite some studies.

23 Popular beliefs notwithstanding, even witnesses
24 who get a long hard look at the perpetrator during the crime
25 frequently finger the wrong suspect in a lineup or courtroom.

1 Once more, the relation between eyewitness's
2 confidence in their testimony and the accuracy of their
3 memories is typical -- typically weak or even nonexistent.

4 You cite a study.

5 This finding is deeply troubling given that
6 jury members tend to place heavy weight on eyewitness's
7 confidence when gauging the believability of their memories.

8 More studies.

9 In one recent survey, 34 percent of 160
10 American judges believe that there was a strong association
11 between eyewitness confidence and accuracy.

12 And a study.

13 Disturbingly, of the 239 criminal defendants
14 freed on the basis of DNA testing as of June 2009, about
15 75 percent were convicted largely on the basis of inaccurate
16 eyewitness testimony.

17 Did I read that correctly?

18 A. You read it correctly, but there is an error
19 there.

20 Q. Oh. Please clarify.

21 A. I believe that the number is now up to 338.

22 Q. So that was at the time of publication?

23 A. That was at that time.

24 Q. So it's not an error. It's just there's a more
25 updated figure?

1 A. Yes. It is erroneous in terms of current data.

2 Q. And so it continues to be a problem with these false
3 beliefs about memory being relevant to misidentification of
4 potentially innocent perpetrators in criminal cases?

5 A. In my opinion, yes.

6 Q. All right. Now, if you could turn, Dr. Lynn, to
7 page 636. This is in the same essay, and this is a little --
8 a quote about hypnosis, starting at the third full paragraph.

9 Does hypnosis fare any better when it comes to
10 remembering extremely early life experiences? A televised
11 documentary showed a group therapy session in which a woman
12 was age regressed through childhood to the womb and
13 eventually to being trapped in her mother's fallopian tube.

14 The woman provided a convincing demonstration
15 of the emotional and physical discomfort one might experience
16 if one were indeed stuck in that uncomfortable position.

17 Although this woman may have believed in the
18 reality of her experience, we can be quite sure that it
19 wasn't memory based. Instead, age-regressed subjects behave
20 according to their knowledge, beliefs and assumptions about
21 age-relevant behaviors.

22 As Michael Nash in 1987 showed, adult age
23 regress to childhood don't show the expected patterns on many
24 indices of early development, including vocabulary, cognitive
25 tasks, brainwaves, EEGs, and visual delusions. No matter how

1 compelling they may seem, age-regressed experiences aren't
2 literal reinstatements of childhood experiences, behaviors or
3 feelings.

4 Does that capture your current understanding of
5 some of the problems with using hypnosis to travel backwards
6 to recover memories?

7 A. It does.

8 Q. Okay. Now, let's talk about the -- the big picture
9 in terms of your expert opinions you intend to offer today.
10 We're getting ready to offer you as an expert. First, I'm
11 laying the groundwork.

12 All right. How did you get involved in
13 Mr. Flores's case?

14 A. I actually have -- have some information pertinent
15 to that. I was -- I was -- I'm missing the first page. But
16 I believe I was first contacted by -- by Gregory Gardner
17 regarding this case.

18 Unfortunately, the first page is -- is missing,
19 and I don't have that exact date. But I -- I did receive a
20 phone call from him, and I did agree that I would serve as an
21 expert in this case.

22 Q. And just for the record, Mr. Gardner was
23 Mr. Flores's previous counsel.

24 A. He was his attorney at the time.

25 Q. Okay. And you did, in fact, review materials and

1 prepare an application?

2 A. That is correct.

3 Q. I mean -- I'm sorry -- an affidavit?

4 A. I did.

5 Q. And that was used to support the application that
6 led to the proceeding today; is that your understanding?

7 A. It is my understanding.

8 Q. Now, are you prepared to offer expert opinions about
9 the topics covered in that affidavit?

10 A. I would be happy to.

11 Q. So let's -- let me -- let me go over some of them
12 and see if these are topics --

13 A. Please.

14 Q. -- you prepared to opine about today.

15 Are you prepared to opine about flaws in the
16 hypnosis session that the law enforcement officer performed
17 on Mrs. Jill Barganier back on February 4, 1998?

18 A. I would.

19 Q. Are you prepared to opine about the elements of the
20 hypnosis session that made her subsequent testimony about her
21 memory of what she had seen over 13 months before unreliable
22 from a scientific perspective?

23 A. I will do that.

24 Q. And are you prepared to opine about scientifically
25 indefensible positions in the expert testimony that was

1 provided during the Zani hearing in this case?

2 A. I will.

3 Q. And are you prepared to opine about how the
4 scientific perspective of hypnosis has evolved and the data
5 that supports those developments?

6 A. I would be happy to.

7 Q. Are you prepared to opine about reasons for concern
8 about using hypnosis as a forensic tool?

9 A. I would.

10 Q. And, finally, are you prepared to opine about the
11 contemporary scientific consensus that law enforcement
12 hypnosis sessions cannot be done in such a way as to
13 safeguard against the four dangers, in quotes, of hypnosis
14 that are described in the Zani case?

15 A. I have some thoughts about that too.

16 Q. Are you asking this Court to make new law by
17 adopting a per se ban on testimony from witnesses who have
18 been subjected to hypnosis?

19 A. I am not.

20 Q. Is it your opinion that hypnosis has value as a
21 therapeutic tool?

22 A. Absolutely.

23 Q. What are the some examples of how you've been able
24 to use hypnosis effectively as a therapeutic tool?

25 A. Yes. Well, at present time, I have a book in press

1 based on a program we developed to use hypnosis with smoking
2 cessation. And that program is based on -- on scientifically
3 supporting a principle with the addition of hypnosis which
4 has been, in fact, shown empirically, scientifically to
5 increase the effectiveness of a variety of treatments. In
6 other words, simply labeling the procedure as hypnosis does
7 improve outcomes across a number of different therapies.

8 So -- so, yes, it can be a val- -- a valuable
9 tool. And I have written a textbook that -- that recounts
10 how hypnosis can be used in clinical situations using
11 techniques that are -- empirically support. I view it as an
12 adjunct, an added technique, that can be helpful as a
13 catalyst of positive expectancies which we now have
14 reasonably good data showing that that's helpful.

15 So the short answer is, yes, it can be very
16 useful, and I do use it in my clinical practice because there
17 are data showing that it is useful to help people.

18 Q. You use the word "expectancies." Is the fact that
19 hypnosis comes with certain expectancies make it particularly
20 useful in the therapeutic context?

21 A. It's useful in the forensic concept -- context. I
22 don't believe it's useful in the veracity context.

23 Q. Okay.

24 A. But that's not your question.

25 Q. No. I'm sorry.

1 A. Your question has to do with positive expectancies.
2 Yes. Because people come into that situation with a
3 pre-existing set of beliefs based on widespread beliefs in
4 our culture that hypnosis can increase people's abilities.
5 It can increase their concentration. It can increase their
6 sports performance. In other things -- in other words, there
7 are -- are -- are things, if you will, that -- that people
8 achieve during hypnosis, they believe this, that they cannot
9 necessarily achieve during hypnosis.

10 We also know that positive expectancies are one
11 key to effective psychotherapy. So when people enter into
12 this particular situation, they come in with the belief
13 that -- that there is a tool that will help them. And I
14 believe it is this tool, these positive expectancies, that
15 are important and a catalyst for positive outcomes or more
16 positive outcomes than if hypnosis were not used.

17 Q. So we'll get into the substance of your opinions
18 more fully, but at this time, could you provide a summary for
19 the Court of the materials you reviewed and relied on in
20 forming your opinion?

21 A. Yes. I reviewed a transcript of -- of Ms. Jill
22 Barganier's testimony before the jury, Volumes 35, 36, and
23 38. I viewed a video recording of the hypnosis session with
24 her conducted by Police Officer Mr. Roen Serna, a transcript
25 of the video recording of the hypnosis session of Ms. Jill

1 Barganier, a Farmers Branch Police Department data sheet, a
2 document entitled, Time Line Barganier, a document entitled,
3 Hypnosis Data Sheet and Narrative, and a transcript of the
4 Zani hearing pertinent to the proceedings that occurred in
5 the period of March 22nd to April 21 in the Flores matter.

6 Q. And, Dr. Lynn, I want to clarify one thing that
7 we've learned in the last week, is that Ms. Barganier
8 pronounces her name Barganier. And it was misspelled in the
9 record, which is why we had all been saying Barganier
10 (different pronunciation).

11 A. I -- I will try to remember that.

12 Q. We'll -- we'll --

13 A. Okay.

14 Q. -- we'll try to be on the same page.

15 A. If I get that wrong once or twice, please forgive
16 me.

17 THE COURT: Doctor, let's make sure that she
18 asks the question and then you wait to answer --

19 THE WITNESS: I will.

20 THE COURT: -- because the court reporter can
21 only take down one person person at a time.

22 THE WITNESS: Thank you.

23 MS. SWEEN: Thank you, Your Honor. At this
24 time, we offer Dr. Steven Lynn as an expert in hypnosis,
25 memory and pseudoscience.

1 MS. OTT: No objection.

2 THE COURT: Proceed, Counsel.

3 Q. (BY MS. SWEEN) Dr. Lynn, did you prepare a
4 Power- -- some PowerPoint slides to assist in the flow of
5 your testimony today?

6 A. I prepared several.

7 MS. SWEEN: Your Honor, at this time, we ask
8 permission to publish these slides as a demonstrative.

9 THE COURT: All right. You may proceed.

10 MS. SWEEN: Okay.

11 Q. (BY MS. SWEEN) Dr. Lynn, if we could get some basic
12 definitions. You have here -- maybe we don't need to go
13 through all of these terms, but let's start with hypnosis
14 itself. What is the current scientific understanding of what
15 hypnosis is?

16 A. There are different current scientific
17 understandings of what hypnosis is. There are many
18 definitions of hypnosis.

19 What you will see depicted in this slide is a
20 definition that I -- I feel comfortable with, and it is
21 stated in the slide. A situation that is defined as
22 hypnosis, presumed to be hypnosized by a person who is invited
23 to respond to imaginative suggestions. Simply defining the
24 situation as hypnosis increases suggestibility of 1.5
25 sessions -- I'm sorry -- suggestions on a 12 point scale of

1 hypnotizability.

2 Q. All right. And then you -- you use the term
3 "suggestions." What are hypnotic suggestions?

4 A. Hypnotic suggestions, I define them as imaginative
5 suggestions that are typically related to changes in
6 sensations, thoughts, emotions, memories, perceptions and
7 actions.

8 Q. Can you give us a concrete example?

9 A. If I ask you to pay attention to -- to this
10 suggestion, your -- your arm is getting lighter and lighter,
11 you can feel sensations of lightness creeping into your arm.
12 You can imagine that there is a balloon attached by a string
13 to that arm. It is a helium balloon. And it feels lighter
14 and lighter. It's moving up and up and up.

15 I'm now going to attach several other helium
16 balloons in your imagination. I'm not wording this very
17 well. And there will be a red balloon. There will be a
18 yellow balloon, a green balloon, maybe a balloon of any color
19 you like. And with those three balloons, your hands will
20 rise more and more off of the resting surface until your hand
21 is at shoulder height or higher.

22 And -- and you give suggestions for that hand
23 and that arm to be lighter and lighter. So that is an
24 imaginative suggestion.

25 Q. And is that a fundamental part of what hypnosis

1 involves?

2 A. Hypnosis involves, in my opinion, and according to
3 the scientific literature, three things that have been
4 scientifically demonstrated to be predictors and predict a
5 significant amount of the variability in how people respond.
6 That is their responsiveness to imaginative suggestions,
7 their expectancies and their motivation to respond.

8 So if I don't expect that my arm will lift,
9 it's very likely that I will tune into those sensations
10 associated with lightness. If I can't imagine that happening
11 at all, I have no memory of it. And if I'm not motivated to
12 respond, it wouldn't be surprising if I did not respond at
13 all to that suggestion.

14 Contrary-wise, if I had high expectancies,
15 imagined it very, very carefully and could actually feel
16 those sensations and were motivated to respond, there would
17 be a much higher likelihood that I would succeed in passing
18 that particular suggestion.

19 Q. When did you get your Ph.D. in psychology,
20 Dr. Lynn?

21 A. It's been longer than I feel comfortable sharing,
22 but it was -- it was 1976, 1977. I will tell you that at
23 this very moment it was in 1976.

24 Q. And what was your view of hypnosis at that time?

25 A. I was a true believer. I was fascinated by

1 hypnosis. I -- I thought it was a technique where people
2 could access abilities that they normally couldn't access,
3 that it -- it would help in -- help people in many, many
4 ways. I did believe that it was a dramatically altered state
5 of consciousness.

6 And specific to our proceedings today, I
7 believed that hypnosis could actually improve people's
8 memories.

9 Q. Now, in this slide that I put up that you prepared,
10 is this study that -- there's a picture of from 1979?

11 A. That study was actually published in 1983. I began
12 working on it with an honor student in 1979. And as you will
13 see at the top of the slide, it says, the majority of
14 psychologists, 84 percent, and nonpsychologists, 64 -- 69
15 percent -- it's hard to read -- believed hypnosis can recover
16 memories. And I was one of those people who strongly
17 believed that. Even though --

18 Q. Did you start to change your mind at some point?

19 A. Well, I did. I did not come into the field of
20 hypnosis with preconceived ideas. I did not have -- other
21 than the common myths, because I did not have a mentor in
22 graduate school who -- who had strong beliefs in one theory
23 of hypnosis or another. So I came to my -- my beliefs based
24 on empirical studies that -- that we did in my laboratory.
25 So --

1 Q. Can you talk about this -- this first study --

2 A. Yes. I was heading there.

3 Q. -- the lab study? Okay. Please.

4 A. Yes. Well, it was a surprise to us because we -- we
5 were looking at -- at stimuli that were paired associates.
6 What a paired associate means is you have -- you have two
7 words, like truth and justice, okay, or -- or cat and yarn.
8 So the true and justice pair associates are abstract, you
9 know, truth and justice. The ball and the yarn are -- are
10 not. They're concrete.

11 So we thought we'd first try to duplicate --
12 the irony of this is long-winded. We would try to duplicate
13 these earlier findings that people remember the more concrete
14 paired associates better than truth and justice.

15 And we found that was true, but we wanted to
16 see whether hypnosis could actually improve recall of that,
17 so we had three different sessions. There was a baseline
18 session. In other words, we tested before hypnosis. And
19 then we -- we had three conditions. We had a hypnosis
20 condition. We had a relax condition, and we had what we
21 called a task-motivating condition where people simply try to
22 do their best to remember something.

23 What we found is when we tested them at session
24 two, the hypnosis recall was actually poorer, much to our
25 surprise, than the other two conditions.

1 Then we tested them in a third session for
2 hypnotizability, and we found no differences in
3 hypnotizability across all three of these conditions.

4 So this was very surprising to us, and this was
5 the very -- one of the very first studies we did. It got me
6 thinking that maybe hypnosis was not a very altered state or
7 a trance state, that it was fundamentally different from a
8 nonhypnosis state.

9 And this also got me very curious about doing
10 more research on hypnosis and memory. So from that time on,
11 we have been consistently doing research on hypnosis and
12 memory and/or I've been -- been writing about it.

13 Q. And -- and, Dr. Lynn --

14 MS. LAMBERT: I'm sorry. Can I just ask you --
15 can you go back to that last line? I can't read it. So
16 could you just read the title and the year --

17 MS. SWEEN: Oh.

18 MS. LAMBERT: -- of that first study.

19 MS. SWEEN: How do I go back? First study,
20 decrease recall -- oh. The study down there?

21 MS. LAMBERT: Yes.

22 MS. SWEEN: Hypnosis, hypnotizability and
23 imagery mediated learning.

24 Q. (BY MS. SWEEN) Is that correct, Dr. Lynn?

25 A. I can't see it, but I believe that that is correct,

1 and I could go to my vitae to give you --

2 Q. That was --

3 A. -- the exact title.

4 Q. But that was one of your first laboratory studies --

5 A. That was --

6 Q. -- about hypnosis?

7 A. -- my first laboratory study --

8 Q. All right. And we --

9 A. -- on hypnosis.

10 Q. -- we do not have the --

11 THE COURT: Let me -- hold on. Just one at a
12 time. Okay? Just one at a time. Speak one at a time.

13 MS. SWEEN: Thank you, Your Honor.

14 Q. (BY MS. SWEEN) So, Dr. Lynn, we don't have time to
15 survey all of your laboratory studies on hypnosis, but I
16 wanted to -- the next slide you have there hypnotic age
17 regression. And then there's some information. I'm just
18 going to bring it all up because I don't know what you wanted
19 to look at. Whoops. Sorry.

20 Can you talk to us briefly about this next --
21 this particular study that came after that first one.

22 A. I would be very happy to. This study involved
23 hypnotic age regression, which simply means that you invite
24 somebody to imaginatively relive an earlier period in time.

25 And this was a follow-up, actually, of a study

1 that we had conducted, and I will not -- will not bore you or
2 take up our time with that study. But if -- if you could
3 switch to the next slide, that would be very helpful.

4 Q. And let me just ask you: When I was reading from
5 your book about that frontline documentary --

6 A. Yes.

7 Q. -- was that one of the impetuses for doing this
8 study?

9 A. It's one of the impetuses for doing this study
10 because what I read about was that when people have these
11 experiences of hypnotic regression -- and I experienced this
12 in my clinical work -- they would often have a very
13 compelling experience of -- of being, if you will, a child.

14 And so it's very impressive to me as a
15 clinician, but then I started wondering, are these memories
16 that people have accurate memories, which is the
17 real where-the-rubber-meets-the-road test.

18 And so we actually contacted parents after one
19 of our studies to see whether they could corroborate what was
20 remembered during an age regression hypnosis session. And so
21 this is -- is what I would like to -- to share with you.

22 So we age regress, age regressed hypnotized
23 subjects to the age of 3. And we also had role playing
24 subjects. Now, these are subjects who are not at all
25 hypnotizable based on previous tests. And they are a good

1 control for the highly hypnotizable subjects. Because if
2 they can duplicate what the hypnotized subjects do in that
3 particular study, the possibility is that the hypnotized
4 subjects themselves are acting on the basis of the
5 expectations and what they glean from the experiment in terms
6 of how they are supposed to respond.

7 So in other words, if low hypnotizable,
8 role-playing subjects told to act like high hypnotizable
9 subjects respond the same way, it leaves us the question as
10 to -- to whether the hypnotized subjects' responses are not
11 due to those variables, rather than something intrinsic to
12 hypnosis.

13 But we did find some very interesting
14 differences between these two groups. So they're asked
15 during hypnosis to play with objects in the soothing presence
16 of their mother. And one of the objects we asked them to
17 play with was what we call a transitional object, which is
18 like a teddy bear or a blanket. And the interesting thing
19 about this study is we then went back and we contacted the
20 parents to get third-party verification of what actually
21 transpired.

22 So if you could go to the next slide, please.
23 The findings were that the parents could corroborate the
24 reports of the hypnotized people only 21 percent of the time,
25 whereas the role players after hypnosis were corroborated

1 only 70 percent of the time.

2 Q. And by role players, you mean they were in on the --
3 the -- the scenario, essentially?

4 A. They did exactly the same thing, but these were low
5 hypnotizable people asked to role play the performance of an
6 excellent subject.

7 Q. So they were acting?

8 A. They were -- yes. Thank you. They were acting. So
9 that also really caught our attention, and we started
10 thinking, well, we can't really corroborate these memories.
11 Then maybe they're having a very vivid experience during
12 hypnosis, but that experience is not necessarily a veridical,
13 you know, a truthful experience that -- that has fidelity to
14 what they actually experienced during childhood.

15 So that -- that we found very interesting.
16 And -- and all of the recollections that came forth during
17 hypnosis were -- were actually incorporated into what they
18 reported after hypnosis. So it seemed like it just wasn't a
19 hypnotic phenomenon.

20 Now, a slightly higher percentage of the
21 hypnotized subjects -- I believe it was 36 percent -- maybe
22 this is too much information, but -- but after a hypnosis
23 reported that they played with these, but that was still
24 different from the 70 percent rate of the people who were
25 simulating or role playing hypnosis.

1 Q. So more reason --

2 A. So that struck us very -- to be more skeptical of
3 this very common popular belief. I'm sorry. I didn't let
4 you finish. I'll try to do better.

5 Q. So -- and just -- I want to skip to here. The --
6 the -- the conclusions you were starting to reach, did they
7 have some -- did they lead you to do this study about
8 hypnosis and whether or not memory is improved if you're
9 dealing with emotional memories?

10 A. Well, yes. Yes. I would say that all of our
11 studies, after that investigation, were -- were stimulated
12 certainly to some degree by our initial findings.

13 And at that point, there was very little
14 literature on this, and this got not only me, but my entire
15 lab interested in this area of hypnosis and memory.

16 Q. So did you do multiple studies on subjects that
17 involved highly emotional events, like, fatal stabbings,
18 et cetera?

19 A. Well, we didn't do that.

20 Q. You couldn't stab people in the lab and then
21 hypnotize them?

22 A. Oh. You can't?

23 Q. So how did you do this?

24 A. You can't do that?

25 Q. You can't do that.

1 A. Well, we -- we did not do many along those lines,
2 but there are eight studies in the literature now that --
3 that show that -- that the emotionality and level of arousal
4 that's induced by the stimuli, like a mock assassination and
5 so forth, they have little bearing on the outcome. So that
6 does not seem to be a key variable.

7 Q. Okay. And then I want to talk to you about this --
8 the flashbulb memory studies you did. You've got here this
9 picture of Princes Di, and there may be people here younger
10 than I that do not remember this event. Can you describe
11 this study very briefly?

12 A. Yeah, I can describe very briefly, but I'll give you
13 the humorous antidote. I was in Australia giving a hypnosis
14 workshop, and I got a call from a first-year student who had
15 just entered the program. And she said, did you know that
16 Princes Diana died? I said, well, yes. You can't miss this
17 in Australia. You know, they're kind part of the
18 commonwealth and -- and so forth. So, yes, she contacted me
19 somehow and said we have to do a study on -- on flashbulb
20 memories.

21 Now, why do a study on flashbulb memories?
22 Flashbulb memories are these memories of the Kennedy
23 association, the Challenger association, very, very
24 significant memories that -- that people -- valor is people
25 do not forget these memories.

1 And so we wanted to test this, but we wanted to
2 test this in context of hypnosis. And I thought it was a
3 great idea. Why? Because the argument that had been made,
4 in part, by the American Society For Clinical Hypnosis.
5 Well, hypnosis could be very useful in these kinds of
6 emotional situations, but -- but, also, the studies did not
7 necessarily generalize to real life experiences outside the
8 sterile conditions of the laboratory. So we thought this was
9 an ideal platform for doing this.

10 These were autobiographical memories. All
11 participants in the study were required to have had an
12 emotional reaction to her death. It was done -- done outside
13 of the formal laboratory. And -- and -- we were able to
14 compare hypnosis then with several other well-respected
15 recall procedures.

16 So what we did is we contacted people one to
17 three days after. They wrote down descriptions, and then
18 there was an 11 to 12-week follow-up.

19 And if you would advance the slide, please.

20 Q. Just one question, Dr. Lynn. So, basically, you got
21 people who claimed to have had an emotional response to
22 learning the news of --

23 A. Yes. Correct.

24 Q. -- not observing it?

25 A. Learning about the news. Thank you.

1 Q. And then so they had to write down what they
2 remem- -- where they were, et cetera --

3 A. Yes.

4 Q. -- a few days afterwards?

5 A. Yes. Thank you. All -- all of the circumstances
6 surrounding it, their emotional reaction to it and as much
7 detail as they could possibly provide.

8 Q. And then you followed up and asked the same
9 question, give me as much information as you can --

10 A. Yes.

11 Q. -- about what you remember --

12 A. Well, we --

13 Q. -- about that today?

14 A. Yes. But we did it under three conditions, one
15 where we asked them to go back to that content, reinstate it
16 and even play the events back, forward and backwards, which
17 is a technique associated with contentional reinstatement.
18 It's supposed to be -- be helpful.

19 In that third condition, we invited them to --
20 to simply do their best to try to recall as much detail as
21 possible.

22 And then there was the hypnosis condition. And
23 to make a long story a bit shorter, we found that the recall
24 in the hypnosis condition was the least consistent of the two
25 conditions --

1 Q. So the -- the --

2 A. -- of the study.

3 Q. -- the group that had been -- had submitted to
4 hypnosis, their memory of what they had initially described
5 as their situation was the most divergent?

6 A. Yes. That's exactly right.

7 Q. Now, this next slide is about more current
8 scientific understanding regarding the ability to refresh
9 memory using hypnosis.

10 Can you summarize this -- this paper, I guess,
11 you cite from 2012, what it covers?

12 A. Well, there were many -- there were earlier studies
13 of -- of hypnosis that -- and -- and I cite, for example,
14 Steblay and Bothwell. And Bothwell, in 1994, who concluded,
15 among other things, that -- that there was, in fact, a narrow
16 window in which there was more accurate recall of hypnotic
17 recollections, but that that window faded before 24 hours
18 and -- and after 24 hours.

19 But the key findings of that study was that --
20 when they analyzed six of the -- the studies, that the recall
21 was actually poorer, and there were more false memories.

22 And in an analysis of five studies, they showed
23 that -- that -- that hypnotized subjects responded greater to
24 misinformation than nonhypnotized subjects.

25 So we wanted to do a more current update in

1 2012, and we -- we provided a summary. And this is really
2 important. 23 of the studies that we reviewed showed that
3 hypnosis either increases confidence relative to nonhypnotic
4 groups, or participants confidently report inaccurate
5 memories of events that they earlier denied occurred when
6 they were not hypnotized.

7 And the second point is, of the nine studies
8 that showed no difference in confidence, in five of these
9 studies, hypnosis produced more errors, or less accurate
10 information.

11 So in my mind, this raises very serious
12 questions about the use of hypnosis in forensic situations.

13 Q. Would you say your -- your empirical research also
14 underscores that memories aren't stored like videotape in the
15 brain and can be rewound, fast forwarded, paused?

16 A. Not only my research, but voluminous research
17 conducted by cognitive scientists across the world is
18 consistent with that conclusion. That's simply not how the
19 mind works.

20 Q. The premise or the idea of refreshing, recovering
21 memory, don't we have to start with this concept of memory
22 being encoded in the first place?

23 A. Yes, we do.

24 Q. What exactly is -- is -- does it mean to encode a
25 memory?

1 A. It means, basically, the -- the memory trace is --
2 is laid down, that it is stored, and it can potentially be
3 available for later retrieval.

4 If my eyes are closed and if you hold up the
5 signs A and B and ask me to -- to report what they are, the
6 memory is never encoded, so I can't store it, and I cannot
7 retrieve it accurately.

8 Q. Because you never saw it?

9 A. Yes. It was never -- to use the vernacular term, it
10 was never -- never laid down in my memory.

11 Q. So you can't refresh through hypnosis, or otherwise,
12 a memory that was never encoded in the first place?

13 A. I will amend that. You cannot restore an accurate
14 memory.

15 Q. You can store a false memory?

16 A. You can store a false memory.

17 Q. Or a confabulated memory, perhaps?

18 A. Yes, you could.

19 Q. What does that mean, a confabulated memory?

20 A. Confabulated -- confabulations occur all of the time
21 because memory is not reconstructive. It doesn't lay down,
22 somehow, the events that occurred in the sequential basis as
23 they occurred.

24 So a confabulated memory, given that there are
25 memory gaps, means that we come up with a memory that is

1 based on our guesses, our -- our hunches, our fantasies,
2 our -- our history. How we have responded or reacted in the
3 past provides the basis for our -- our coming up with new
4 memories or distorted memories.

5 So confabulation, in short, means filling in
6 memory gaps, although it has been defined in different ways
7 to simply define memories that are false memories that can be
8 documented to be memories that are inaccurate.

9 Q. And let me ask you: Can you describe some of the
10 mechanisms associated with hypnosis, the techniques of
11 hypnosis that cause particular risks in terms of the creation
12 of false memories?

13 A. Well, I can describe some that -- that -- that have
14 been -- been talked about and supported by research.

15 Now, the -- the first one is really important,
16 and it's the expectancies that hypnosis improves memory and
17 increases confidence.

18 Now, why is this important? The basic
19 presumption when someone enters into a hypnotic scenario,
20 particularly for forensic purposes, is that it will improve
21 memory and that the memories that ensued following that
22 methodology are likely to be accurate. After all, why would
23 one go through that particular procedure if it would not
24 have -- have value?

25 And -- and -- and this is highly problematic

1 for several reasons. One, we know that expectancy is a vital
2 part of how people respond to suggestions more generally.
3 But in this context, let me think of a good analogy for this.
4 A good analogy would be if I gave you a truth pill --

5 Q. I'm sorry? A truth pill?

6 A. -- a truth pill, a pill that you felt would restore
7 or improve or fill in memory gaps, and I told you this, or I
8 implied it or your prior beliefs were consistent with that.

9 You take this truth pill -- and why would you
10 doubt, because I'm an authority that this truth pill would
11 not do what it is supposed to do? You take the truth pill,
12 and then I ask you -- I ask you a question. What was it that
13 you recall on that date?

14 And because you've taken that truth pill and
15 you come up with stuff, either then or after the -- the
16 hypnosis, when given a suggestion to do so, you would likely
17 come to believe that that memory, whether it was a guess, it
18 was a hunch, it was a shot in the dark, was an accurate
19 memory because, after all, I had given you a truth pill.

20 And assuming that that truth pill works, well,
21 then, you would assume that that memory was accurate. But if
22 it were not accurate, we would have a serious problem of
23 false memory, and you might be resistant to cross-examination
24 after it, or your confidence, at the very least, would be
25 increased by that truth pill.

1 Q. So to take your analogy backwards, if we say someone
2 approaches hypnosis with the expectation that it is going to
3 help them remember more, that very directive from someone who
4 is authoritative can engender this false confidence that
5 whatever you come up with, even if it's -- if it's something
6 you glanced in the newspaper or something you read in a book
7 or had in a dream, you're going to think the hypnosis is
8 responsible?

9 A. I would amend that slightly. It is possible that
10 one might, even before he or she came to the hypnotist --
11 came to that situation might entertain those beliefs.

12 And, unfortunately, in this case and many other
13 cases, there is no ascertainment of what the prehypnotic
14 beliefs are. So we cannot judge how those expectancies might
15 come into play in this scenario.

16 Q. And you also have here hypnosis increases
17 suggestibility. What is suggestibility?

18 A. Suggestibility simply means that -- that one's
19 responsiveness to suggestion is increased. And based upon
20 what I just shared with the Court, one would assume that the
21 suggestibility would be increased simply by the
22 expectancy-boosting power of hypnosis.

23 Q. And what about -- you have eye closure, relaxation
24 discourages critical evaluation. What do you mean by that?

25 A. Well, when we say that there is critical evaluation

1 of a memory, it might -- it might mean many things. But it
2 might mean that the person engages in an active process of
3 weighing the plausibility and the likelihood that that was a
4 true memory and -- and is able to -- to relate that
5 likelihood and that plausibility to the context and to
6 numerous other potential factors.

7 When one is -- is focused in on relaxation, on
8 the sensations of relaxation or other distracting or -- or
9 other distracters, when the eyes are closed and one is
10 relaxing, it may well be the case -- it may well be the case
11 that one is not critically evaluating one's memories --

12 Q. So your critical defenses are down because you're
13 being asked to close your eyes, et cetera?

14 A. Well, not only close your eyes, but in this case and
15 in many cases in -- in which relaxation is used, you are
16 actually given competing stimuli that could interfere with --
17 with one's ability to critically analyze or -- or monitor
18 one's recall.

19 Q. What about the term "imagination inflation?"

20 A. Imagination inflation is -- is a concept that was
21 introduced in around 1998, 1999 by Maryanne Garry and her
22 colleagues in which she and -- and subsequent researchers
23 have documented that simply imagining repeatedly a suggested
24 event increases the confidence that one actually experienced
25 an event.

1 Q. Dr. Lynn, are you familiar with a legal case called
2 Zani v. State of Texas case?

3 A. I'm reasonably familiar with it.

4 MS. SWEEN: If I may approach the witness with
5 what's been marked as Applicant 58, Your Honor?

6 THE COURT: You may.

7 A. Thank you.

8 Q. (BY MS. SWEEN) Do you recognize that, Dr. Lynn, as
9 a printout of the case from Zani v. State?

10 A. I do.

11 MS. SWEEN: At this time, we offer Applicant
12 58.

13 (Applicant's Exhibit No. 58 offered.)

14 MS. OTT: No objection.

15 THE COURT: All right. Applicant's Exhibit
16 Number 58 is admitted.

17 (Applicant's Exhibit No. 58 admitted.)

18 Q. (BY MS. SWEEN) This -- this case was decided in
19 1988, correct, Dr. Lynn?

20 A. Yes, it was.

21 Q. So I'm going to walk us through some of the key
22 holdings. The CCA acknowledged in that case that the medical
23 and scientific communities then -- then, in 1988, saw
24 hypnosis as a valid psychotherapeutic device?

25 A. Yes.

1 Q. Is -- is -- does that confirm your understanding of
2 the science of the day, that there was pretty broad
3 acceptance of it as a therapeutic device?

4 A. There was broad acceptance of it in the scientific
5 community. Outside the scientific community, unfortunately,
6 I think the opinions were more variable because of prevailing
7 myths, negative myths and unfortunate myths about -- about
8 hypnosis, that subjects would go into a deep trance, they
9 would basically be under the power of a hypnotist, that --
10 that they could -- could respond with little ability to
11 resist suggestions et- -- et cetera. There were numerous
12 myths.

13 And, unfortunately, I can't tell you exactly
14 what the opinions were in 1988, but my suspicion is that the
15 therapeutic community underappreciated the potential value of
16 hypnosis as a valid and efficacious treatment tool.

17 But within the scientific community, yes,
18 people were very keen on using hypnosis and applying it to a
19 variety of physical and mental conditions.

20 Q. Treating pain, curing smoking?

21 A. Exactly.

22 Q. All right. Okay. All right. And in Zani, the CCA
23 also acknowledged that there was, at this time, 1988, by
24 contrast, a lack of consensus about the use of hypnosis as a
25 means of refreshing memory reliable enough to be vetted in

1 the criminal adversarial process.

2 Is that true about the status of the scientific
3 consensus in 1989, that there was much more debate?

4 A. Yes. There was considerable debate. In fact, in --
5 in the 1980s and even through the 1990s, there was
6 considerable debate about -- about the use of hypnosis, at
7 least, in forensic situations.

8 Q. And if you glance at the Zani case, doesn't it, in
9 fact, quote a bunch of competing scientific views?

10 A. That's my recollection.

11 Q. And the CCA then decided -- that's the -- the Court
12 of Criminal Appeals --

13 A. Yes.

14 Q. -- that in resolving this debate about whether or
15 not someone whose testimony had been hypnotically refreshed
16 could testify reliably.

17 They decided that if safeguards, corroboration
18 and traditional means existed to test the reliability of
19 eyewitness testimony, then it felt it should be okay to admit
20 hypnotically refreshed testimony, right? There was this --

21 A. Yes.

22 Q. -- legal decision, would listen to the scientist
23 if -- if there could be some safeguards --

24 A. Uh-huh.

25 Q. -- and they found an expert, Dr. Orne, who had

1 identified some safeguards; is that correct?

2 A. That's correct.

3 Q. Did you know who Dr. Orne is --

4 A. I was --

5 Q. -- or was?

6 A. I was well acquainted with Dr. Orne.

7 Q. So he gave some of the courts confidence that there
8 were safeguards that could be used to then vet testimony and
9 see that it was reliable; is that fair to say?

10 A. He did that in the Hurd decision, not in the Zani
11 decision directly. The Hurd decision was based in part on
12 the Zani decision.

13 Q. Okay. Actually, Hurd was decided before Zani?

14 A. Sure, in 1980.

15 Q. And Hurd was decided by the New Jersey Supreme
16 Court; is that correct?

17 A. Correct.

18 Q. So the -- the Texas Court said, oh, we -- we looked
19 at what the New Jersey courts have done and the California
20 courts have done, and they adopted similar guidelines; is
21 that correct?

22 A. Yes. That is correct.

23 Q. Okay. And they wanted procedural guidelines because
24 they identified these things called the four dangers of
25 hypnosis, correct?

1 A. The four-prong dangers of hypnosis.

2 Q. Okay. Four-prong dangers of hypnosis. And you've
3 listed them here on a slide. Can you briefly define these
4 for us?

5 A. Well, I'll try. Hypersuggestibility suggests that,
6 in -- in the hypnotic context, people can tend to be
7 hypersuggestible and not -- as I stated, I believe that that
8 suggestibility is due to motivation, expectancy and -- and
9 people's responses to imaginative suggestions.

10 This is important because there are very
11 clear-cut expectancies for greater recall in forensic
12 situations. People --

13 Q. And by that, you mean there's a higher motivation --

14 A. No.

15 Q. -- because the stakes are higher?

16 A. No, I don't. I mean, there is a higher expectancy
17 that -- that -- that whatever is recalled will be accurate
18 because people tend to believe that hypnosis will produce
19 accurate recall. So I'm separating that out from motivation.

20 There's often motivation because a crime has
21 been committed, because it is essential to find the
22 perpetrator. Oftentimes the police put undue or, at least,
23 very strong pressure on the witness, or the totality of the
24 investigation and the criminal process puts great pressure in
25 increasing -- in motivation, and people are asked to imagine

1 and visualize, which accesses their imaginative response to
2 suggestions. So there is hypersuggestibility.

3 Q. And, Dr. Lynn, I think you've already talked about
4 loss of critical judgment by the very nature of being put
5 under hypnosis?

6 A. No. No. I don't --

7 Q. Okay.

8 A. -- mean to say that. I'm saying that in this
9 situation, there can be a loss of critical judgment. Because
10 when people expect that their recall will be accurate recall,
11 without analyzing it carefully or monitoring of it, there can
12 be loss of critical judgment. And I also said that with eye
13 closure and relaxation, that can potentially contribute to
14 this process.

15 Confabulation, we now have, since -- since this
16 trial, a voluminous amount of evidence that people can be led
17 to report false memories, false memories that they
18 participated -- that they witnessed an exorcism.

19 We've done research showing people can -- can
20 have false memories of being bullied as children. People
21 have produced false memories since -- at a time of
22 participating in medical procedures when there were no such
23 medical procedures. There are more and more examples that
24 people can confabulate.

25 Now, in the hypnosis situation, because memory

1 is not like a video recorder, not like a multi-channel tape
2 recorder, yet, people believe that they can recall more
3 through the auspices of the hypnotic proceedings.

4 There is a great possibility here, a greater
5 possibility here for confabulation, which is indicated by the
6 fact that people report false memories that they are highly
7 confident of. And as I indicated and summarized earlier,
8 this is a threat that runs through many studies.

9 And memory cementing means simply that
10 individuals are more confident of their memories that are
11 produced during hypnosis which, in my opinion, is associated
12 with the high degree of confidence that they attribute to the
13 hypnotic proceedings, although it may be more complicated
14 than that.

15 Q. And by "memory cementing," you mean whether it's a
16 false or a real memory, it gets cemented?

17 A. Thank you for that distinction. The concern that
18 people have is that there is -- excuse me -- unwarranted
19 confidence, regardless of whether the memories are accurate
20 or inaccurate. And the courts are, of course, concerned with
21 the inaccurate memories largely.

22 Q. Now, and let me back up to confabulation one more
23 time. This is not lying, correct? It's about tricks of the
24 mind where you fill in the gaps because of memory zone
25 inadequacy?

1 A. Thank you for that clarification. Generally,
2 speaking. However, we cannot rule out the possibility that
3 people can be conscious liars. That certainly is possible,
4 but we don't know the base rates of that, how common that is.
5 I don't suspect that happens very often. That would be
6 surprising, but that is different from confabulation.

7 Q. Different concern?

8 A. The concern here is that people cannot discern the
9 difference between accurate memories and inaccurate memories.

10 And if we could go back to that slide on
11 mechanisms, please.

12 Q. On?

13 A. On mechanisms. It's about two slides. There you
14 are.

15 Q. There you go.

16 A. Thank you. There are studies that show that our
17 problems distinguishing memories between prior to hypnosis
18 and those that occur during hypnosis.

19 Q. All right.

20 A. But, again -- can we stay with that, that slide --

21 Q. Oh. I'm sorry.

22 A. -- if that's possible?

23 And -- and -- and given all of this, there is a
24 low threshold for imagined events to be construed as
25 memories. And guesses can be presumed to be memories as

1 well. And there are research studies that support this.
2 It's not just my -- my own conjecture here.

3 Q. In one of the studies, you cite here this Whitehouse
4 1991. Would you say in 1991 this was widely understood,
5 the -- the problems with retrieval of accurate memories
6 following hyp- -- hypnosis?

7 Why is it still being studied in 2003 and 2008
8 if everybody gets it?

9 A. Well, I -- I think that science progresses by
10 increments. It is accumulating. There rarely are gigantic
11 breakthroughs in science. We become more certain of our
12 hypotheses. We become more certain of -- or confident that
13 we are on the right track.

14 This was one of the earlier studies that showed
15 this, and people are still very concerned with all of these
16 issues. And as I -- as I have reviewed the literature, many
17 of these issues are in force today, and we have somewhat
18 different thinking of some of these issues today.

19 But, today, the consensus of information, I
20 believe, is somewhat different from what people were thinking
21 about in 1999 as the field has progressed in its certainty
22 regarding certain statements and in -- in the volume of
23 research that has been done over the years.

24 Q. Dr. Lynn, this list of four-prong dangers of
25 hypnosis from the Zani case, do you agree that those are,

1 indeed, dangers associated with hypnosis?

2 A. I absolutely do.

3 Q. Okay. Now, in Zani, they came up with these
4 procedural safeguards, correct?

5 A. Correct.

6 Q. And it was supposed to protect against these
7 four-prong dangers of hypnosis, right?

8 A. It was supposed to do that.

9 Q. All right. So let's -- we've got listed here on the
10 slide what it seems like are nine different factors. And
11 I'll just quickly move through it and see if this corresponds
12 with your rem- -- your memory of the -- the -- the case, the
13 Zani case, and also the facts of our case. But the
14 procedural safeguards are the level of training in the
15 clinical use -- uses and forensic applications of hypnosis by
16 the person performing the hypnosis. Is that one of the
17 factors?

18 A. It is, as I understand it.

19 Q. The hypnotist's independence from law enforcement
20 investigators, prosecutors and defense, is that a factor?

21 A. It is, as I understand it.

22 A. The existence of a record of any information given
23 or known by the hypnotist concerning the case prior to the
24 hypnotist -- hypno- -- hypnosis session, is that a factor?

25 A. It is, as I understand it.

1 Q. The existence of a written or recorded account of
2 the facts as the hypnosis subject remembers them prior to
3 undertaking, undergoing hypnosis, correct?

4 A. It is, as I understand it.

5 Q. The creation of recordings of all contacts between
6 the hypnotist and the subject, is that a factor?

7 A. As I understand it.

8 Q. All right. I know this is tedious, but I want to
9 get them all out there. The presence of persons other than
10 the hypnotist and the subject during any phase of the
11 hypnosis session as well as the location of the session, that
12 was a factor the Texas court wanted trial courts to look at,
13 correct?

14 A. As I understand it.

15 Q. The appropriateness of the induction and memory
16 retrieval techniques used, is that a factor?

17 A. As I understand it.

18 Q. The appropriateness of using hypnosis for the kind
19 of memory loss involved, is that a factor?

20 A. As I understand it.

21 Q. And, finally, the existence of any evidence to
22 corroborate the hypnotically enhanced testimony?

23 A. As I understand it.

24 Q. Did you recently reread the Zani case to get up to
25 speed on the --

1 A. Yes.

2 Q. -- State's procedural safeguards?

3 A. I did.

4 Q. All right. Now, what we want to do is now talk
5 about the hypnosis session of Jill Barganier that occurred on
6 February 4, 1998.

7 THE COURT: Counsel, let me -- let me just stop
8 you there. For the sake of my court reporter, let's take a
9 quick 10-minute break. We've been going for about an hour and
10 15 minutes, so we're in recess. 10-minute break.

11 (Court in recess, 10:30 - 10:45 a.m.)

12 (Open court, applicant present.)

13 THE COURT: All right. Back on the record.

14 Ms. Sween, you may continue.

15 MS. SWEEN: Thank you, Your Honor.

16 Q. (BY MS. SWEEN) Dr. Lynn, we were discussing the
17 procedural safeguards that the Texas Court of Criminal
18 Appeals announced in Zani. And do you recall from reviewing
19 the Zani hearing transcript that the State's expert,
20 Dr. George Mount, testified during that hearing that these
21 sa- -- procedural safeguards were satisfied with respect to
22 the hypnosis session performed on Jill Barganier?

23 A. I do recall that.

24 Q. So let's go through, and I want you to evaluate how
25 accurate that testimony was based on your own reading of the

1 factual record.

2 What do we know about the level of training in
3 the clinical uses and forensic applications of hypnosis by
4 Officer Serna who was the one who performed the hypnosis?

5 A. We know that he had only preformed, I believe, one
6 hypnosis session prior to that, or this was his first. So
7 please correct me. But his training was through a police
8 organization that -- that provided, I believe, 40 hours of
9 training for a certification in forensic hypnosis.

10 Q. In your view, was that adequate training in the
11 clinical uses of forensic hypnosis?

12 A. It was not adequate in the sense that the technique
13 that -- that he used was a technique that previous research
14 even had -- had showed could produce a greater frequency of
15 inaccurate memories.

16 Q. We'll talk more about that particular technique, but
17 let's go to the next factor. The hypnotist independent from
18 law enforcement, investigators, prosecution and defense.

19 Now, Officer Serna was an officer in the same
20 police department that was investigating the crime. He
21 worked the crime scene. Did that mean he was sufficiently
22 independent from investigators, prosecutors and defense?

23 A. I can't see how it would mean that.

24 Q. And --

25 A. The answer is no.

1 Q. Okay. The next factor, the existence of a record of
2 any information given or known by the hypnotist concerning
3 the case prior to the hypnosis session.

4 Did you see any information that he was given
5 any information about the -- the crime, other than collecting
6 evidence?

7 A. I did not see that.

8 Q. Okay.

9 A. The answer is no.

10 Q. Did you see the existence of a written or recorded
11 account of the facts as the hypnosis subject remembers them
12 prior to undergoing hypnosis?

13 A. I received a brief statement to that effect.

14 Q. If the records show that there was at some time a
15 witness affidavit signed by Ms. Barganier, did you ever see
16 such a statement where she described what she had seen?

17 A. I did not.

18 Q. And so the only information you saw was that
19 gathered during the hypnosis session itself as the preview to
20 it?

21 A. I saw that information, and then I saw a brief
22 report that was written after the hypnosis session.

23 Q. And that was by Officer Serna himself?

24 A. Correct.

25 Q. Now, the creation of recordings of all contacts

1 between the hypnotist and the subject.

2 Did we see all contacts between the hypnotist
3 and the subject in a recording?

4 A. I don't believe that we did. Would you like me to
5 expand on that?

6 Q. Yes, sir.

7 A. Unless I'm mistaken, we did not see the full bodies
8 of both the individual who was interviewed and Mr. Serna.

9 Q. And was there actually yet another person in the
10 room too?

11 A. There was, indeed.

12 Q. And we did not see him to see his contacts with the
13 hypnosis subject?

14 A. I believe we might have seen his feet or -- or
15 legs.

16 Q. And do you recall where the hypnosis session was
17 conducted?

18 A. It occurred in an office in the actual police
19 station.

20 Q. Is that concerning?

21 A. It's very concerning.

22 Q. Why is that?

23 A. It's concerning because it is contrary to the Zani
24 guidelines, and it is concerning because being housed there
25 could well have increased pressure on her to identify the

1 culprit.

2 Q. Let's look at the next four factors that are
3 identified by Zani. The presence of persons other than the
4 hypnotist and the subject during any phase of the hypnosis
5 session as well as the location of the session. So this is
6 what you were referring to?

7 A. Exactly.

8 Q. Okay. So it was a problem having any person in the
9 room when -- during the hypnosis session?

10 A. It was.

11 Q. Is it more problematic that it was the second
12 detective investigating crime, Officer Baker?

13 A. I can't say that, but it is, I assume, contrary to
14 good practice and -- and to Zani.

15 Q. Is it conceivably something that adds a subtle
16 pressure to come forward with information helpful to the
17 police investigation?

18 A. That's my opinion.

19 Q. And do we have any way of knowing if Officer Baker
20 gave any auditory clues or encouragement during that hypnosis
21 session based on the tape you reviewed?

22 A. I couldn't really tell.

23 Q. Because we couldn't see him or hear him in the
24 recording?

25 A. It's certainly much better to see him.

1 Q. Okay. Now, the next factor, the appropriateness of
2 the induction and memory retrieval techniques used during the
3 hypnosis session.

4 You commented a moment ago about there being a
5 problem with the technique. What technique are you refer to?

6 A. I'm referring to the combination of a technique
7 where one is asked to observe in something like a magic
8 theater, or otherwise, events as they transpired. But I'm
9 particularly concerned with the fact that those events
10 depicted in the movie were documentary events.

11 Documentary implies that those events depicted
12 document faithfully the events as they transpired that she
13 witnessed. And if you'd like to know my reasons for concern,
14 I'd be happy to share them, but I am concerned.

15 Q. I would like to know, but one clarification. So
16 you're saying the fact that you heard Officer Serna use a
17 technique that invited Ms. Barganier to imagine herself
18 watching a documentary film, that's what you're referring
19 to?

20 A. I'm referring to that, and I'm also referring to the
21 the fact that because the mind does not store memories in
22 pristine fashion, like those memories aren't kind of laid
23 down in -- in amber or etched in stone that she can access
24 them. And -- and that implies that there are techniques that
25 can recover those memories and that those memories will be --

1 be accurate, that that technique was used in the first place.

2 But then -- and on top of that, there's this
3 notion of a documentary that those memories will be accurate,
4 much as I described the truth pill earlier.

5 Q. So is it fair to say that this particular technique
6 increases these dangers associated with hypnosis?

7 A. It increases some of the dangers certainly
8 associated with -- with hypnosis.

9 Q. By representing to the subject that they are going
10 to be able to recover a document of their past experience?

11 A. Yes. If I gave you -- handed you a document, this
12 document is -- is accurate, learn this, what do you remember
13 about this document, it would be the equivalent of doing so.

14 Q. And memories just aren't --

15 A. But even worse, because she is visualizing and
16 imagining things, and we know that there can be dangers
17 associated with visualization and imagination repeatedly,
18 what I refer to as imagination inflation.

19 Q. Are there studies about the appropriateness of using
20 this particular movie theater technique in hypnosis?

21 A. Yes.

22 Q. And what are those studies -- what are -- what are
23 the results of those studies?

24 A. Yuille and McEwan, back in, I believe, 1985 or 1987,
25 actually tested a movie theater technique. I don't believe

1 it was defined as a documentary. And in that study, when he
2 compared those people who were exposed to that technique with
3 people who were -- were simply asked to review the events,
4 there were 9.33 errors in recall in the film technique versus
5 7.08 in the other technique.

6 Q. Now, the last factor here, the existence of any
7 evidence to corroborate the hypnotically enhanced testimony.
8 Did you look at other corroborating evidence that the State
9 relied on?

10 A. I tried to restrict -- the answer is no. And I
11 tried to restrict -- no. I take that back. I -- I saw there
12 was some reference to multiple corroborators, but I did --
13 did not focus in on that because I'm not an expert in
14 eyewitness testimony or corroboration. And -- and so I just
15 basically glanced at that.

16 Q. So you don't know one way or another if there were
17 any other witnesses who claimed to have seen the same thing
18 that Ms. Barganier saw the morning of January 29, 1998?

19 A. No, not at all.

20 Q. Now, going through these, the nine factors, is it
21 fair to say that a substantial number of the procedural
22 safeguards recommended by Zani were not complied with in this
23 particular hypnosis session?

24 A. It is safe to say that.

25 Q. And, yet, that -- and, yet, the State's expert at

1 trial, Dr. Mount, said he felt like the safeguards were
2 sufficiently satisfied?

3 A. That was my impression.

4 Q. You read his testimony?

5 A. I certainly did.

6 Q. All right. Now, we'll get back to Dr. Mount's
7 specific testimony, but now we're going to talk a second
8 about the hypnosis session itself. You studied the videotape
9 of the hypnosis session?

10 A. I did.

11 Q. Did Officer Serna conduct a prehypnotic interview
12 with her?

13 A. Yes, he did.

14 Q. And what is the purpose of a prehypnotic interview,
15 generally speaking?

16 A. The prehypnotic interview is crucial. In the
17 prehypnotic interview, the hypnotist is -- is charged with
18 getting a detailed description of the events as they
19 transpire. The more detail, information is provided, the
20 better it is.

21 And why is it better? Because one must use
22 that information to compare. Whatever is gleaned from the
23 hypnosis session, you can compare it piece by piece to
24 determine whether or not information was added, from very
25 minor information to very significant information.

1 Without that information, we cannot assess the
2 recall, what it generated, what it added and the quality of
3 that recall based on hypnosis.

4 Q. So you -- your view is that to be effective, to be
5 useful in assessing what comes out of hypnosis, you need to
6 do a deep dive into the details of what the memory is with
7 the subject before anything happens?

8 A. Yes. Correct. It is impossible to do that deep
9 dive to even analyze the effects of the hypnosis session with
10 a 100 to 200, or however many words it was, vague description
11 of what occurred in that person's mind at that particular
12 time.

13 Q. So let's play a short clip, which is the prehypnotic
14 interview that Officer Serna conducted which is part of
15 Applicant's 26, which is already admitted. And if you'll
16 just listen carefully, Dr. Lynn, and then explain to us if he
17 does this prehypnotic interview appropriately.

18 (Video clip played.)

19 Q. (BY MS. SWEEN) Okay. Dr. Lynn, if we could, let's
20 collect the information that was given by Ms. Barganier in
21 that prehypnotic interview.

22 MS. SWEEN: Your Honor, if I may get some
23 assistance from my investigator, Aggie Livsey, who has better
24 handwriting than I do.

25 THE COURT: Sure.

1 Q. (BY MS. SWEEN) Dr. Lynn, this is a memory test. So
2 I want to see if we can collect the details she provided.
3 Did she say she looked out the window?

4 A. Yes, she did say she looked out the window.

5 Q. Did she describe seeing a car?

6 A. She did describe seeing a car.

7 Q. What did she tell us about the car?

8 A. It was a Volkswagen -- a Volkswagen Bug.

9 Q. Did she give us any description of the color?

10 A. No.

11 Q. All right. Did she say two guys got out?

12 A. I believe she said two got out the car, yes.

13 Q. And did you hear her describe both of them as the
14 passenger?

15 A. I think she did describe both of them as the
16 passenger.

17 Q. So the first passenger, she said she distinctly
18 remembers his hair, right?

19 A. Right.

20 Q. Did the hypnotist get from her any information about
21 what she distinctly remembered about the hair?

22 A. No, she [sic] did not.

23 Q. No details at all?

24 A. No, he did not. Excuse me. No details at all.

25 Q. Okay. And then she talks about this -- this person,

1 this first person, taking a quick -- getting a bottle and
2 taking a quick drink?

3 A. She said, I believe, she might have imagined it
4 or -- or something like that. But, yes --

5 Q. Did she --

6 A. -- there was some qualification.

7 Q. Did she describe it at this point as a beer
8 bottle?

9 A. I think she did, but I'm not sure that she did.

10 Q. Okay. And then she describes the second man also as
11 a passenger, correct?

12 A. She did describe him as a -- him as a passenger.

13 Q. And did she say he had dark hair?

14 A. She did.

15 Q. And that it was basically the same as the
16 driver's?

17 A. She did say that.

18 Q. Do we know what the driver's hair was like at this
19 point?

20 A. No.

21 Q. All right. She then talked about them closing the
22 door; is that correct?

23 A. That's correct.

24 Q. And started to walk off?

25 A. Correct.

1 Q. And then she closed the blinds?

2 A. That, I don't remember, but --

3 Q. Okay.

4 A. -- I -- I believe you.

5 Q. Now, is this what a prehypnotic interview should
6 look like?

7 A. No, far from it.

8 Q. What -- what should -- give us an example of what
9 should have gone on in this interview.

10 A. What should have gone on would be a detailed
11 rendition of exactly what she saw from the time she opened
12 the window, began to observe something to the very end of it.

13 It should have described in as much detail as
14 possible both passengers. It should have described their
15 different bodily features from head to toe.

16 It should have provided the basis for a
17 comparison using many of the same questions that were asked
18 during hypnosis with the possibility of asking for even more
19 details. This was not done.

20 Q. So you're trying to have a real before-and-after
21 where you're getting as much as you can before you go into
22 the hypnosis session?

23 A. That's correct, so that we can evaluate, as I said
24 earlier, the contribution of hypnosis to the extent that
25 there was any material added or possibly inconsistent with

1 previous decisions, so we can evaluate what the influence --
2 potential influence of hypnosis was.

3 Q. Now, we're going to talk about the body of the
4 hypnosis session. You -- you -- you studied that video,
5 correct?

6 A. I did.

7 Q. And then you created some slides that pull out some
8 statements that come from the hypnosis?

9 A. Um-hum.

10 Q. First, let me ask you: In your affidavit that was
11 submitted in support of the initial application here, you
12 wrote, numerous studies now show that asking people to
13 imagine events can create false memories or increase
14 confidence in the likelihood that a particular event
15 occurred.

16 Do you stand by that statement in your
17 affidavit?

18 A. I still stand by that.

19 Q. So you identified some moments where Officer Serna
20 was asking Ms. Barganier to imagine things, correct?

21 A. That's correct.

22 Q. What I'd like to do is read them and then explain to
23 us why you think this particular statement in the hypnosis
24 session is noteworthy. Is that okay?

25 A. Absolutely.

1 Q. All right. You're going to be seeing a documentary.
2 You're going to be seeing a film of the events that occurred
3 on that day, on that morning. Now, is this from Officer
4 Serna?

5 A. I believe so.

6 Q. Did you already explain to us why that was
7 problematic?

8 A. Yes, I essentially did.

9 Q. Okay. Keep your eyes closed. Take a deep breath.
10 Relax. All the nerves are gone. That's Officer Serna,
11 again, right?

12 A. That's correct.

13 Q. Why did you find this concerning?

14 A. I find these comments concerning in part because
15 while they may help her to relax, which may have been
16 important in that situation, they also discourage, as I
17 stated earlier, potentially, an analytical or critical
18 attitude toward those memories.

19 After of all, it would be very difficult to --
20 to focus in on the memories while one's attending to -- to
21 relaxation, which suggestions were given throughout the
22 entire proceedings, not just in -- in this case.

23 In this case, it might be fine because if this
24 were the introduction to hypnosis and part of the induction
25 of hypnosis, that's more typical and -- and may arguably be

1 appropriate because relaxation is included in
2 many inductions.

3 But to continue reinforcing her and saying good
4 during this situation is essentially a competing task with
5 analyzing her memories and placing them in context of what
6 did or didn't happen in terms of her eyewitness
7 identification.

8 Q. So he repeatedly went back to telling her to
9 relax --

10 A. Correct.

11 Q. -- in the midst of extracting information?

12 A. And said good repeatedly.

13 Q. Okay. Now, this next one: As I said, this is your
14 very own special theater, and the theater can be decorated in
15 any way you like. Why did you flag this statement by Officer
16 Serna?

17 A. Because decorating in any way she likes involves
18 that she must create a scene of what that theater looks like,
19 a picture of it through her imagination.

20 Q. So her brain is becoming occupied with this
21 additional task of imagining a theater she likes with leather
22 chairs, et cetera?

23 A. You could say that.

24 Q. And she's [sic] asking her to imagine which, in
25 itself, is intention with the idea of retrieving accurate

1 memories should such exist?

2 A. I can't speak to what his intention is, but I can
3 say that -- imagination inflation. And there's now even
4 evidence suggesting that simply imagining something once that
5 is suggested or implied can lead to a false autobiographical
6 memory, and I can refer you to a study that demonstrates
7 that.

8 Q. Let me ask you this, Dr. Lynn: Is it true the act
9 of imagining is distinct from the act of recalling what one
10 is hoping to be an accurate memory? These are two different
11 tasks?

12 A. Not necessarily. One can say, imagine what occurred
13 on that date, so they're not necessarily distinct. And,
14 honestly, I would have to review this a little bit more
15 carefully to answer that question.

16 Q. So it's two different meanings of imagine? Imagine
17 yourself in a movie theater that -- that you decorated.
18 That's creating an event that didn't happen?

19 A. That's setting the norm to use your imagination, at
20 the very least.

21 Q. Okay. Now, also, this statement: The five buttons
22 are the stop, rewind, fast forward, pause and play button.
23 Why did you flag this statement?

24 A. Well, that's not the way minds typically work. I
25 don't know whether any of us can really do that. Yes, we can

1 review a memory. Can we really stop that memory at an exact
2 point and not expect other memories to infiltrate in?

3 We tend to remember things in terms of -- of
4 narrative sequences. This is asking her to do something that
5 if she is able to do this or believes that she is able to do
6 this, she could be thinking something that would be not
7 necessarily in keeping with what occurred at that time.

8 I don't know. Again, this is speculation, but
9 this is not how memories really work.

10 Q. So it's an imaginative technique that's built on the
11 premise of the mind as a video recorder?

12 A. Yeah. Yes. Absolutely.

13 Q. And that has been debunked for ages?

14 A. For ages now.

15 Q. Okay. When I reach the number zero, if you could
16 just press the play button, this play button will take us to
17 Thursday, January 29th. It is a very important day of
18 significance. Why did you flag this?

19 A. I flagged this because he's beginning to say how
20 important this day of significance is, increasing the
21 pressure on her to come up with -- with -- with memories, to
22 think about this -- this situation with the goal that
23 something will be helpful at this time or at a later time.

24 Q. And this next comment: Relax. Take your time.
25 You're doing fine. These are the comments you noted

1 repeatedly, that he would say, you're doing good; you're
2 doing fine?

3 A. You're doing fine could even refer her to a memory
4 that is in her mind that she may, or not, be willing to
5 express depending upon how she felt in terms of how confident
6 it was. But this kind of -- of reinforcement, while not
7 uncommon, I think, in these situations, cannot be
8 particularly constructive.

9 Q. You flagged: Focus on the gentleman we call
10 Letter A. Pan in on his face. Can you tell me what his face
11 looks like? Why did you flag that comment?

12 A. Well, actually, it's the second comment more, if I
13 might focus on that.

14 Q. The try and imagine?

15 A. Please, yes.

16 Q. Try and imagine, if you will, the shape of his face.
17 He panned in on the face, the shape of his face, if it's
18 round or oval or square. What's problematic there?

19 A. I think he's asking her, again, to use her
20 imagination. But beyond that, shape of face, if it's round,
21 oval or square, he is giving her a strong suggestion that
22 it's one of those three shapes.

23 Faces come in all various -- in all various
24 types, in all varieties of -- of shapes. I don't know that
25 that is particularly helpful because we might get from that a

1 very stereotype, later, at some point, identification of a
2 face that's either round or oval or square.

3 I don't know how I could describe your face or
4 your face or your face easily, especially if I were put on
5 the spot to do that, unless someone had a particularly long
6 or square face.

7 Why not just an open-ended question? Please
8 describe the face of the person you witnessed.

9 Q. So it's unduly narrowing the options she's being
10 invited to consider; is that fair?

11 A. It's fair. It's also a leading question.

12 Q. So these last three comments you flagged are from
13 Ms. Barganier: Did I do okay? Did I help in any way? Why
14 are those significant?

15 A. My interpretation is, again, she is very motivated
16 to be a good witness in this case. She's un- -- uncertain, a
17 little bit, of how well she's doing, not necessarily in terms
18 of memories or lack of them, but in terms of how helpful she
19 can be, which relates to my concerns about where she was
20 interviewed, an investigator being in the room and the fact
21 that -- we haven't talked about this, but she was the person
22 who sought to be hypnotized in the first place. And, yeah, I
23 think I'll stop there.

24 Q. But why is that significant, that she's the one that
25 sought out the hypnosis?

1 A. I don't know exactly because I cannot read her mind
2 either, but it seems that she was very motivated to identify
3 a potential culprit. She does indicate that she was scared
4 at -- at some point. So this had some personal meaning for
5 her. And -- and the whole context of this is, it's real
6 important that you identify somebody.

7 Q. And what about this? This comment was asked at the
8 end of the hypnosis session, after she's been brought out, I
9 felt like a medium. This is when he asked her how deeply she
10 had gone in. Do you remember that?

11 A. I do remember that.

12 Q. Why did you flag that?

13 A. Because I believe that phrase she is saying that she
14 is medium in terms of hypnotizability.

15 Q. Was there any test of her hypnotizability done?

16 A. Unfortunately, this is a rather serious problem in
17 my mind. There was no formal test of hypnotizability that
18 was done.

19 Q. And there are -- there were such tests?

20 A. There are many such tests. In fact, Dr. Spiegel
21 here has a brief test that would have been entirely
22 appropriate to -- to at least get -- get some -- some sense
23 for how hypnotizable she is.

24 Q. In your opinion, based on studying the video, did
25 you feel that she was hypnotized?

1 A. I did.

2 Q. And part of that has -- is reflected in the fact
3 that she herself felt she had been at least medium
4 hypnotized? What does that mean?

5 A. That is true. And we have found in -- in our
6 research that generally people's self assessments of their
7 levels of hypnotizability are pretty consistent with -- with
8 what we find in standardized hypnotizability scales.

9 Q. All right. Now, here are some details you collected
10 that seem to -- that were new. And -- and by "new," you mean
11 not revealed through the -- the prehypnotic interview; is
12 that correct?

13 A. That's correct.

14 Q. All right. So let's go through these. These --
15 these are from Ms. Barganier. I'm getting my coffee. So we
16 didn't hear any reference to her getting her coffee in the --
17 the description before the hypnosis, correct?

18 A. Correct.

19 Q. Like little waves, waves on the bottom. That was a
20 description of the car that she added, correct?

21 A. Correct.

22 Q. What about pink top?

23 A. Correct.

24 Q. What was that about?

25 A. I remember she identified that -- that the top of

1 the car was pink.

2 Q. So it's more about the car?

3 A. Yes.

4 Q. All right. Yes, a man in his car in the driveway.

5 A. I believe I was mistaken about this. I do believe
6 that she had described that the car was in the driveway. So
7 if we could -- could scratch this, that would be --

8 Q. So that -- that's --

9 A. Yes.

10 Q. -- that's not new?

11 A. That was my error, and I apologize for that.

12 Q. Okay. They took a bit -- they look a bit purple.
13 That was more about the color of the car?

14 A. Correct.

15 Q. All right. Then this is the driver's hair, blonde,
16 then dark blonde, long, wavy. Did we get those details in
17 the prehypnotic interview?

18 A. I don't recall them.

19 Q. And kind of young, did we --

20 A. I don't recall.

21 Q. -- get that information?

22 A. I'm sorry to interrupt you. I don't recall it.

23 Q. Okay. Did we hear about the color of the driver's
24 eyes being blue or pretty eyes?

25 A. No, we did not.

1 Q. And then here's a description. We heard about a
2 beer bottle. That it's big, big brown beer bottle. Why?
3 It's so early in the morning. Was that information that came
4 our prior to the hypnosis?

5 A. I recall something about the beer bottle, but I do
6 not remember that.

7 Q. But not the description?

8 A. (No verbal response.)

9 Q. And not her judgment about --

10 A. Yes. Excuse me. She adds that, correct.

11 Q. And then about the passenger's hair, a lot like his
12 friend's. What did we hear about the hair of the passenger
13 in the previous interview?

14 A. Well, I'd like to find the exact words, but...

15 Q. We've written down dark hair --

16 A. Yes. Basically the same. That's correct.

17 Q. -- basically the same?

18 A. That's correct.

19 Q. That's a consistency, actually. Basically the same,
20 except now we know what she means by same is a lot like his
21 friend's, to his shoulders?

22 A. Correct.

23 Q. Okay. Because that's -- to his shoulders was new.
24 And he has brown eyes, is that new?

25 A. Yes. That's definitely new.

1 Q. Now, you also flagged statements that you have
2 labeled here as suggestive statements. Again, what is a
3 suggestive statement in the context of a hypnosis?

4 A. Well, a suggestive statement is -- suggests a state
5 of affairs that is not necessarily present.

6 Q. Okay. So it's not like --

7 A. It leads -- and it potentially can lead the person
8 to believe something to come to a conclusion that they would
9 not necessarily come to had they not received that
10 suggestion.

11 Q. So it's a term of art. It's not like saying, to my
12 daughter, I suggest that you clean your room?

13 A. Well, it could be. It could be that too.

14 Q. Because when I say, I suggest that you clean your
15 room with the right tone, perhaps she knows she needs to get
16 it done; is that fair?

17 A. I would say that is more of an instruction.

18 Q. But in the -- but, seriously, in the term of the --
19 the term of art you're using it, it's when a hypnosis is
20 nudging someone.

21 A. Well, we can look back at the definition of
22 imaginative suggestions, if you like. These are imaginative
23 suggestions and remembering something that is not in the
24 present involves some use of imagination, because imagination
25 is not reconstructive. And so that is actually giving her an

1 imaginative suggestion that she can remember everything.

2 Now, as we know, it's not possible to remember
3 everything. Could any one of us remember everything that was
4 said in a session? It's simply not possible to remember
5 everything that was said. I don't know about you. I'm
6 getting a little old, but I can't remember everything that
7 was said five minutes ago.

8 So this is misleading in the sense -- not in
9 terms of specific content misleading, but it is misleading in
10 that he's asking her to do something that she cannot possibly
11 do. So --

12 Q. It's back to --

13 A. -- in the --

14 Q. -- that confident inflation concept?

15 A. Confident, yeah. To confident, yes. It is also
16 back to confabulation, that if you ask someone to remember
17 something and there are gaps in memory, they will naturally
18 come up with information that is not accurate.

19 None of us can do that, I think, imagine what
20 happened with exact fidelity, what people were wearing,
21 whether they were wearing glasses, what color their socks
22 were, you know, 15 minutes ago, probably. I've never done
23 studies on this, but that's my guess, that that would be
24 challenging for many people.

25 How about what we had for breakfast yesterday?

1 How about everything we had for breakfast today? This is a
2 strong suggestion to her.

3 Q. And particularly faces, which -- strangers seen at a
4 predawn hour, glimpsed out of some blinds early in the
5 morning, to tell her she can remember everything, this is
6 giving her false confidence?

7 A. It -- it is. But keep in mind that, for this
8 particular statement, he's asking her to remember what she
9 said in the session. But then the second part of it is even
10 more problematic, and you might find yourself being able to
11 recall other things as times [sic] move on. That's a strong
12 suggestion that her recall will improve with the passage of
13 time.

14 Q. Let's go on and look at the rest of these suggestive
15 statements. You'll remember everything that was said in this
16 interview. It's the same problem you were describing,
17 correct, about we do not have perfect recall? And as I said,
18 you'll be able to recall more of these events as time goes
19 on.

20 A. Again, this is even worse. Because in the first
21 statement, he makes no references to being able to record
22 more -- recall more. He says, you might find yourself being
23 able to recall other things. Here, he's clearly saying, you
24 will be able to remember more.

25 To me, this is the most problematic. We've

1 talked so far about small potatoes. We've talked about small
2 things she is remembering prior to this time. It does
3 suggest that, yes, hypnosis either had some effect or the
4 prehypnotic recall was done so poorly that we can glean
5 virtually nothing from it. This, to me, is a serious -- is a
6 very serious problem which I want to emphasize to the Court.

7 Q. And then this last statement you flagged: Okay.
8 Oftentimes, like I told you before I brought you out the
9 hypnosis, you might find yourself recalling things, things
10 that might not have to do with the accident itself. You
11 might be at home doing an everyday chore and something might
12 come to you about that incident or anything else. It's
13 almost a phenomenon the way that -- they way that it happens.
14 So it's not uncommon to just remember something after the
15 fact, after the session. Is -- this is also suggestive?

16 A. Well, I think we can -- can -- all in the audience,
17 we're not experts, but I think we can pretty much agree that
18 this is highly suggestive.

19 He's not saying, you will remember the witness
20 looks like he's 5 feet, 9 tall, and he has orange hair. It's
21 not suggestive in that sense, but it's wide open for her to
22 come up with stuff because she clearly has gaps in her
23 memory.

24 Now, an invitation, a strong suggestion to come
25 up with information in the absence of information that might

1 never have been encoded is a recipe for confabulation. It's
2 a formula for filling in the gaps and coming up with stuff.

3 Q. Have there been studies about the risks associated
4 with asking a person repeatedly to try to recall a particular
5 event?

6 A. Since the trial -- and I've prepared a list of
7 studies. There is a list of studies. It used to be thought
8 that if you ask people to remember things over time, yeah,
9 they might remember more. We still know that they might
10 remember more. You ask people to keep remembering things,
11 but we now know that there's a dark side to this, that the
12 more they remember, the more likely, not only are they to
13 come up with false memories, but they are likely to mistake
14 the source of the memories so that they don't know whether
15 those memories were, quote/unquote, real memories or were
16 memories that were suggested to them.

17 So there are some real risks that we now know
18 are associated with -- since the trial, largely, and I can
19 provide people studies that I feel document that.

20 MS. SWEEN: Your Honor, if I may approach with
21 what's been marked as Applicant's 60, since Dr. Lynn just
22 referred to his list of studies? This is -- I'd like to
23 present that to the witness.

24 THE COURT: You may approach.

25 MS. SWEEN: Thank you.

1 THE WITNESS: And, Judge --

2 THE COURT: Counsel can approach you.

3 THE WITNESS: -- may I -- I just add something
4 to that?

5 THE COURT: Sure.

6 THE WITNESS: Yes. Thank you.

7 A. I will say that -- that this is actually not the
8 list that I was looking for. I believe that I gave this to
9 Carolotta last night.

10 MS. LEPINGWELL: But that's a different list.

11 Q. (BY MS. SWEEN) I don't know what that list is, but
12 let's hold this in abeyance then.

13 A. Yes.

14 Q. I won't -- I won't offer this now.

15 A. Okay.

16 Q. But -- so this is something that you put together
17 last night?

18 A. I put this together last night based on a fairly
19 cursory review. There are more studies on this, but these, I
20 thought, were some important studies.

21 Now, what you have in your hand is a comp- --
22 is a completely different document which describes some of --
23 but not all of the studies that have been done since the Zani
24 hearing that I feel are relevant studies.

25 Q. Then let me go ahead. Dr. Lynn, you -- you

1 recognize this document as something you created?

2 A. I created this.

3 MS. SWEEN: And at this time, Your Honor, we'll
4 go ahead and offer Applicant's 60.

5 (Applicant's Exhibit No. 60 offered.)

6 MS. OTT: No objection.

7 THE COURT: All right. Applicant's Exhibit
8 Number 60 is admitted.

9 (Applicant's Exhibit No. 60 admitted.)

10 Q. (BY MS. SWEEN) All right. You just mentioned the
11 Zani hearing. I want to go to that for just a second,
12 Dr. Lynn.

13 The Judge, at the end of -- of Officer Serna's
14 testimony asked him: Have you planted the seed that will
15 flower or bloom 13 months later into her ability to identify
16 somebody, and he replied, no, Your Honor.

17 Assuming he sincerely meant that, do you, as a
18 hypnosis expert, feel like there was a problem with his
19 answer?

20 A. Yes, I do.

21 Q. Why? Why? Did he, in fact, plant a seed of some
22 kind?

23 A. Well, I -- I -- I hope that I've described that
24 clearly. The seed was this suggestion.

25 Q. The suggestion that she would be able to recall much

1 more fully something even 13 months later?

2 A. Absolutely.

3 Q. Okay. Now, during the Zani hearing, the Judge also
4 asked Officer Serna if he noticed any confabulation, and
5 Officer Serna said, no.

6 From a scientific perspective, is there
7 anything problematic about that answer, the ability to notice
8 confabulation?

9 Let me rephrase. Can -- based on the -- the
10 prehypnotic interview and the hypnosis session that you
11 watched -- which is, our understanding, all of Officer
12 Serna's interaction with Ms. Barganier -- can someone be able
13 to say there was no confabulation based on that experience?

14 A. I'm confabulating all the time. I'm filling
15 in memory gaps. I'm going on the basis of -- of hunches. I
16 don't know how you or anyone in the court can tell me that
17 I'm confabulating at a particular time.

18 Now, if I said aliens were coming down from
19 outer space and I had a recollection that two weeks ago
20 aliens came from outer space and they transported me to the
21 planet Zaful, I would really question that. And I would
22 think that there's a good chance the person's memory was
23 based on a delusion, a confabulation, that it wasn't an
24 accurate memory.

25 In very extreme cases, yes, we can determine

1 whether someone is -- is confabulating. But in most everyday
2 life, we cannot really determine whether someone is
3 confabulating, nor can they, because memory is not laid down
4 like a multisensory video or tape recorder or computer
5 recording. So how can we do that? I mean, that's my --
6 that's my take on it. It's very problematic.

7 And to assert with confidence that one can
8 determine confabulation or just because someone says no to
9 something in an interview, in a hypnotic interview, it
10 doesn't mean they're not confabulating about other things.

11 In other words, the hypnotist suggests
12 something and then they say, no, that didn't happen. One
13 might relate to the pressure to recall things and resisting
14 increased pressure to recall and the fact that that
15 information was well laid down in memory, but that's distinct
16 from confabulation.

17 Q. So confabulation from the perspective of memory
18 science is something we all do all the time because we don't
19 have this video recorder with a documentary film in our head,
20 correct?

21 A. We do it all the time, but to varying extents.

22 Q. And the only way you could know if an individual is
23 doing it is if you did have access to the inner workings of
24 their mind and know what the gaps are, correct?

25 A. Yes. And that's not to say that many accurate --

1 many memories are not accurate. Just to be clear to the
2 Court, many memories are accurate. It's not like we're
3 widely -- just wildly distorting things. But I'm suggesting
4 that hypnosis has a greater potential for people to -- to
5 label guesses, hunches, uncertainties as memories under these
6 kinds of pressure circumstances and given the hypnotic
7 methods that were used and general expectations regarding
8 hypnosis.

9 Q. What about Ms. Barganier's purported confidence,
10 that high level of confidence she had 13 months after the
11 hypnosis session that she now had a memory of what she had
12 seen that morning?

13 A. Astounding. I cannot tell you a single time,
14 personally, when -- when I couldn't recognize something and
15 then 13 months later I was completely positive.

16 Q. Actually, more than one hundred percent positive.

17 A. More than one hundred percent positive. It is
18 astounding, but it is consistent with the suggestion that she
19 would be able to recall other things as time move on -- moves
20 on. There was pressure to do so.

21 And how this happened, I can't tell you
22 exactly, but I can say that it is astonishing to me. And
23 that one potential explanation centers around these forces
24 that kind of conspired based, in part, on the suggestion that
25 motivated that kind of recognition.

1 Q. So the -- the high level of confidence may, in fact,
2 be causally connected to the suggestions she was given during
3 hypnosis?

4 A. Let me say this: It's highly suspicious. I don't
5 know exactly what caused that recognition. I can't say that,
6 but it -- it is poor -- a very poor procedure that was -- was
7 used in this particular case. It could result in memory
8 taint. But like many human behaviors, there can be multiple
9 determinants of why people do the things they do, but this is
10 highly suspicious.

11 And it is con- -- and it -- it sheds light, I
12 think, particular light, given the connection between the
13 suggestion and what she recalled on the potential
14 unreliability of the identification that was made following
15 that suggestion, which was not only a suggestion to remember
16 something, remember at that particular time, it was a
17 suggestion to remember something ad infinitum until the --
18 the in-court identification took place.

19 Q. Is it fair to say that the scientific community
20 today would find serious problems with the hypnosis session
21 that Jill Barganier was subjected to in 1998?

22 A. I can't speak for all of the individuals out there,
23 and I won't, but I can say that there are very serious
24 problems here. And I think that there would be other
25 individuals, experts who I respect, who would probably come

1 to similar conclusions.

2 Q. In your professional opinion, in light of your
3 expertise, would you feel like this hypnosis session could be
4 described as a non-event in terms of affecting Jill
5 Barganier's memory?

6 A. No. I cannot say how it affected her memory. I
7 cannot read her mind. I don't know how it affected her
8 memory. Clearly, she did remember some things that she did,
9 described herself as medium hypnotizable, so I -- I can't
10 tell you. I would be inconsistent with my previous
11 statements if I told you that I could.

12 Q. But you do see a reason for serious skepticism about
13 the suggestive statements made in hypnosis and then the
14 ability 13 months later to constantly say she now remembered?

15 A. I certainly do.

16 Q. Now, the next thing I want to do is turn to the
17 State's expert during the Zani hearing, Dr. George Mount.
18 Now, based on your review of the trial record, would you
19 agree with me that he was the voice of science that was put
20 before the Court about the integrity of the hypnosis
21 session?

22 A. I would agree with you he was the voice. I would
23 not say that his opinions were scientific.

24 Q. But he had a -- he had a Ph.D. in psychology,
25 correct?

1 A. Correct.

2 Q. And he was presented to the Court as an expert in
3 forensic hypnosis?

4 A. Correct.

5 Q. Had you heard of Dr. George Mount before you read
6 his testimony in the Zani hearing conducted in Mr. Flores's
7 trial?

8 A. No.

9 Q. You've been working and publishing the field of
10 hypnosis for, like, three decades?

11 A. Well, I'm almost ashamed to say it, but let's call
12 it closer to four.

13 Q. Okay. And do you keep up with the scientific
14 literature on hypnosis and memory?

15 A. I try my best.

16 Q. Had you ever previously come across anything
17 published by Dr. George Mount?

18 A. I have not.

19 Q. His name is not mentioned in any studies or in
20 anybody's else's articles that you recall?

21 A. I can't -- well, that I recall. I just may not be
22 familiar with them as an expert.

23 Q. But it was Dr. Mount's view that in light of the
24 relevant science that the trial Court could rely on
25 Ms. Barganier's testimony, it was sufficiently trustworthy

1 and let her testify in the wake of that hypnosis session?

2 A. I'm sorry. Would you please repeat that?

3 Q. It's a terrible question. Let me try this again.

4 Is it your understanding from reading the Zani hearing

5 transcript that he felt comfortable telling the Court that

6 she could be permitted to testify because the hypnosis

7 session was sufficiently protected against those dangers of

8 hypnosis?

9 A. I can't speak to how comfortable he was, but he did
10 testify to a number of -- of points that I would disagree
11 with.

12 Q. Well, then let's look at his specific opinions.

13 A. Sure.

14 Q. All right. Now, Dr. Mount testified, at Volume 36,
15 page 54, that he saw nothing wrong with how Officer Serna
16 conducted the hypnosis session. Would you agree with that
17 assessment, that there was nothing wrong with it?

18 A. I do not agree.

19 Q. Dr. Mount noted that he did not see any
20 confabulation in the videotape of the hypnosis session. And,
21 again, we talked about -- is it possible to be able to see
22 whether someone is not confabulating?

23 A. I -- I don't know how one would really do that. I
24 think that there are extreme -- you know, if -- if she came
25 up with very bizarre kinds of -- of notions -- memories, it

1 would be suggestive -- suggestive of that. But in this case,
2 I can't imagine how that's possible.

3 Q. So from the perspective of the scientist saying, I
4 didn't see any confabulation, does that suggest a
5 misunderstanding of what confabulation even is?

6 A. I -- I can't really say.

7 Q. As you said, though, confabulation is something we
8 are continuously doing to fill in gaps in memory?

9 A. To minor degrees, typically.

10 Q. Now, Dr. Mount testified that the hypnotist was
11 sufficiently independent from law enforcement because the
12 hypnotist only investigated the crime scene but did not
13 interview witnesses. And he also said that was the opinion
14 of the Texas Association For Investigative Hypnosis, and that
15 was an organization he belonged to.

16 Is that your -- an opinion you share?

17 A. No.

18 Q. So you think there was a real problem with the lack
19 of independence from law enforcement?

20 A. I think there -- there could be. It's very
21 difficult to -- to ascertain that. We just don't have enough
22 information to -- to really understand the full impact. I
23 think it could potentially be problematic, as I've
24 indicated.

25 Q. Now, Dr. Mount testified that it was not a problem

1 for an investigator to be in the room during the hypnosis
2 session even if that investigator had knowledge of the
3 criminal investigation and potential suspects.

4 What's your professional opinion?

5 A. I tend to agree with -- with Zani. I cannot think
6 of any justification why that individual should be there.
7 Any questions that that individual might have could have been
8 been -- been resolved mostly prior to the session. And that
9 might be one reason that some people might justify that he
10 could -- could slip questions, but that would be suggestive
11 too. And so I certainly wouldn't recommend that.

12 Q. All right. If law enforcement had answers to the --
13 to the test and were trying to slip questions, it's kind of
14 loading the dice, wouldn't you --

15 A. That's -- that's exactly -- said very nicely.

16 Q. Now, Dr. Mount testified that conducting the
17 hypnosis session in a room at the police station was not a
18 problem, what matters was that she seemed comfortable.

19 Did you have a problem with the location being
20 at the police department?

21 A. As I shared earlier, I do have a problem with it.

22 Q. And Dr. Mount said that using the movie theater
23 technique to elicit information during the hypnosis was
24 common, permissible, appropriate.

25 Would you agree with that expert opinion?

1 A. By this point, it should be clear that I don't agree
2 with that.

3 Q. You've already said that's improper because of
4 this -- it relies on the notion that the brain works like a
5 video recorder?

6 A. Well, and -- and it would also, predictively,
7 increase one's confidence in what's recalled, because it's
8 presented as as a documentary.

9 Q. Does memory typically decay or improve over time?

10 A. It typically decays over time.

11 Q. And does that occur very rapidly at the outset?

12 A. You know, I'm not exactly familiar with the time
13 course of decays of memory, and it might differ with the
14 different types of memories. But -- but, yes, it can begin
15 to decay, in my opinion, fairly, fairly shortly afterwards.

16 If it -- if we're talking about highly
17 traumatic memories that are emotionally salient memories,
18 they tend to -- to perhaps not decay. And -- and we know
19 that certain accurate memories can persist for a long time.

20 But as a general principle with -- with typical
21 memories, there is some decay in memories over time. It's
22 more difficult to remember something that happened three
23 years ago than something that happened yesterday.

24 Q. Is it important what the quality of the impression
25 was at the outset in evaluating how trustworthy it is that

1 something is presented as a memory 13 months later?

2 For instance, if it's not a traumatic event,
3 it's just a passing moment in the -- in the course of a busy
4 morning, is that different from, say, the experience of being
5 in the midst of battle?

6 A. Yes, it -- it -- it is. But there are still false
7 memories that are associated with battles. Southwick and
8 others have shown that these memories do change. And -- and
9 with -- with traumatic-type memories, there are -- there's
10 often a greater focus on -- on central events versus events
11 in the periphery. A good example would be gun focus, where
12 somebody points a gun at you, and you're focused in on the
13 gun rather than what's in the surroundings, maybe more so.

14 But generally speaking, those memories tend to
15 be more memorable, so you're not going to forget things like
16 you were sexually assaulted in all likelihood. I think
17 Dr. Spiegel might differ in -- in his opinion there. But --
18 but my reading on the literature is that these are highly
19 salient, memorable, emotionally meaningful, arousing events
20 that -- that can be processed.

21 But as we learned with flashbulb memories, even
22 those memories that are supposedly not prone to decay so
23 much, we find that across different events, including 911,
24 people's memories do change significantly over time.

25 Now, whether it is a process of decay or a

1 process of other memories overriding those memories,
2 sometimes can be very difficult to discern. But -- but, yes,
3 there is a general tendency for that.

4 Q. And just to be clear, Ms. Barganier expressed being
5 anxious, being scared. This was, though, after she had
6 realized the potential significance of what she'd seen.

7 Did you see anything in the record indicating
8 that -- that she was traumatized by looking out of her mini
9 blinds and seeing this Volkswagen that morning?

10 A. I would have to say that it would all depend on how
11 you define trauma. Was she anxious afterwards? At one
12 point, I believe she said she was shaking and --

13 Q. But that -- that was after she learned that --

14 A. After.

15 Q. -- that her next-door neighbor had been murdered,
16 correct?

17 A. After she learned. However, if she witnessed and
18 there were no part- -- was no particular significance or
19 meaning attached to it, one would expect that it would be
20 just an everyday kind of occurrence. She looks out her
21 window. She sees people leaving. One is holding a beer
22 bottle, whatever. So it would be the knowledge after
23 the potential consequences, because she said she -- she made
24 eye contact with the person, which might have instilled any
25 number of -- of reactions including a fearful response of

1 retaliation. But the point here is that she would have
2 probably -- that would probably not have affected the
3 encoding of the material.

4 Q. I'm glad you brought that up, Dr. Lynn, because I
5 think we're conflating two things. She did, in fact, testify
6 that she thought she'd locked eyes with the passenger.

7 A. Yes.

8 Q. Do you recall reading that?

9 A. I do.

10 Q. Do you recall hearing anything to that effect in the
11 prehypnotic interview or in the hypnosis session?

12 A. No, I don't believe so.

13 Q. Now, in fact, she talks about him looking towards
14 her, but not at her, correct?

15 A. Correct. I believe that's correct.

16 Q. So this was, yet, new information that surfaced at
17 trial, this idea of locking eyes, correct?

18 A. I have a vague memory of that, honestly, but I'll
19 take your word for it.

20 Q. But we'd have to go back and compare what did she
21 say to the police officers before she was hypnotized --

22 A. Um-hum.

23 Q. -- right during the prehypnotic interview, during
24 the hypnosis session, and if it doesn't square with some
25 things that happened at trial, that's significant, isn't it?

1 A. I believe so.

2 Q. Now, Dr. Mount testified that the hyp- -- he -- he
3 agreed with the prosecution that the hypnosis session had
4 guarded against the four dangers of hypnosis. Do you agree
5 with that opinion?

6 A. No, I don't.

7 Q. Okay. And Dr. Mount testified that he heard nothing
8 in the session that would have suggested or cued her to come
9 to the courtroom 13 months later and positively identify the
10 passenger she had seen getting out of the car.

11 You, in fact, did hear things that you felt
12 could have been cues, correct.

13 A. Correct.

14 Q. Those are those suggestive statements you
15 identified?

16 A. Well, those are suggestive statements. But -- but
17 primarily the one that I really focused on about suggestions
18 for her to continue recalling, that -- the -- that the
19 memories --

20 Q. You will be -- you will --

21 A. -- might come --

22 Q. -- recall more?

23 A. At one point, she [sic] said might. And then at
24 another point, she said will. I mean, these are serious
25 errors in my mind.

1 Q. Now, Dr. Mount testified that he did not see any
2 significance in the passage of time between the hypnosis
3 session and the identification. And I think he
4 was confused that in Zani there was a passage of time between
5 the crime or the scene witness and the hypnosis session.

6 In Zani, the hypnosis session led to an
7 identification immediately. Do you recall that fact?

8 A. I believe within one day.

9 Q. But here we have hypnosis session, then 13 months
10 later a purported memory?

11 A. Yes. Correct.

12 Q. Is that not significant?

13 A. Well, as I said earlier, I think it's -- it's very
14 significant. It -- it suggests to me that she didn't encode
15 very much to begin with and -- and that she was basically
16 given a str- -- I believe it's a strong -- I would -- I would
17 describe it -- Dr. Spiegel may differ -- as a strong
18 suggestion which was also reinforced after hypnosis.

19 And Dr. Martin Orne has stated that suggestions
20 that are given before and after hypnosis can be -- be just as
21 compelling as suggestions given during hypnosis. But this
22 one was even linked with the suggestion that was given during
23 hypnosis. She's basically given a -- you know, a suggestion,
24 remember more.

25 Q. Now, Dr. Mount testified that he believed that the

1 memory of what she had seen was there and something triggered
2 it to surface 13 months later. Did you see any evidence to
3 support that expert conclusion?

4 A. No. It's entirely speculative.

5 Q. Dr. Mount testified that he did not agree that
6 hypnosis by its very nature is suggestive. Has empirical
7 research taught you otherwise?

8 A. Yes. I mean, we -- we do know that there are
9 studies now that -- that suggest -- there's research that
10 suggests that hypnosis has an independent effect of --
11 misleading questions, for example.

12 There -- a study done in 2002, it wasn't -- it
13 was very compelling. It wasn't replicated in 2006, which
14 Dr. Spiegel might want to refer to, but the authors provide
15 reasons for why they're not -- why there was not necessarily
16 a replication.

17 And there are other -- are many studies now
18 that show that -- that hypnosis, above and beyond waking
19 suggestion, results in more false memories and more uncued
20 errors, even though many studies do show no differences
21 between hypnotic and nonhypnotic recall.

22 Q. Now, isn't Dr. Mount in saying he disagrees that
23 hypnosis is by nature suggestive disagreeing with the Zani
24 court itself, that warned about hypersuggestivity is a --
25 suggestibility is one of the dangers of hypnosis?

1 A. I believe he is.

2 Q. All right. And Dr. Mount testified that he did not
3 believe that Jill Barganier showed a desire to please the
4 hypnotist because she did disagree with him about some
5 things. Do you think that disagreeing about some things
6 means you're -- you're not trying to please?

7 A. No.

8 Q. What were some of the indications that led you to
9 conclude she was trying to please?

10 A. Well, she asked whether her performance was -- was
11 good and whether she was helpful.

12 Q. All right. Now, I want to move. Does the
13 contemporary understanding of these procedural safeguards
14 that were mandated by Zani --

15 A. Okay.

16 Q. -- in your professional opinion -- all of those nine
17 procedural safeguards that we went over, do they sufficiently
18 guard against the dangers of hypnosis?

19 A. Absolutely not. And --

20 Q. So -- and also, in your professional opinion, was
21 Dr. Mount's expert opinion about whether or not those
22 safeguards had been complied with dead wrong?

23 A. Well --

24 Q. Well, I don't think you agreed with him about
25 anything.

1 A. Well, no. That's not true.

2 Q. All right.

3 A. You would have to go over the -- the -- the
4 safeguards. I think there were a few. And if you would
5 like, I -- you know --

6 Q. You're saying that --

7 A. -- I can go there.

8 Q. -- that you felt like a few of the safeguards, at
9 least, we don't have information about whether or not they --

10 A. Yes.

11 Q. -- were violated?

12 A. I think that it's clear to me that six of the
13 safeguards were violated and -- and four might not have
14 been.

15 Q. Okay. So I overstated the case. You would say you
16 would disagree with Dr. Mount about a significant portion of
17 his testimony to the Court back in 1999?

18 A. That's stated so that I can agree with that.

19 Q. Now, these procedural safeguards, you mentioned that
20 they were similar to ones that the New Jersey Supreme Court
21 had adopted in the Hurd case?

22 A. Correct.

23 Q. All right. And how do you know about the Hurd
24 case?

25 A. I know about it because --

1 MS. OTT: Objection. Relevance.

2 MS. SWEEN: Your Honor, the -- the witness has
3 established that these procedural safeguards we've been
4 discussing for an hour were derived from other case law,
5 including the Hurd decision.

6 MS. OTT: Including People v. Romero in
7 Colorado.

8 MS. SWEEN: Right.

9 MS. OTT: So it's just not relevant in -- in
10 this particular case. These ten factors are not specifically
11 the Hurd factors. What's been done in New Jersey is not
12 relevant to what's been done in Texas.

13 THE COURT: Well, I'll allow it. Go ahead.

14 Q. (BY MS. SWEEN) Are you familiar with the -- the
15 Hurd case?

16 A. Yes, I am.

17 Q. And are you familiar with it because you testified
18 in a case that led to overruling the Hurd case?

19 A. Yes, I did.

20 Q. And what was the name of that case?

21 A. That was Moore v. State of New Jersey, I believe.

22 Q. Now, let me --

23 MS. SWEEN: If I may approach the witness with
24 what has been marked, Your Honor, as Applicant's 55?

25 THE COURT: You may approach.

1 Q. (BY MS. SWEEN) Dr. Lynn, do you recognize what
2 Applicant's 55 is?

3 A. I'm -- I'm -- I'm really sorry, but I don't -- oh,
4 I see. The exhibit number, yes --

5 Q. Yes.

6 A. -- I do.

7 Q. You don't need to know the exhibit number. And --
8 and is this a copy of the court's opinion in State v. Moore,
9 the New Jersey Supreme Court opinion?

10 A. I haven't read it, but it looks like it.

11 Q. Are you quoted in that opinion?

12 A. Yes, I am quoted in the opinion.

13 Q. And this was decided in 2006?

14 A. Yes, it was.

15 MS. SWEEN: So we offer Applicant's 55.

16 (Applicant's Exhibit No. 55 offered.)

17 MS. OTT: The State objects to this exhibit.
18 It's not relevant to this case.

19 THE COURT: All right. I'll overrule your --
20 State, your objection. And Applicant's Exhibit Number 55 is
21 admitted.

22 (Applicant's Exhibit No. 55 admitted.)

23 Q. (BY MS. SWEEN) In the New Jersey Supreme Court's
24 decision, State v. Moore, you were quoted as an expert on
25 hyp- -- forensic hypnosis, correct?

1 A. I was.

2 Q. And what -- can you describe for us the -- the basic
3 propositions that the court adopted? You put them on a slide
4 here, if that is helpful to you.

5 A. Yes. It -- it states: Hypnotically induced
6 testimony is not reliable and that hypnosis has an adverse
7 effect on -- on accuracy.

8 The second point is: Cross-examine of
9 hypnotized witness is difficult or impossible because the
10 witness confidently believes that a false memory is true and
11 has difficulty distinguishing between pre- and posthypnotic
12 memories. Can I expand on that point?

13 Q. It's -- it's -- your expert --

14 A. I do think --

15 Q. -- opinion.

16 A. I do think that is important. The -- the data shows
17 that about 73 percent of hypnotized subjects, when they are
18 prepared for cross-examination by a lawyer with the very
19 typical cross-examination statements, you know, be confident
20 but also be truthful, I believe it's 73 percent of hypnotized
21 subjects are resistant to cross-examination.

22 However, it is also true, and I must state
23 that for the Court, that nonhypnotized participants are about
24 equally resistant to cross-examination.

25 So while that statement is true, it seems that

1 attorney preparation can make people very resistant to
2 cross-examination. But in that same study, hypnotized
3 individuals were more confident in their recognition of a
4 mugshot.

5 So while they had enhanced confidence, which is
6 very typical of witnesses who have been hypnotized, the rate
7 of -- of -- of disavowing, or going back on their earlier
8 testimony, was relatively low.

9 Q. So and --

10 A. 73 percent of people --

11 Q. -- to clarify, Dr. Lynn --

12 A. -- did not break down under cross-examination.

13 Q. To be clear, when you say hypnotized subject, you're
14 saying someone who later provides testimony in court that had
15 previously been hypnotized; is that correct?

16 A. Yes. Thank you for that correction. Uh-huh.

17 Q. And then the last point that you were cited for in
18 the Moore case had to do with the Hurd guidelines we were
19 discussing. All right. These are essentially the same as
20 the Zani guidelines?

21 A. They're somewhat different, but essentially the
22 same.

23 MS. OTT: Objection, Judge. I believe that's a
24 misstatement of the law. The Hurd guidelines, there's six of
25 them. Judge, actually there's ten. Ours are different.

1 THE WITNESS: I said they were similar.

2 MS. SWEEN: Your Honor, the witness was
3 contradicting me. He's perfectly capable of answering the
4 question about the relative differences. But there are
5 procedural safeguards courts have adopted to try to prevent
6 against the dangers of hypnosis. And there's some very --
7 very slight variations. We could only find nine in Zani.
8 Even though the prosecutor in the Zani hearing refers to ten,
9 there seems to be only nine.

10 THE COURT: All right. Just rephrase your
11 question.

12 MS. SWEEN: Yes.

13 Q. (BY MS. SWEEN) All right. So I'm not suggesting
14 that the Hurd guidelines are word for word per the Zani
15 guidelines. That would be wrong, right, Dr. Lynn?

16 A. It would be wrong. That's correct.

17 Q. But the -- as an expert in hypnosis, and including
18 forensic hypnosis, you're aware of these guidelines the
19 courts have adopted to attempt to counteract the dangers
20 associated with hypnosis even back in the '80s?

21 A. Yes. That's correct.

22 Q. All right. But Moore decided, what, about the New
23 Jersey procedural safeguards that have been announced in
24 Hurd? What did Moore decide to do?

25 A. The basic decision Moore had was even when those

1 procedural guidelines were in place are insufficient to
2 reduce the effects of hypnosis in respect to false
3 confidence, confabulation, uncued errors and recall
4 problems.

5 Q. So even with procedural safeguards, whether they are
6 similar or different from the Zani guidelines, the -- the
7 premise was the same. The New Jersey court was trying to
8 find a way to safeguard against dangers that they concluded
9 could not be safeguarded against, correct?

10 A. Correct.

11 Q. And they relied on your expertise to reach that
12 conclusion?

13 A. I was one of the experts at the trial.

14 Q. Now, before we get to your ultimate conclusions,
15 you -- you had prepared this list of studies --

16 A. Correct.

17 Q. -- that has been admitted as Applicant's 60?

18 A. Yes.

19 Q. Can you walk us through just the categories and why
20 these evolving developments of science are something you
21 wanted to highlight by putting together this document?

22 A. Well, thank you very much. Yeah, I would be very
23 happy to. As I said, science is a gradual practice. So,
24 obviously, we knew many of the dangers of -- of hypnosis way
25 back in the 1980s. That's not an issue. I think we can all

1 agree on that.

2 But what has come forward, in part, based on my
3 summary of the evidence, is that there is now about
4 72 percent of studies that were done, and these studies were
5 done using very, very different experimental scenarios across
6 a gamut of recall tests that show that there is a danger of
7 inflated confidence ranging from small to very large when
8 hypnosis is used.

9 Also, that in the studies where we find no
10 difference in confidence, in five out of nine of those
11 studies, I believe we find that either hypnosis produces more
12 inaccurate memories or there are no differences.

13 So I think that is a significant finding
14 because what we were talking about earlier is, is there a
15 consensus, and is that consensus based on data. And now,
16 I -- I think we have data that provide an even greater basis
17 for a consensus regarding the very things that Moore and Zani
18 are concerned about.

19 THE COURT: Counsel --

20 Q. (BY MS. SWEEN) What about the category of
21 persistence of --

22 THE COURT: Counsel, give me one second.

23 (Court exits courtroom; 12:03 p.m.)

24 A. You can now be more --

25 MS. SWEEN: Wait.

1 THE WITNESS: Oh. I apologize. Excuse me.

2 (Court re-enters courtroom; 12:05 p.m.)

3 THE COURT: All right. You may be seated.

4 You may continue, Ms. Sween.

5 MS. SWEEN: Thank you, Your Honor.

6 Q. (BY MS. SWEEN) Dr. Lynn, just -- could you
7 summarize for us the essential purpose of this document you
8 put together that's been labeled Applicant's 60?

9 You have these various categories. What were
10 you trying to convey?

11 A. I was trying to convey the fact that -- that there
12 had been debates for a long time in the scientific community.
13 Mostly, it's divided among clinicians, people who are mostly
14 clinicians, versus cognitive scientists and neuroscientists
15 regarding the potential dangers of hypnosis.

16 I was attempting to convey that there is more
17 recent literature from the time of the Zani hearing that not
18 only bolsters the conclusions, it solidifies them regarding
19 some of the risks in hypnosis, but also -- also takes us in
20 somewhat different directions that would lead us to -- to
21 have even more doubts regarding hypnosis or, at least, firms
22 up our -- our doubts that were evident at the Zani hearing.

23 Q. You mentioned earlier Dr. Martin Orne?

24 A. Yes.

25 Q. And that he was the one who had provided the -- the

1 foundation for the procedural guidelines at issue in Hurd; is
2 that correct?

3 A. Correct.

4 Q. And did he subsequently change his mind about those
5 procedural safeguards?

6 A. He did change his mind about the procedural
7 safeguards.

8 Q. And is that something that is mentioned in the Moore
9 decision?

10 A. I believe it -- it -- it was, and it cited the --
11 the case, but I cannot recall it.

12 Q. What was Dr. Orne's area of expertise?

13 A. He was viewed as -- as one of the world's foremost
14 forensic psychologists. One of his -- his foremost areas
15 of -- of expertise was in the area of hypnosis and memory.
16 His 1979 article was foundational to -- to raising red flags
17 about some of the dangers associated with
18 hypnotically-elicited testimony.

19 Q. So he was then a trailblazer in that field?

20 A. Yes.

21 Q. Now, I want to just sum up the conclusions that
22 you've provided. You've given us many data points to wrestle
23 with but just some overarching conclusions. Let me know
24 where you stand.

25 In your professional opinion, is scientific

1 consensus slow to build?

2 A. Yes. Generally speaking, it is slow to build,
3 particularly in areas that have been marked by controversy
4 and debate.

5 Q. And is forensic -- the use of forensic hypnosis one
6 of those fields?

7 A. Correct.

8 Q. In your professional opinion, is there a greater
9 consensus today among experts in memory about the risks
10 associated with the use of hypnosis in the forensic context
11 than there was in 1999?

12 A. In -- in my opinion, there is. And in my opinion,
13 there also have been many courts that have moved in the
14 direction of barring hypnotic-elicited testimony.

15 Q. Do you know how many jurisdictions now barred --

16 A. I believe there are at least -- I'm -- I'm sorry for
17 cutting you off. I believe there are at least 27.

18 Q. In your professional opinion, did the hypnosis
19 session conducted with Jill Barganier include suggestive
20 statements that might explain how she could feel so confident
21 about suddenly making an identification 13 months later?

22 A. I do.

23 Q. In your professional opinion, was the hypnosis
24 session that was conducted on Ms. Barganier in 1998 done so
25 as to safeguard against the dangers of hypnosis?

1 A. Absolutely not.

2 Q. In your professional opinion, are there any
3 safeguards that can sufficiently reduce the effects of
4 hypnosis with respect to confabulation, uncued errors, recall
5 problems and false confidence?

6 A. Yes, there are. But -- if you will? But they do
7 not minimize or obviate the risk. For example, asking
8 suggestive questions is a no-no. If you ask fewer suggestive
9 questions, direct, suggested, highly leading questions, there
10 will probably be fewer problems.

11 If you have a very detailed prehypnotic account
12 of what occurred, you have a better idea about the effects of
13 hypnosis. It will not reduce the risks of -- of hypnosis,
14 but we would be in a better position to evaluate them.

15 Most of the guidelines do more to provide us
16 with guidelines that allow us to evaluate what transpired
17 during hypnosis rather than to minimize risks of memories
18 being tampered.

19 MS. SWEEN: Pass the witness.

20 THE COURT: All right. At this time, we're at
21 a good stopping point, so we're going to take a -- we'll take
22 a one-hour break. So be back at -- everybody be back at
23 1:10. At this time, we're in recess.

24 (Court in recess, 12:10 - 1:10 p.m.)

25 (Open court, applicant present.)

1 THE COURT: All right. Back on the record. I
2 believe, Ms. Sween, you had just passed the witness.

3 MS. SWEEN: Yes, Your Honor.

4 THE COURT: Let the record reflect the State is
5 present. The applicant is present. The attorneys are
6 present, and Dr. Lynn is present.

7 State, you may proceed.

8 **CROSS-EXAMINATION**

9 **BY MS. OTT:**

10 Q. Good afternoon, Dr. Lynn. My name is Rebecca Ott.
11 I'm representing the State of Texas in this hearing.

12 A. Good afternoon, Rebecca.

13 Q. You testified earlier you completed your Ph.D. in
14 1976, correct?

15 A. Correct.

16 Q. And you've been licensed and practicing as a
17 psychologist since that time?

18 A. I have.

19 Q. And, now, you are licensed in New York; is that
20 correct?

21 A. Correct.

22 Q. And were you licensed anywhere besides New York?

23 A. Yes. I was licensed in Ohio.

24 Q. So you've been a practicing psychologist for
25 approximately 41 years?

1 A. Correct.

2 Q. And your CV shows that you have been a diplomate in
3 psychological hypnosis since 1993; is that correct?

4 A. Yes.

5 Q. And is that through the American Psychological
6 Association?

7 A. No. That's through the American Board of
8 Psychological Hypnosis.

9 Q. And now I want to ask you some questions about your
10 experience testifying as an expert witness.

11 A. Uh-huh.

12 Q. You previously stated that you've testified as an
13 expert nine times; is that correct?

14 A. That is correct.

15 Q. Were any of those in the state of Texas?

16 A. No. No, they were not.

17 Q. Have you ever testified for the proponent of
18 hypnotically refreshed testimony?

19 THE COURT REPORTER: I'm sorry. You're
20 speaking a little bit fast, and I'm having a hard time. I
21 just need you to speak a little bit clearer, please.

22 Q. (BY MS. OTT) Have you ever testified for the
23 proponent of hypnotically refreshed testimony?

24 A. No, I haven't.

25 Q. So it has always been for the party challenging the

1 use of the hypnotically --

2 A. Yes. That's correct.

3 THE COURT REPORTER: I'm sorry. I didn't get
4 the last end of it.

5 Q. (BY MS. OTT) Okay. So have you always been
6 testifying for the party challenging the use of hypnotically
7 refreshed testimony?

8 A. I believe so.

9 MS. OTT: May I approach?

10 THE COURT: You may.

11 Q. (BY MS. OTT) Dr. Lynn, I'm going to show you what's
12 been marked as State's Writ Exhibit 6, and this is a copy of
13 the CV that was attached to the writ application --

14 A. Uh-huh.

15 Q. -- and it's dated 2012. Do you recognize that?

16 A. Yes.

17 Q. Okay.

18 MS. OTT: the State's offers Writ Exhibit
19 Number 6.

20 (State's Writ Exhibit No. 6 offered.)

21 MS. SWEEN: No objection.

22 THE COURT: All right. State's Writ Exhibit
23 Number 6 is admitted.

24 (State's Writ Exhibit No. 6 admitted.)

25 Q. (BY MS. OTT) Now, I have marked a space in there

1 where it talks about some of the cases that you've testified
2 in. I did not notice that in the updated CV, so I just want
3 to go through a little bit of that.

4 A. Excuse me. I brought that here for you --

5 Q. Okay.

6 A. -- with that express purpose.

7 Q. Okay.

8 A. And it's updated. Because I realized that it was
9 missing from here, and I wanted you to have the full record.

10 Q. And you said this is an updated one from what was in
11 the previous?

12 A. That's correct.

13 Q. Okay. And just to clarify, this was not in the CV
14 that was offered by the Applicant earlier today, correct?

15 A. That's correct.

16 Q. Okay.

17 A. Yes.

18 Q. Now, in 1996, did you file a declaration on behalf
19 of the defendant in a case in California styled Miller v.
20 Calderon?

21 MS. SWEEN: Objection. Relevance.

22 MS. OTT: It goes to his previous testimony as
23 an expert in this specific area prior to the time of the
24 defendant's trial.

25 THE COURT: All right. I'll allow it.

1 A. Yes, I did.

2 Q. (BY MS. OTT) And was that concerning whether
3 hypnotic eyewitness recall was reliable?

4 A. That's correct.

5 Q. Okay. And in 1997, did you testify in a civil trial
6 for the plaintiff in a case styled Cook v. Olsen concerning
7 the biasing effects of hypnosis in recovering memories?

8 A. Excuse me. I -- I did not testify in Miller v.
9 Calderon. I filed a declaration there.

10 Q. That -- that was my question, a declaration.

11 A. I thought you said testify.

12 Q. Declaration.

13 A. And your second question was what?

14 Q. In 1997, did you testify --

15 A. Uh-huh.

16 Q. -- did you testify in a civil trial for the
17 plaintiff in a case styled Cook v. Olsen?

18 A. Cool v. Olsen.

19 Q. I'm sorry. Cool v. Olson?

20 A. Uh-huh.

21 Q. Okay.

22 THE COURT: I'm sorry. Say yes or no, Doctor,
23 if you would.

24 THE WITNESS: Yes or no, yes.

25 A. Yes. The answer is yes.

1 Q. (BY MS. OTT) And in 1999, did you provide a report
2 for the defense in a case -- in a criminal case in California
3 styled People v. John Stephens concerning the hypnotic
4 procedures used on a witness in a capital murder case?

5 A. Yes.

6 Q. Okay. Now, in 1999, did you also testify for the
7 plaintiff in a civil trial titled Hess and Wausau Insurance
8 Companies v. Wisconsin Patience Compensation Fund and
9 Fernandez in Wisconsin?

10 A. Uh-huh. Yes, I did.

11 Q. And did your testimony concern the biasing effects
12 of hypnosis in recovering memories?

13 A. That was part of that, yes.

14 Q. Okay. Well, let's talk a little bit more about the
15 Hess case. Do you recall that you testified on that case on
16 August 4, 1999?

17 A. No, I don't.

18 Q. If that's what the record reflects, would you have
19 any reason to disagree with that?

20 A. No, I don't.

21 Q. Do you recall testifying that hypnosis creates the
22 risk of false memories?

23 A. I don't have any recollection of that.

24 Q. Do you recall testifying that hypnosis does not
25 improve memory?

1 A. I don't have any recollection -- recollection of
2 that.

3 Q. Do you recall testifying that hypnosis creates
4 increased recall of both accurate and inaccurate
5 information?

6 A. I don't have any recollection of that.

7 Q. Do you recall testifying that a hypnotized person is
8 vulnerable to misleading information?

9 A. I don't have any recollection that.

10 Q. Do you recall testifying that hypnosis can increase
11 unwarranted confidence in remembered events?

12 A. I don't have any recollection of that.

13 Q. Do you have any reason to disagree with any of
14 that -- those statements?

15 A. No.

16 Q. Any reason to disagree that that's what you would
17 have testified to?

18 A. I don't have any rec- -- recollection of it, so I
19 can't tell you.

20 Q. With regard to how memory works, do you recall
21 testifying in that case that memory is reconstructive, not
22 reproductive?

23 A. That case was a long time ago, and I don't have any
24 recollection of that.

25 Q. And would you have any reason to disagree with my

1 representation that you testified that memory is not like a
2 video recorder?

3 A. I have no reason to disagree with that.

4 Q. Now, you have written and edited various books or
5 chapters in books; is that correct?

6 A. That's correct.

7 Q. Do you recall the book you edited entitled Truth and
8 Memory?

9 A. I do.

10 Q. And that was published in 1998; is that correct?

11 A. I don't remember the exact date, but I could look in
12 my vitae and tell you.

13 Q. Yes. If you could do that, please.

14 A. Sure. Yes. That's correct.

15 Q. Now, in addition to being one of the editors of that
16 book, you also coauthored a chapter in that book; is that
17 correct?

18 A. I believe so.

19 Q. And was that chapter titled The Assessment, Validity
20 and Determinants of Early Memory Reports?

21 A. I don't remember.

22 Q. Okay. In 1997, did you coauthor a chapter in a
23 publication entitled Recollections of Trauma, Scientific
24 Evidence in Clinical Practice?

25 A. I did.

1 Q. Okay. Now, you've also published numerous articles;
2 is that correct?

3 A. Yes.

4 Q. Okay. And in 1997, do you recall publishing an
5 article titled Recalling the Unrecallable: Should Hypnosis
6 Be Used to Recover Memories in --

7 A. Yes, I did.

8 Q. -- Psychotherapy?

9 Okay. And that was in the journal titled
10 Current Directions in Psychological Science?

11 A. Yes, it was.

12 Q. Okay. And in 1998, do you recall that you published
13 a journal article titled Hypnotic Psuedomemories, Prehypnotic
14 Warnings and the Malleability of Suggested Memories?

15 A. I'd have to look at that date to be sure.

16 Q. I believe that's on page 12 of your --

17 A. Okay.

18 Q. -- CV.

19 A. Yes. Uh-huh.

20 Q. Okay. So prior to 1999, you, yourself, had
21 conducted research, published articles and edited books
22 concerning the use of hypnosis to recover or refresh memory,
23 correct?

24 A. Correct. Yes.

25 Q. And you have also testified -- okay. Hold on.

1 Scratch that.

2 Now, in your affidavit in this case, you cite
3 to a 1997 journal article -- oh. hold on.

4 And in the 1997 article I just cited to you,
5 you discussed a 1994 study by Matyi, Steblay and Robert
6 Bothwell in The Law and Human Behavior journal; is that
7 correct?

8 A. Correct.

9 Q. Okay. And that was a meta-analysis of 24 studies;
10 is that correct?

11 A. Yes. Uh-huh.

12 Q. Okay. So meta-analyses on this topic were being
13 conducted at that time --

14 A. Yes.

15 Q. -- 1994?

16 Okay. Now, I want to talk about lab studies in
17 general that you've conducted regarding hypnosis. Now, many
18 of these studies occur on college campuses; is that correct?

19 A. Yes.

20 Q. Okay. And many of the research participants are
21 college students?

22 A. Yes.

23 Q. And they range in age from 18 to 25?

24 A. Correct.

25 Q. Now, would you agree that crime victims and

1 witnesses to crime are not just aged between 18 and 25?

2 A. That's correct. Yes.

3 Q. And that crime victims and witnesses come from all
4 age groups or range of mental abilities and from different
5 socioeconomic backgrounds?

6 A. Yes.

7 Q. Okay. And is there at least some disagreement
8 amongst practitioners and researchers concerning whether the
9 results of these studies from -- conducted in a lab can be
10 generalized to crime victims and witnesses?

11 A. There are always questions about generalizations
12 with respect to any study.

13 Q. Okay. Now, with regard to the materials that you
14 reviewed in this case. On page 1 of your affidavit, you
15 state that you looked at the transcript of Jill Barganier's
16 testimony before the jury; is that correct?

17 A. I did.

18 Q. And a video recording of the hypnosis session; is
19 that correct?

20 A. Correct.

21 Q. And the Farmers Branch hypnosis data sheet; is that
22 correct?

23 A. I'm sorry. And the what?

24 Q. The Farmers Branch hypnosis data sheet.

25 A. Yes, I did.

1 Q. Okay. And a transcript of the Zani hearing?

2 A. I'm sorry? Of the what hearing?

3 Q. The Zani hearing.

4 A. Oh. The Zani hearing. Yes, I did.

5 Q. Okay. Now, you also mention a transcript of the
6 hypnosis session; is that correct?

7 A. Yes.

8 Q. Do you know who prepared this transcript?

9 A. I have no idea.

10 Q. Do you have a copy of that with you?

11 A. I should have a copy of it with me. Did you want me
12 to look?

13 MS. OTT: Judge, may I approach and look?

14 THE COURT: You may.

15 A. If you want -- if you have one -- one handy, I would
16 be happy to --

17 Q. (BY MS. OTT) I do not have one.

18 A. -- to look at that, if you have it. But I -- I do
19 have it. I've identified it and located it.

20 (Sotto voce discussion amongst counsel.)

21 THE COURT REPORTER: Judge, is this on the
22 record?

23 THE COURT: No. We're off the record.

24 MS. SWEEN: We're off the record?

25 THE COURT: Hold on. It sounds like you guys

1 are talking back there. So we're off. None of this is going
2 to be on the record.

3 (Off-the-record discussion.)

4 THE COURT: All right. Back on the record.

5 Q. (BY MS. OTT) You also mention a time line regarding
6 Jill Barganier; is that correct?

7 A. I do believe I mention that. I don't have that with
8 me.

9 Q. Do you know who prepared that?

10 A. I have no idea.

11 Q. But you didn't -- you didn't bring that with you?

12 A. No. I didn't -- didn't really study it carefully,
13 honestly.

14 Q. Have you reviewed any additional materials in
15 preparation for your testimony today?

16 A. No. Well, that's -- that's not correct. I reviewed
17 many studies which --

18 Q. But nothing related to the facts of this case?

19 A. I -- I -- if I understand your question, the answer
20 would be no.

21 Q. Now, from the Zani hearing, you reviewed the
22 testimony of Investigator Jerry Baker, Officer Roen Serna and
23 Dr. George Mount; is that correct?

24 A. Correct.

25 Q. Okay. You've not reviewed the testimony of any of

1 the other witnesses in this case; is that correct?

2 A. I reviewed Barganier's testimony sometime ago, not
3 recently.

4 Q. And that would be her testimony all four times she
5 testified at the trial; is that correct?

6 A. All four times, I testified -- her testimony, you're
7 saying, not mine?

8 Q. Yes, her testimony.

9 A. I believe so.

10 Q. Did you review any portion of the police file or any
11 statements from any other witnesses in this case?

12 A. No.

13 Q. So you aren't offering any opinion as to whether
14 there's evidence in this case that would corroborate
15 Mrs. Barganier's identification of the defendant; is that
16 correct?

17 A. I wouldn't possibly presume to be in any position to
18 do that.

19 Q. Okay. And you testified that you are familiar with
20 Zani v. State, correct?

21 A. I have some familiarity with it, yes.

22 Q. Okay. And so you are aware that hypnotically
23 refreshed testimony is admis- -- is admissible in Texas
24 subject to the totality of the circumstances test; is that
25 correct?

1 A. That's correct.

2 Q. So in Zani, the Texas Court of Criminal Appeals
3 listed ten factors that should be considered in determining
4 the trustworthiness of hypnotically refreshed testimony; is
5 that correct?

6 A. Yes.

7 Q. Okay. And I think there was some discussion earlier
8 about nine. Would -- I think you also referred to ten.
9 Would the presence or absence of overt or subtle cuing or
10 suggestion of answers during a hypnotic session sound like
11 the tenth factor to you?

12 A. I'm sorry. My memory is not that great, but --

13 Q. If I --

14 A. Yes. I do remember that that is one of the
15 factors.

16 Q. Okay. And are you aware that one of those ten
17 factors is the existence of corroborating evidence?

18 A. Yes, I am.

19 Q. But you weren't asked to evaluate any corroborating
20 evidence in --

21 A. No, not at all.

22 Q. Okay. And are you aware that the Court of Criminal
23 Appeals did revisit the Zani decision in 2004 in a case named
24 State v. Medrano in light of Kelly and Daubert?

25 A. No. I'm not aware of that at all.

1 Q. And are you aware that the court reaffirmed the
2 opinion in the Zani case?

3 A. I am not.

4 Q. Would you agree that the Court has the ultimate
5 responsibility of determining whether evidence is admissible?

6 A. I would.

7 Q. Okay. Now, if I can turn your attention to
8 Applicant's Exhibit 5, which is the affidavit that you
9 prepared in this case.

10 A. Uh-huh.

11 MS. LAMBERT: May I approach, Judge?

12 THE COURT: You may.

13 Q. (BY MS. OTT) Now, in preparing your affidavit, were
14 you directed to focus on the research that was conducted
15 post-1999?

16 A. I was. Let me --

17 THE COURT: Wait. Counsel, just give him one
18 second.

19 Q. (BY MS. OTT) Now, would you agree that there were
20 certainly articles, books and research studies available
21 prior to the defendant's trial that addressed the
22 unreliability of hypnotically refreshed testimony?

23 A. Oh, certainly, and I attested to that earlier.
24 There was a great deal of --

25 Q. Okay.

1 A. -- new material on it.

2 Q. Now, on page 18, you state that in evaluating
3 posthypnotic recollections, it is important to also consider
4 the eyewitnesses' beliefs and expectations about hypnosis and
5 broader motivations.

6 A. I'm sorry. And broader what?

7 Q. Motivations.

8 A. Motivations. Yes.

9 Q. Ms. Barganier sought out hypnosis which implied that
10 she expected that it would help to retrieve accurate memories
11 and that she viewed hypnosis as a particularly credible way
12 of enhancing accurate memories; is that correct?

13 A. Let me read that -- that more carefully. You're
14 talking about page 18, correct?

15 Q. Uh-huh.

16 A. And would you tell me approximately what line you're
17 on?

18 Q. It begins with, in evaluating posthypnotic
19 recollections.

20 A. I see it. I see it. Thank you.

21 Q. Okay. So you're saying it is important to consider
22 the beliefs and expectations of the person being hypnotized,
23 correct?

24 A. That's correct.

25 Q. Would you agree that it would be important to know

1 whether the person believed that hypnosis could help her
2 improve memory?

3 A. I would.

4 Q. So you are aware that Ms. Barganier testified at
5 trial that she wanted hypnosis to help her relax because she
6 couldn't stop shaking, correct?

7 A. I believe I came across that.

8 Q. Okay. And are you aware that last week she
9 testified to the same fact that she requested the hypnosis to
10 help her relax?

11 A. No.

12 Q. And that she did not think hypnosis would help her
13 recover memories?

14 A. No. I was not aware of that.

15 Q. Now, in the video of the hypnosis session, Officer
16 Serna never told Mrs. Barganier that her memory worked like a
17 video recorder; is that correct?

18 A. I'm sorry?

19 Q. In the video of the hypnosis session, Officer Serna
20 never told Mrs. Barganier that her memory worked like a video
21 recorder?

22 A. He strongly implied that.

23 Q. But he didn't say that, correct?

24 A. No, he didn't.

25 Q. Now, on page 19 of your affidavit, you address the

1 Zani decision. Now, of the ten factors, you look at three,
2 memory recovery technique, the fact that another person apart
3 from the hypnotist was in the room and the quality of the
4 audio or video recording. This is a totality of the
5 circumstances test, correct?

6 A. Yes.

7 Q. Now, it's -- it's about evaluating all ten of those
8 factors and anything else the Court might consider to be
9 important, correct?

10 A. Correct.

11 Q. And the Court in the Zani decision specifically
12 noted that those ten factors were not exhaustive, correct?

13 A. Correct.

14 Q. And, again, one of those factors is corroboration,
15 correct?

16 A. Correct.

17 Q. Okay. But you don't know what corroborating
18 evidence exists in this case?

19 A. I do not.

20 Q. And you're not here to provide the opinion that the
21 hypnosis session caused Jill to falsely identify Mr. Flores,
22 correct?

23 A. I'm here to talk about the circumstances in the
24 hypnosis case, what was done, what procedures weren't
25 followed that might have some bearing on her identification

1 13 months later.

2 Q. Okay. And you were not there on the morning of the
3 offense, correct?

4 A. I'm sorry? I was not there --

5 Q. You weren't there on the morning of the offense,
6 correct?

7 A. No, I was not.

8 Q. You don't know what she saw, correct?

9 A. I don't think any of us do.

10 Q. And you don't know what memory she incurred at that
11 time, correct?

12 A. I have no idea.

13 Q. So you can't say for certain that her identification
14 of Mr. Flores as one of the men she saw on the morning of the
15 murder is incorrect?

16 A. I can't read her mind --

17 Q. Okay.

18 A. -- or her memory.

19 Q. If you would turn to page 20 of your affidavit,
20 please.

21 A. (Witness complies.)

22 Q. And you wrote, unfortunately, no expert opinion was
23 rendered that challenged the appropriateness of the hypnotic
24 proceedings in keeping with scientific findings at the time,
25 correct?

1 A. Yes.

2 Q. Okay. So you are saying that another expert should
3 have been called to testify at Mr. Flores's trial to
4 challenge Mrs. Barganier's testimony, correct?

5 A. I'm not saying should have. I'm saying that it
6 would have been appropriate to do so.

7 Q. Okay. Now, is it your opinion that Ms. Barganier
8 was under fear or stress at the time she saw the two men?

9 A. No.

10 Q. Would you agree that she paid attention because she
11 was at least curious about what she was seeing?

12 A. I have no idea why she paid attention.

13 Q. She mentioned several times the driver had a beer
14 bottle which she thought was unusual because it was at 6:45
15 in the morning; is that correct?

16 A. It wasn't always clear whether she thought it was
17 the driver or the passenger at different times. I believe
18 there was some conflict there.

19 Q. Okay. But she thought it was unusual that someone
20 would have -- or she testified she thought it was unusual
21 that someone would have a beer bottle at 6:45 in the morning,
22 correct?

23 A. I don't know if that's the exact wording, but, yeah,
24 I believe so. Yeah.

25 Q. But at the time she saw the man and the Volkswagen,

1 she didn't know the significance, correct?

2 A. That seemed to the case.

3 Q. Now, just to talk about hypnosis in general, you
4 testified that you use hypnosis in your clinical practice; is
5 that correct?

6 A. I do.

7 Q. Is it your opinion that hypnosis should not be used
8 in a forensic context?

9 A. It is my opinion that that is up to the Court. I
10 think that the evidence strongly weighs towards
11 inadmissibility of the evidence.

12 Q. But it's not your opinion that all hypnotically
13 refreshed testimony is inaccurate, correct?

14 A. Of course, it's not.

15 Q. Okay. And would you agree that distortions in
16 memory can occur outside of hypnosis just as they can occur
17 with hypnosis?

18 A. Yes.

19 Q. And, in fact, in your affidavit, on page 5, you note
20 that confabulation, the tendency to fill in memory gaps with
21 information that is not necessarily accurate, is the hallmark
22 of normal human memory, correct?

23 A. Yes, of course.

24 Q. Will you agree that there is more recall anytime you
25 ask a witness to repeat their story?

1 A. No.

2 Q. Okay. Now, in the context of a witness being
3 interviewed by police or multiple police officers, would it
4 be fair to say there's always going to be more recall?

5 A. No.

6 Q. Okay. Now, imagination inflation, you discuss that
7 in your affidavit too, correct?

8 A. Correct.

9 Q. Okay. And that is when someone has a false memory
10 after being asked to imagine an event but also has increased
11 confidence that the event occurred; is that correct?

12 A. Yeah. I think that's -- that's fair to say, yes.

13 Q. Okay. And this was reported in a study published in
14 1996 by Jerry, Manning, Loftus, and Sherman; is that
15 correct?

16 A. No. It was published by Garry --

17 Q. Garry.

18 A. -- Manning, Loftus, and Sherman.

19 Q. But in 1996, correct?

20 A. Correct.

21 Q. Okay. Would you agree that imagination does not
22 always lead to the creation of false memories?

23 A. With that strong statement, that's correct. But it
24 does increase the -- the probability, sometimes greatly, of
25 false memories.

1 Q. Okay. Would you agree that not everyone can be
2 hypnotized?

3 A. It depends what you mean by hypnotized.

4 Q. What is someone's hypnotizability?

5 A. Hypnotizability is simply the number of suggestions
6 that they respond to in response to imaginative suggestions,
7 not only the number, but it has to do with how involved they
8 are subjectively. So it involves a subjective response and a
9 behavioral response.

10 Q. Okay. Now, there's a scale that can be administered
11 to determine someone's hypnotizability; is that correct?

12 A. There are many scales --

13 Q. Okay.

14 A. -- that can do that.

15 Q. None of those scales, to your knowledge, were
16 administered to Mrs. Barganier in this case?

17 A. Which is terribly unfortunate but correct.

18 Q. Thank you. So we don't know with any certain [sic]
19 whether Ms. Barganier was, in fact hypnotizable?

20 A. Yes, we do.

21 Q. How do we know that?

22 A. Because she responded to suggestion. She indicated
23 a subjective response to the questions, and she indicated
24 that her self-perception was that she was medium
25 hypnotizable.

1 Q. And --

2 A. So by that definition, I would say she was.

3 Q. And that definition that you use of hyp- -- hypnosis
4 or -- is -- the definition you use or define hypnosis as, is
5 that one that is the standard definition accepted by the
6 American Psychological Association?

7 A. It was accepted by that organization in 1994, and
8 it's been highly controversial. And I've written about that
9 since then. So it's not the current definition, but it was a
10 current -- but it was a current definition at one time.

11 Q. And you mention that Mrs. Barganier reported that
12 she experienced a medium state of hypnosis, correct?

13 A. Correct.

14 Q. Okay. Now, Mrs. Barganier has testified that she
15 has never been hypnotized before, so she doesn't really have
16 any experience to compare that to; is that correct?

17 A. Well, in terms of formal hypnosis, that's correct.
18 Yes, you're right.

19 Q. We're relying on her self-report?

20 A. That's correct -- well, we're also relying -- I'm
21 also relying on how I believe she responded in the hypnosis
22 session.

23 Q. Okay.

24 A. So she may be relying on her self-report rather than
25 the standardized test that should have been administered or

1 could have been administered, but we're primarily relying on
2 self-report in terms of how she perceived it.

3 Q. Okay. Now, as you outlined on direct examination,
4 the debate over the reliability of hypnotically-refreshed
5 testimony is not a new one, correct?

6 A. Correct.

7 Q. Okay. And I know that we touched on this earlier,
8 but prior to 1999, you had conducted research, published
9 articles, and edited -- and edited books concerning the use
10 of hypnosis to recover or refresh memories, correct?

11 A. Correct.

12 Q. Okay. Now, that pretty clearly dates back to prior
13 to 1999, the time of Mr. Flores's trial, and that's why we
14 had the Zani hearing in the first place, correct?

15 A. Yes.

16 Q. Okay. If you had been contacted in 1999, you could
17 evaluate the case, correct?

18 A. Correct.

19 Q. And presented testimony?

20 A. Correct.

21 Q. And, in fact, in your affidavit, you say someone
22 should have presented contra- -- contradictory testimony at
23 the Zani hearing, correct?

24 A. Correct.

25 Q. Okay. Would you expect that after these clinical

1 hypnoses on one of your patients one time that they would
2 have an effect, like the one in this case, 13 months later?

3 A. I have no clear idea what effect you're referring
4 to, what type of patient you're referring to, what the
5 context is. So if you'd clarify it, that would be really
6 helpful.

7 Q. I'll move on. Bottom line is that you can't say
8 that any of the things that we've been talking about today
9 regarding the potential dangers of hypnosis actually happened
10 in this case; is that correct?

11 A. That's not correct at all.

12 Q. You can't say it with any -- you're saying that we
13 can say with certainty that all of the dangers that happened
14 or potentially can happen with hypnosis happened in this
15 case?

16 A. No. I didn't say that.

17 Q. Okay.

18 A. Excuse me. Maybe I misconstrued your -- your
19 question. So if you would repeat -- repeat the initial
20 question, I would be interested in getting some clarity and
21 responding to it.

22 Q. That we have no way of knowing for sure whether all
23 of the dangers associated with hypnosis happened in this
24 case?

25 A. I think that some dangers happened, and some dangers

1 probably did not happen.

2 Q. But we can't know for -- we can't know for
3 certain?

4 A. I think we can.

5 Q. Okay.

6 A. Excuse me. By "dangers," are you referring to the
7 requirements of the Zani hearing?

8 Q. I was talking about the four dangers that Zani talks
9 about, the confabulation, hypersuggestibility, loss of
10 critical judgment --

11 MS. SWEEN: Memory cementing.

12 Q. (BY MS. OTT) -- memory cementing.

13 MS. OTT: Thank you.

14 A. I think that's -- that's difficult to say. I think
15 what we can say is that the probabilities that -- that
16 confabulation occurred are rather high.

17 Q. (BY MS. OTT) Okay.

18 A. And I think that it's -- it's difficult to sometimes
19 pin down exactly what in a hypnosis session is responsible
20 for changed memories. However, that doesn't obviate the
21 risks that the literature has shown us that hypnosis has in
22 terms of -- of memories.

23 Q. Okay.

24 MS. OTT: Pass the witness.

25 THE COURT: All right. Ms. Sween, any

1 follow-up?

2 MS. SWEEN: Just a few, Your Honor.

3 **REDIRECT EXAMINATION**

4 **BY MS. SWEEN:**

5 Q. Dr. Lynn, is there a difference between lab rats and
6 human beings?

7 A. Maybe one or two.

8 Q. Does that mean there's no efficacy in doing
9 laboratory studies, for instance, of new drugs to treat
10 cancer on lab rats?

11 A. It certainly is very important to do laboratory
12 research. And -- and if I could, at some point, I would like
13 to expand on that with you.

14 Q. Why is it important to do laboratory research even
15 when you can never perfectly simulate the conditions out in
16 the -- the real world?

17 A. It's critically important in hypnosis research
18 because we know what the stimulus -- stimuli are. We know
19 the people were looking at word lists. We know the people
20 were responding to stimuli that they could remember or not
21 remember. We can verify whether their responses were
22 accurate or inaccurate.

23 We've done now, I refer to, 33 different
24 studies. They were all done under very different conditions
25 with mock assassinations with photo lineups, with mugshots,

1 with people watching videos, with people responding to
2 questionnaires. And they, with great regularity, converge on
3 the same conclusions, 72 percent find inflated confidence
4 across these very different studies suggesting that these
5 findings have great generalization.

6 I refer to a finding with Princess Diana, for
7 example, where these were autobiographical memories outside
8 the laboratory. I refer to research on early memories. I
9 have reference to those that are your personal memories.
10 They're not manipulated particularly by -- by laboratory
11 conditions other than by asking questions or using hypnosis.

12 So it's very impressive that from all of these
13 different sources, all these different studies, we have
14 converging evidence. You rarely have these phenomena, such
15 phenomena, any phenomena in science, in my mind, with such a
16 high degree of replication across different stimuli,
17 different conditions.

18 A Sloan study was done in 1981, which was done
19 in a police department in Los Angeles where they looked to
20 see whether hypnotically assisted in recall could be
21 worthwhile in rapes and other trials. They found it not to
22 be. That is not a laboratory study. So we have all kinds of
23 data all pointing us in the same direction.

24 Q. Dr. Lynn, does it make any sense to you, as an
25 expert in forensic hypnosis, that the police would be

1 interested in conducting a hypnosis session for someone
2 solely to help them relax?

3 A. There are many, many different inductions. Many
4 focus on relaxation. They have absolutely nothing to do with
5 the inappropriate technique of the magic, mysterious movie
6 theater that is a documentary.

7 If she wanted relaxation, the last place she
8 should go would be the police station. Would you go to the
9 police station to be relaxed? I doubt anyone in this
10 courtroom would.

11 We would go to an expert in relaxation. She
12 went there, in part, to do what she was asked to do and what
13 she went there for, which she requested, which was to be
14 hypnotized.

15 It might have been to her benefit to relax, but
16 we don't even know whether that relaxation improved anything,
17 did anything for her. Because people can be hypnotized when
18 they are riding an exercise bicycle. They are as responsive
19 to suggestions whether they are aroused and riding an
20 exercise bicycle as when they're relaxed.

21 So there was no need to go there. It's
22 certainly strange credulity that she would go to the police
23 station to recall an event that was stated to be an important
24 event, and she believed to be an important one, for the sole
25 purposes of relaxation.

1 Q. And would it make any sense for someone who solely
2 wanted to seek relaxation through hypnosis at the police
3 station would ask at the end, did I do okay, did I help in
4 any way?

5 A. I think you raise an excellent point. What she was
6 referring to was, did she help in terms of that particular
7 case, which the hypnotist, unfortunately, pressured her by
8 repeatedly stating how important it was.

9 It was not so important, I don't believe. He
10 was implying that she achieve some relaxation. What was
11 important was what she was there for, and what she was there
12 for was to recall. And that is why he got the prehypnotic
13 statement, and that is why he attempted to augment her
14 memories, not to relax her.

15 MS. SWEEN: Pass the witness.

16 MS. OTT: Nothing further.

17 THE COURT: All right. May this witness be
18 excused?

19 MS. SWEEN: Your Honor, we'd like Dr. Lynn to
20 remain in case we need to re-call him for rebuttal.

21 THE COURT: Okay. All right. You may step
22 down.

23 THE WITNESS: Thank you very much.

24 MS. SWEEN: But, otherwise, the Defense
25 rests.

EXHIBIT 8

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REPORTER'S RECORD
VOLUME 5
WRIT NO. W98-02133-N(B)
TRIAL COURT CASE NO. F98-02133-N

EX PARTE * IN THE 195TH
Charles Don Flores *
* JUDICIAL DISTRICT COURT
*
APPLICANT * DALLAS COUNTY, TEXAS

WRIT HEARING - CONTINUED

On the 11th day of October, 2017, the following
proceedings came on to be heard in the above-entitled and
numbered cause before the Honorable Hector Garza, Judge
presiding, held in Dallas, Dallas County, Texas.

Proceedings reported by machine shorthand method.

1 MS. SWEEN: No, Your Honor.

2 THE COURT: Okay. All right. So State's
3 Writ Exhibit No. 4 is admitted.

4 (State's Writ Exhibit No. 4 admitted.)

5 THE COURT: So is Dr. Kovera here?

6 MS. LEPINGWELL: Yes, Your Honor.

7 MS. SWEEN: Yes, Your Honor.

8 THE COURT: We're going to go ahead and do
9 the 705 hearing, so...

10 MS. SWEEN: Okay. If -- Dr. Kovera, you
11 may approach.

12 Can I go ahead and introduce her for the
13 record, and then you can ask for the hearing?

14 THE COURT: Let the record reflect that
15 Dr. Kovera was sworn in as a witness yesterday.

16 **MARGARET KOVERA, PhD,**
17 having been previously duly sworn, testified as follows:

18 **DIRECT EXAMINATION - 705 HEARING**

19 **BY MS. SWEEN:**

20 Q Good morning, Dr. Kovera. Can you just
21 introduce yourself for the record, spelling your name.

22 A My name is Margaret, M-a-r-g-a-r-e-t; Kovera,
23 K-o-v-e-r-a.

24 Q How are you currently employed?

25 A I'm a professor of psychology and presidential

1 scholar at John Jay College of Criminal Justice at the
2 City University of New York.

3 Q And you have a PhD in psychology?

4 A I do.

5 Q And you're a professor in a psychology
6 department?

7 A I am.

8 Q Now, is the field of psychology monolithic or
9 are there subfields?

10 A There are subfields.

11 Q What is -- is your expertise on the clinical
12 side, or do you do empirical research?

13 A I am not a clinician, and I do do empirical
14 work.

15 Q And what exactly is empirical work?

16 A Well, in works -- explicitly, I do experimental
17 work. So empirical work has to do with doing research
18 that involves numbers and analyzing data. Specifically, I
19 tend to do experimental work which allows one to
20 manipulate variables in a study and isolate the causes of
21 behaviors.

22 Q And when you say manipulate variables, what does
23 that mean?

24 A So in the context of eyewitness memory, we would
25 manipulate whether a witness was witnessing an event under

1 certain circumstances and then look to see how that
2 affected eyewitness accuracy, or we would look to see
3 whether different sets of procedures produced different
4 sets of outcomes for eyewitness accuracy.

5 Q But when a layperson hears the word
6 "manipulate," we think that means mess with. What does it
7 mean for a scientist?

8 A To a scientist it means that you control the
9 settings in which you are observing the behavior. In this
10 case, eyewitness accuracy.

11 Q So it's actually almost the opposite of what the
12 lay definition of manipulate is?

13 A It's -- it's very specifically trying to
14 control the -- and so to have -- make sure that the
15 participants in your study are acting under very clear
16 circumstances that are specified in your studies.

17 Q So we've heard that term "controlled study."
18 Can you give us an example of what a controlled study is?

19 A They look lots of different ways. But the basic
20 idea between a controlled study is that you manipulate a
21 variable, meaning that you have some participants engage
22 in a situation and other participants engage in a
23 different situation. And you randomly assign participants
24 to those two conditions. And so that means that you're
25 trying to, through random assignment, even out any

1 individual difference in participants across the two
2 conditions so that you can isolate the one thing that you
3 changed between the two groups of participants as being
4 the cause of any changes in the outcome behavior.

5 Q So does this have to do with just the basics of
6 the scientific method?

7 A It is absolutely the scientific method.

8 Q Now, is there a discrete field of research on
9 eyewitness identification and memory?

10 A There is.

11 Q What does it encompass?

12 A Really it encompasses looking at all sorts of
13 factors that influence the reliability of eyewitness
14 memory. And we look at things like eyewitnessing
15 conditions, so what happened at the time that the witness
16 was witnessing an event. We also look at things that
17 happened post the witnessing event that could alter
18 memory, and we look at the procedures used by the police
19 to see whether those are variables that can influence the
20 accuracy of memory.

21 Q So do you have particular expertise in the area
22 of law enforcement's use of eyewitness identifications?

23 A Yes.

24 Q Do you do consulting in that area?

25 A I do.

1 Q For instance, with whom?

2 A Well, primarily, whoever asks me, but I -- and,
3 mostly, who ask is the Defense counsel. So I talk to
4 Defense bar about -- but also to a number of my students.
5 John Jay is known for educating police officers. And so I
6 spend a lot of time in the classroom educating future
7 police officers on avoiding suggestive procedures.

8 Q Did you have a recent trip overseas that
9 involved some consulting work in this area?

10 A I did. I went to the Netherlands. The
11 Netherlands, about seven years ago, instituted a new
12 government agency in response to three high-profile cases
13 of wrongful convictions. And those wrongful convictions
14 seem to in turn -- in parts turn on junk science given by
15 experts. And so they legislated an agency that was tasked
16 with vetting the quality of experts that appear in Dutch
17 courts. And so I have been chosen as one of the four
18 international experts to vet the Dutch experts in the area
19 of psychology and law, including eyewitness identification
20 accuracy.

21 Q Now, are you a member of any professional
22 associations that are apropos to this particular matter?

23 MS. LAMBERT: Judge, if I could, we're not
24 objecting to her qualifications as an expert. We'd just
25 like to get on to what she plans to offer today and what

1 she relied on in making those...

2 THE COURT: If you can -- if you can --
3 since they're not objecting to her qualifications or her
4 credentials, if you can get to what her opinions are going
5 to be and what she relies on to make those.

6 MS. SWEEN: Okay. Your Honor, and I do
7 feel like -- maybe after the 705, if we could develop,
8 somewhat, her credentials just to understand the degree to
9 which she should be given weight as an expert.

10 THE COURT: Absolutely. But for purposes
11 of the 705, yeah, you just need to keep it to those two
12 issues.

13 MS. OTT: No problem, Your Honor.

14 Q (By Ms. Sween) So let's -- let's -- let me, if I
15 may, approach with your CV. I'm handing you what's been
16 marked as Applicant Exhibit 4 that has a random first
17 page. But if you flip to the second page, do you
18 recognize that document?

19 A It's my CV.

20 MS. SWEEN: We offer Applicant 4.

21 MS. LAMBERT: No objection.

22 THE COURT: All right. Applicant's Exhibit
23 No. 4 is admitted.

24 (Applicant's Writ Exhibit No. 4 admitted.)

25 Q (By Ms. Sween) Now, how did you get involved in

1 this case, Dr. Kovera?

2 A I was contacted by members of your team.

3 Q And you were asked to review some certain
4 materials related to this specific case?

5 A I reviewed discovery produced by the Farmers
6 Branch Police Department, as well as testimony from the
7 Zani hearing, as well as trial testimony.

8 MS. SWEEN: Now, at this time, we'd like to
9 offer into the record the entire production from the
10 Farmers Branch Police Department that Dr. Kovera reviewed,
11 that the State has -- and we've conferred about this, and
12 we suggested perhaps it'd be kept under seal because it's
13 redacted by the police department, but there's still some
14 confidential information.

15 MS. LAMBERT: That's correct. We agree to
16 the admission of it. We'd just like it to be under seal
17 since there is confidential information contained.

18 THE COURT: All right. So...

19 MS. LAMBERT: And I believe they have
20 printed a hard copy, but they're also -- they're gonna
21 give the court reporter a digital copy.

22 MS. SWEEN: So don't panic. We'll mark
23 this as Applicant 57. And I will represent to the Court
24 we will give you an exact copy on a flash drive.

25 THE COURT: Can I see the lawyers real

1 quick?

2 (Bench conference; off the record.)

3 MS. SWEEN: At this time, Applicant offers
4 57, a hard copy that will be placed under seal. And in
5 support thereof, we will submit an electronic copy for the
6 convenience of the Court of Criminal Appeals and the court
7 reporter.

8 THE COURT: And you're adding that to the
9 box?

10 MS. SWEEN: We'll add that to the actual
11 box --

12 THE COURT: Applicant's Exhibit No. --

13 MS. SWEEN: -- before the end of today.

14 MS. LAMBERT: No objection from the State.

15 Q (By Ms. Sween) Now, Dr. Kovera, in addition
16 to --

17 THE COURT: Hold on. Counsel, hold on.

18 MS. SWEEN: I'm sorry.

19 THE COURT: All right. Applicant's Exhibit
20 No. 57 is admitted and is filed under seal.

21 (Applicant's Writ Exhibit No. 57 admitted.)

22 MS. SWEEN: Thank you.

23 Q (By Ms. Sween) Dr. Kovera, in addition to the
24 Farmers Branch Police Department records, you also
25 reviewed relevant trial testimony, the Zani hearing

1 transcript and -- was there anything else you were trying
2 to identify?

3 A I mean -- anything else I was trying to
4 identify?

5 Q Did you listen to the testimony in court?

6 A Oh, I'm sorry. I did listen to the testimony in
7 court yesterday. And I also watched the video of the
8 hypnosis session.

9 Q Did you also review Dr. Lynn's --

10 A Affidavit?

11 Q -- CV and his affidavit?

12 A I did.

13 Q And do you have any familiarity with Dr. Lynn's
14 credentials extraneous to his curriculum vitae?

15 A I am aware of him in the field of -- especially,
16 his work on hypnosis and its relationship to eyewitness
17 accuracy.

18 Q Does it have the earmarks of reliability, his
19 work in the field?

20 A It does.

21 Q Any concerns about his qualifications?

22 A No.

23 Q All right. Now, since this is a 705, the State
24 has a right to hear what opinions you intend to offer
25 today. We've talked about what you reviewed and relied

1 on. They might ask you additional questions about the
2 basis of these opinions. But can you summarize for the
3 Court the opinions you intend to offer today?

4 A My intention is to offer the opinion that the
5 use of hypnosis is problematic in the context of
6 eyewitness identification issues in addition to other --
7 over -- in its entirety, I have concerns about the
8 reliability of this identification, in part based on the
9 limitations to the encoding that the witness could have
10 done at the time the witness viewed the event and that
11 that type of vagueness of en- -- encoding makes one
12 especially susceptible to suggestive procedures later on
13 and that hypnosis is one procedure that -- from the
14 experimental evidence, increases the likelihood that a
15 witness will confabulate -- incorporate information
16 through imagination techniques into the memory that -- and
17 these are features that were not present at the event, but
18 that were a part of the imagination process -- and that
19 this entire process increases one's confidence in the
20 accuracy of one's memory.

21 And I further intend to talk about research
22 showing that one should not rely on the confidence of a
23 witness unless the confidence is collected under very
24 specific procedures that are nonsuggestive, that to not do
25 so, to collect confidence in the way that it was collected

1 in this case, makes that information irrelevant to judging
2 a witness's accuracy.

3 And, finally, I have knowledge of other
4 experts' opinions on the reliability of hypnotically
5 refreshed memory. And that opinion of an overwhelming
6 number of experts surveyed in a particular survey was that
7 it's an unreliable technique. And these are eyewitness
8 identification and eyewitness memory experts who were
9 surveyed using reliable survey methods to assess their
10 opinions on the matter.

11 Q Do you have any opinions about whether there's a
12 scientific basis for believing that an in-court
13 identification is more accurate because it's done in
14 person than a photo lineup?

15 A There is, in fact, research comparing the
16 accuracy of live lineups to photo identifications.
17 There's no influence on the -- of those two variables on
18 correct identifications, and there's a tiny effect on
19 reducing false identifications. But all that research
20 assumes that the lineup procedure that is done is fair.
21 So it's not an in-court identification, but it's a live
22 lineup versus a photo array. And all those studies
23 caution that if the procedure is biased, a live
24 identification would be no better than a photo array.

25 Q Do you intend to offer opinions about the -- the

1 studies surrounding in-court identifications,
2 specifically?

3 A Yes.

4 Q And just to clear up something for me. When you
5 talked about limitations to encoding --

6 A Sure.

7 Q -- can you unpack that for us?

8 A Be happy to. When we talk about memory, we
9 start with the idea that memory is not a videotape.
10 There's no recording in your mind that you can go back and
11 replay and skip chapters and fast forward and rewind.
12 That memory has three different phases at which errors can
13 intrude.

14 The first of these phases is encoding. And
15 encoding is the process by which one attends to
16 information that can be later encoded into memory. We
17 actually have a part of the brain that is specifically
18 there to filter out information we don't need to attend to
19 because there's so many stimuli at any given time that we
20 could be attending to when we're witnessing something.
21 But we actually need help from our brain to filter out
22 those parts that we don't need. For example, you may not
23 hear it, but I can hear -- the court reporter's typing
24 on -- but only because I was looking for something in the
25 room to pull your attention to that you probably had

1 filtered out because it wasn't necessary for you to listen
2 to it.

3 So the basic reason we have that part of
4 the brain is that we have a finite amount of attention
5 and -- at any given time. And when that attention is
6 drawn in multiple places, it is impossible to attend to
7 everything at once with enough effort and time that allows
8 to encode and lay down a memory for later retrieval. And
9 so things like multiple perpetrators, which divide our
10 attention between multiple faces, paying attention to a
11 beer bottle, those are things that interfere with our
12 ability to attend to any given event going on.

13 We also have issues of distance and
14 illumination that affect the encoding in very low light,
15 even at short distances. We see that witnesses make more
16 false identifications when light is low even when the
17 distance is short because they feel like they can make
18 that identification because it's not that far away. But
19 the light -- the low light really lessens their ability to
20 see distinct features that they can encode for later use.

21 Cross-race is an issue that influences in
22 encoding. So if you are -- what we know is that people
23 are not attending to the right parts of the faces of other
24 race people that will allow them to efficiently identify
25 them later on. And so that's a problem with encoding

1 here.

2 Then we talk about -- storage is the next
3 phase. And with storage, we're talking about the time
4 that you have to hold the memory until you're going to use
5 it later. And during that phase, we -- several things
6 happen. Just like any other type of trace evidence,
7 memory fades over time. And what we know from the
8 psychological literature is that memory decays really
9 rapidly at the beginning, very, very rapidly within the
10 first few hours, even minutes, of seeing a face. And,
11 certainly, over long periods of time that memory has
12 decayed.

13 In addition, you then have the introduction
14 of potential post-event information that then interferes
15 with the memory during storage. And it can do so in one
16 of two ways. It can either alter the initial memory so
17 that that initial memory is never retrievable again, or
18 that memory could just be sitting aside the original
19 memory, and it depends on retrieval which memory you pull
20 out. So you have that -- those issues during storage.

21 And then during retrieval -- we talk about
22 what is it that influences an ability of a person to
23 recognize a face. People recognize faces based on a
24 feeling of familiarity, so they -- if they see a face and
25 it feels familiar to them, they feel like they've seen it

1 before, they tend to identify it, and they may not be
2 aware of the context in which it was seen before. And
3 there's procedures that help reduce that problem, and
4 there's procedures that exacerbate problems of
5 misidentification later on.

6 And then there's always the -- you know,
7 the question of the relationship between witness
8 confidence and witness accuracy. There's laypeople's
9 belief that a highly confident witness is always accurate.
10 And there is some evidence that highly confident witnesses
11 are accurate, but only when their identification was
12 obtained using what has been -- what have been termed
13 pristine procedures. That means that the identification
14 was obtained with a single lineup with a single suspect,
15 that that lineup that -- was conducted giving the
16 instructions that a perpetrator may or may not be present
17 in the lineup, that the lineup was fair, meaning that
18 there were fillers along with the suspect that did not
19 cause a suspect to stand out in any way and that that
20 lineup was conducted using double-blind procedures,
21 meaning that the police officer was not aware of who the
22 suspect was and that the confident statement is taken by
23 that double-blind administrator immediately after the
24 identification and not later in time. And only under
25 those conditions can we have any faith in the confidence

1 relating -- of the witness relating to accuracy.

2 Q So are you currently involved in any research in
3 the field of eyewitness identification that's relevant to
4 this particular matter?

5 A Much of my research has been focusing on the use
6 of double-blind lineup administrations, including a recent
7 study we just published, showing that the suggestiveness
8 of double-blind -- of single-blind procedures. So when
9 the administrator knows who the suspect is, that those are
10 exacerbated when the memory that has been encoded is weak.
11 So it's been encoded under problematic conditions.

12 Q Based on the testimony you heard yesterday and
13 the documents reviewed, is there any indication that the
14 photo lineups that were shown to Jill Barganier were
15 double-blind?

16 A There was no indication that they were shown to
17 her double-blind, no.

18 Q And have you been accepted as an expert witness
19 by a court before?

20 A Yes.

21 Q On similar topics?

22 A Yes.

23 Q Have courts relied on your opinions in deciding
24 cases or shaping case law?

25 A Yes.

1 Q What are some examples?

2 A I have put forward evidence in a motion to
3 suppress case that a lineup was unfair and suggestive and
4 that the trial court deemed that it was indeed suggestive
5 and excluded the identification. At some level, I --
6 there's a number -- it's hard to know whether my testimony
7 hinged -- what was the thing that drove the case. But in
8 that case, the Judge did accept my argument that the
9 lineup was suggestive.

10 Q And then quote -- quoted you in the opinion?

11 A I have been quoted in -- in at least a slip
12 opinion in People v. volumes. And I know I've been quoted
13 in other court cases within which I didn't appear, but
14 they relied on my research.

15 Q What percentage of your professional time is
16 spent acting as a testifying expert in court cases as
17 opposed to the other work you do?

18 A Most of my time is spent doing the other work.
19 I'm, in fact, restricted from spending more than a day a
20 week over time on these issues.

21 Q Okay. What do you spend most of your
22 professional time doing?

23 A Doing research. I have quite a few doctoral
24 students who I teach to do research. I teach. I'm
25 also -- I'm editor of the premier psychology and law

1 journal. So the top journal of forensic psychology, I am
2 the editor and chief of that journal, so I run the peer
3 review process for the premier outlet for psychology on
4 law research.

5 MS. SWEEN: At this time, we'd like to
6 offer Dr. Kovera as an expert in the science of memory and
7 how that informs contemporary scientific understanding of
8 eyewitness identifications, suggestive pretrial
9 procedures, like hypnosis, that can render an eyewitness's
10 identification unreliable.

11 MS. LAMBERT: Could I ask some questions of
12 the witness?

13 THE COURT: Yes.

14 Are you ready to pass the witness?

15 MS. SWEEN: For the purposes of 705, I pass
16 the witness.

17 THE COURT: Okay.

18 **CROSS-EXAMINATION - 705 HEARING**

19 **MS. LAMBERT:**

20 Q Okay. Dr. Kovera, I'm just gonna kinda go
21 through some of the stuff you testified to kinda one by
22 one. You said that you reviewed the Farmers Branch Police
23 file, correct?

24 A Correct.

25 Q The Zani hearing?

1 A Correct.

2 Q And relevant trial testimony?

3 A Correct.

4 Q So what is the relevant trial testimony?

5 A Testimony from the witness -- the witnesses,
6 testimony from the police officers and testimony from the
7 experts.

8 Q Did you read the entire transcript?

9 A No, I did not.

10 Q Okay. So which witnesses did you read?

11 A Primarily the one associated with the eyewitness
12 identification, which was Jill Barganier.

13 Q Okay. So you read her trial testimony and then
14 her Zani hearing testimony?

15 A Correct.

16 Q Did you read any of the other witness testimony
17 from the trial?

18 A Because there was no identification, I did not.

19 Q Okay. And so you don't have any familiarity
20 with the evidence that was presented at guilt/innocence or
21 punishment?

22 MS. SWEEN: Objection. That over -- that
23 contradicts what the witnesses testified to.

24 MS. LAMBERT: Well, let her answer the
25 question.

1 Q (By Ms. Lambert) Do you have any familiarity
2 with the other evidence that was presented at
3 guilt/innocence or punishment?

4 A No. Because it's not relevant to the assessment
5 of the eyewitness identification.

6 Q Okay. And so you listened to testimony in court
7 yesterday. You listened to all three witnesses yesterday?

8 A I did.

9 Q Okay. And you watched the hypnosis video,
10 correct?

11 A I did.

12 Q And you reviewed Dr. Lynn's affidavit?

13 A I did.

14 Q Did you have any conversations with Dr. Lynn?

15 A I did not.

16 Q Did you have any conversations with Dr. Markman?

17 A No.

18 Q And so let's go through these opinions. You're
19 going to educate the Court on sort of how memory works,
20 correct, the three phases?

21 A Correct.

22 Q And you're going to talk about the factors that
23 can affect reliability of eyewitness ID, correct?

24 A Correct.

25 Q That would include multiple perpetrators?

1 A Correct.

2 Q Distance and illumination?

3 A Correct.

4 Q Cross-race identification?

5 A Correct.

6 Q Are you going to be offering any testimony about
7 the effect that fear or stress can have on eyewitness
8 identification?

9 A It doesn't seem relevant in this case because
10 the stress and -- the effects of stress have been studied
11 at encoding, and there was no reason for the witness to be
12 stressed at encoding given she didn't know a murder had
13 been committed at that time.

14 Q Okay. Any other factors that you plan to cover?

15 A Exposure duration.

16 Q Exposure duration.

17 A So the amount of time the face was viewable.

18 Q Okay. And do you plan to offer any opinions
19 about the lineups that were shown to witnesses other than
20 Jill Barganier?

21 A No.

22 Q Do you plan to offer any opinions about the
23 lineups of Richard Childs that were shown to Jill
24 Barganier?

25 A Depends on what I'm asked, but possibly, yes.

1 Q And do you plan to offer any testimony or
2 opinions on, like, mugshot exposure or exposure over time
3 to photographs and how that can affect identification?

4 A Post-event exposure to faces, yes.

5 Q Okay. So that's what we'll -- post-event
6 exposure to faces.

7 A Sure, yeah.

8 Q Okay. And that's gonna be based on -- in terms
9 of this case, that's gonna be based on what she testified
10 to at trial as well as yesterday?

11 A Yes.

12 Q And you were talking about offering an opinion
13 on the scientific basis for believing an in-court
14 identification versus a photographic lineup
15 identification, correct?

16 A Correct.

17 Q Could you tell me one more time what the opinion
18 is that you plan to offer on that?

19 A The in-court identifications are duly suggestive
20 because they do not provide for a mechanism to filter out
21 guessing on the witness and that they're suggestive in
22 that they basically tell the witness who the suspect is,
23 given that the suspect is sitting at Defense counsel
24 table. Therefore, they do not have the same protections
25 that either a photo array or a live lineup have -- but,

1 overall, there's no indication that live lineups are
2 superior -- or live -- identifications of live people are
3 superior to identifications from photos.

4 Q So your opinion would be that a live
5 identification in court is always unreliable?

6 A Yes.

7 Q Okay. And it should always be a photo lineup
8 done in the way that you prefer, which is the double-blind
9 sequential?

10 A I didn't mention sequential, actually. That was
11 you. I -- it doesn't have to be a photo array. I'm just
12 say there's no preference for a live -- there's nothing
13 special about the live lineup. What is special about the
14 procedures that I'm mentioning is that they actually have
15 fillers in them that allow the witness to have to
16 discriminate among a variety of people and have -- and
17 they more reliably test by hypothesis that the suspect is
18 in fact the perpetrator.

19 Q Do you -- are you going to be offering any
20 opinions on identifications that are made by people who
21 are personally acquainted with the Defendant?

22 A There -- I could -- I -- I have an opinion on
23 that. There is research on the accuracy of
24 identifications of people known to others.

25 Q Okay. Are you planning to offer an opinion on

1 that?

2 A I wasn't planning on it, but if I'm asked about
3 it, I would.

4 Q Okay. And what would your opinion on that be?

5 A Based on Kathy Pezdeck's research, she shows
6 that people make remarkably a lot of errors in identifying
7 people who have been seen by them before. So looking
8 at -- basically, her study showed that if you show people
9 faces that they saw before, people they went to high
10 school with and people that they didn't go to high school
11 with, they make a remarkable number of false claims that
12 they know people when they don't. So, in fact, the
13 strange -- familiar identifications are much harder than
14 we previously thought.

15 Q And are you offering an ultimate opinion in this
16 case that Jill's ID is unreliable?

17 A I never offer ultimate opinions.

18 Q Okay. So you're just educating the Court based
19 on your research and expertise and leaving it to the fact
20 finder to make that decision?

21 A Always.

22 Q And are you making an ultimate opinion about the
23 hypnosis, that it should never be used, that it's junk
24 science?

25 A I will offer the opinion that hypnosis does

1 three things -- yes, three. It makes people more likely
2 to report things that are not true. It -- part of that is
3 due to the use of imagination, and that imagination
4 inflates our belief that false memories are true, and that
5 it -- the use of hypnosis can create -- increases
6 confidence -- our confidence in the accuracy of what we're
7 reporting.

8 Q And what is -- what are those opinions based on?

9 A Empirical research, testing the differences
10 between hypnosis and -- hypnotize and not hypnotize
11 witnesses in eyewitness identifications -- in eyewitness
12 memory settings.

13 Q Are those studies that you've personally done or
14 that you've read?

15 A That I've read.

16 MS. LAMBERT: That's all the questions I
17 have. Thanks, Judge.

18 THE COURT: All right.

19 MS. SWEEN: We can offer Dr. Kovera as an
20 expert.

21 MS. LAMBERT: Judge, do you mind if we take
22 just like a five-minute break?

23 THE COURT: Yeah, we can take a five-minute
24 break.

25 (Court in recess; 9:55 - 10:10 a.m.)

1 (Open court, Applicant present.)

2 THE COURT: All right. Ms. Sween, do you
3 want to restate your offer of your expert.

4 MS. SWEEN: Thank you, Your Honor. At this
5 time, we offer Dr. Kovera as an expert in the science of
6 memory and how that informs contemporary scientific
7 understandings of eyewitness identifications and
8 suggestive pretrial procedures, like hypnosis, that can
9 render eyewitness identifications untrustworthy.

10 THE COURT: Any objections, State?

11 MS. LAMBERT: Yes, Judge. Based on the
12 information elicited during the 705 hearing, we do have
13 some objections to Dr. Kovera's testimony. We don't have
14 an objection to her testifying as an educational expert
15 for the Judge about memory in general and how it works,
16 but the claim that was raised in the subsequent writ
17 application was that there is new science that causes us
18 to question Jill Barganier's hypnotic -- because she
19 underwent hypnosis that causes us to question her
20 identification of the Defendant in this case. So it's a
21 new science claim based on hypnosis. And this expert is
22 not -- is not an expert in hypnosis. We have two experts
23 coming on Monday to talk about that.

24 And so -- to the extent that she wants to
25 offer testimony about the distance and the lighting and

1 the exposure, those issues are not relevant in this
2 proceeding because those were not raised in the writ and
3 that's not what we're here to talk about. In addition,
4 those claims were litigated at trial. I mean, Mr. Lollar
5 cross-examined Jill on what she could see and how long she
6 could see it. And in addition, I mean, are we really
7 questioning -- she identified Richard Childs who has
8 admitted to being there. So are we really questioning
9 whether she could have seen the two people get out of the
10 car? I mean...

11 So we would object to her testifying to any
12 of that, the multiple perpetrators, the distance, the
13 illumination.

14 In addition to that, to the extent that she
15 can't incorporate an expert opinion on hypnosis, she
16 doesn't really offer anything on the issues before this
17 Court. And so we would just -- our objection is to
18 everything that doesn't pertain to -- she can be an
19 educational expert for the Court on memory, but she is not
20 an expert on hypnosis. She's not here to testify about
21 new science regarding hypnosis. And all of the other
22 eyewitness identification testimony that she wants to
23 offer is not relevant. And that's our position.

24 MS. SWEEN: Your Honor, if I may respond?

25 THE COURT: You may.

1 MS. SWEEN: First, if we can reflect back
2 that the issue at trial, as Judge Nelms put it, is the
3 real issue here is whether her -- meaning Jill
4 Barganier's -- in-court identification is trustworthy or
5 not. And if it is not trustworthy by reason of the
6 hypnosis, then, obviously, it would not be admissible.
7 That's how it was framed, that it was the in-court
8 identification in relationship to the hypnosis.

9 Now, also the CCA did not -- you know, its
10 opinion is one page long, but it granted a remand on the
11 entire first claim, which, over and over again, talks
12 about the problems with the eyewitness identification.
13 And Dr. Lynn's affidavit, which was the only evidentiary
14 proffer in support of Claim 1 -- in the introduction it
15 says, More specifically, I will opine that the use of
16 hypnosis and the testimony rendered in the Flores matter
17 were so fundamentally flawed that they raise a specter of
18 doubt, not only regarding the admission of the testimony
19 of the eyewitnesses, but also regarding the in-court
20 eyewitness identification of Mr. Flores.

21 So Dr. Lynn is a renowned expert on
22 hypnosis and how it affects cognition, but that issue is
23 embedded in the eyewitness identification issue that was
24 pled in the writ application, was supported by an
25 evidentiary proffer, and it's Dr. Kovera's frame that

1 allows us to understand how Jill Barganier's testimony was
2 material, because that is our burden. And so if we are
3 cutoff and we cannot talk about the context of the -- how
4 the memory works, looking at what was encoded and under
5 what circumstances, that's to -- denuded of context and is
6 at odds with what was pled.

7 Now, also, Your Honor, it is
8 well-established Texas law that one expert may rely on the
9 expertise of another expert. And so there does not seem
10 to be any issue with the reliance on Dr. Lynn as a
11 hypnosis expert or any contention that Dr. Kovera is not
12 an expert in the broader science of eyewitness
13 identification.

14 So we strongly urge the Court to deny the
15 State's motion to curtail her ability to testify about the
16 very context of the observation that then was affected by
17 hypnosis. How can we know if the hypnosis made any
18 difference and affected the in-court identification unless
19 we look at the entire context? And that was not something
20 that happened at trial. Mr. Lollar asked one question,
21 essentially, on his cross of Ms. Barganier, which is about
22 the time of day, and put into evidence that sunrise was at
23 7:40 -- at 7:25 that day and she had claimed to make this
24 observation at 6:45. That was all the testimony there was
25 about the context of her identification. But it's in the

1 record, and it's certainly something that contemporary
2 science would say, You have to look at all that now that
3 we understand the problems with eyewitness identification
4 when you use suggestive pretrial procedures like hypnosis.

5 THE COURT: Anything else, Counsel?

6 MS. LAMBERT: I just wanted to -- the claim
7 that's raised in the writ is Flores' Article 11.073
8 application should be granted because he can demonstrate
9 that new scientific evidence discredits the testimony of
10 Jill Barganier. And what he cites to you is the affidavit
11 of Steven Lynn, which talks about the new scientific
12 evidence on hypnosis. It does not talk about eyewitness
13 identification. So that's the State's position. And we
14 would urge that she be limited in her testimony to what
15 she can testify to as an expert on in this hearing and
16 that's relevant.

17 MS. SWEEN: Your Honor, if I may approach
18 with a copy of Dr. Lynn's affidavit that we did want to
19 admit into evidence. He talks extensively -- he quotes
20 the Innocence Project research on wrongful convictions
21 based on eyewitness identification. He establishes that
22 context. He is not an expert in those overarching issues.
23 Dr. Kovera is. But he makes that point. The reason the
24 hypnosis that was so fundamentally flawed matters is
25 because of its effect on her ability to claim to be able

1 to identify Mr. Flores in court 13 months later.

2 So if I could approach with that affidavit?

3 Here you are, Your Honor.

4 This is marked as Applicant's 5.

5 THE COURT: So this is part of the writ.

6 Is there any objection to this being admitted?

7 MS. LAMBERT: No objection, Your Honor.

8 MS. SWEEN: So we offer Applicant's 5.

9 THE COURT: Applicant's Exhibit No. 5 is
10 admitted.

11 (Applicant's Writ Exhibit No. 5 admitted.)

12 THE COURT: All right. The Court will take
13 a brief recess to consider those arguments.

14 (Court in recess; 10:18 - 10:38 a.m.)

15 (Open court, Applicant present.)

16 THE COURT: All right. Back on the record.

17 All right. With regard to the State's
18 objection, the Court makes the following finding, that the
19 following testimony will be admissible. The testimony has
20 to specifically relate to Jill Barganier's memory of the
21 event and her identification in the case.

22 So let's tender her testimony to that.

23 MS. SWEEN: Thank you, Your Honor.

24 THE COURT: You may -- Doctor, come on up.

25 MS. LAMBERT: And, Judge, would you just

1 note our objection to -- are you saying identification of
2 the Defendant?

3 THE COURT: Yes.

4 MS. LAMBERT: Okay. So we just would like
5 to get a running objection to anything that pertains to
6 Richard Childs.

7 THE COURT: Well, at this point --

8 MS. LAMBERT: You're not letting that --
9 got it. Sorry.

10 THE COURT: Yeah. At this point, if
11 there's a specific objection that you want to make --

12 MS. LAMBERT: Okay. Just make it at the
13 time?

14 THE COURT: -- make it at the time of
15 the --

16 MS. LAMBERT: Okay.

17 THE COURT: -- of the question as asked.
18 But at this point, it has -- it has to be about the
19 identification of the Defendant, so...

20 MS. LAMBERT: Okay. And so that gets into
21 all the stuff that happened at the time of encoding,
22 illumination, distance, at the time she perceived event.

23 THE COURT: As it relates to her memory, to
24 Jill Barganier's memory.

25 MS. LAMBERT: Okay.

1 THE COURT: All right.

2 MS. SWEEN: Thank you, Your Honor.

3 THE COURT: And like I said, if there's a
4 specific objection, then you can make it at that time; and
5 I'll make a ruling at that time.

6 MS. LAMBERT: Okay. Thanks, Judge.

7 MS. SWEEN: And, Your Honor, I assume she
8 can also talk about suggestive pretrial exposures that
9 affect memory and eyewitness identification, such as
10 hypnosis and...

11 THE COURT: As it relates to Jill
12 Barganier. Because we're not going to spend all morning
13 talking about should have done this or should have done
14 that, okay.

15 MS. SWEEN: I think I under- -- thank you,
16 Your Honor.

17 **MARGARET KOVERA, PhD,**
18 having been previously duly sworn, testified as follows:

19 **DIRECT EXAMINATION**

20 **BY MS. SWEEN:**

21 Q Dr. Kovera, welcome back. I wanted you to help
22 frame something for us by asking you about a recent
23 publication of yours. Have you published a book on
24 eyewitness identification issues?

25 A I have.

1 Q What is that called?

2 A I believe it's called Evaluating Eyewitness
3 Evidence, or something close to that.

4 Q And is that the one that's published by Oxford
5 University Press?

6 A It is.

7 Q And in 2010?

8 A That's correct.

9 Q And can you just survey for us some of the
10 topics that were covered in that book that are relevant to
11 today's proceeding?

12 A Sure. When we evaluate eyewitness
13 identifications for their reliability, we tend to talk
14 about two different types of factors. Those are factors
15 that are under the control of the criminal justice system
16 and those that are not. And so the factors -- at least as
17 it pertains to this particular identification that weren't
18 under the control of the criminal justice system, are
19 factors like the cross-racial nature of the
20 identification, the illumination and distance at which the
21 person was seen by the witness, the amount of time that
22 was possible to view the perpetrators, and other things
23 that would have drawn the attention of the witness.
24 Again, as I discussed before, we have a finite amount of
25 attention that we can allocate at any given time to the

1 extent that there's other items or people drawing the
2 attention that limits the ability to attend to any
3 particular face.

4 And then also we talked about the types of
5 variables. Again, not necessarily under the control of
6 the criminal justice system, but things like retention
7 interval, the idea of how much time passes between the
8 witnessing an event and the ultimate identification of
9 someone, including post-event information that may be
10 either brought in by the police or not that could
11 influence the subsequent identification accuracy.

12 And then we finally talked about police
13 procedures and the ways that those can influence witness
14 memory. And we talked about witness accuracy -- the
15 witness confidence in their own accuracy and the variables
16 that affect that. And I would say even since that 2010
17 book, in the last seven years, there have been changes to
18 the science in what we think about the relationship
19 between confidence and accuracy. State mentioned
20 sequential lineups. And I think the thinking on that
21 has -- or at least the science on that has made the
22 conclusions on that issue less consensual. So there's
23 been some -- there's some disagreements in that area that
24 there weren't before, but -- so there's things I would
25 rely on that are not necessarily in that book that would

1 bring the science more up to date than when we wrote that
2 in 2009. So quite a while ago.

3 Q Did you bring with you today some studies that
4 you might cite to that you relied on in forming your
5 opinions?

6 A I did just in case the questions got really,
7 really specific on numbers, and I didn't want to misquote
8 them.

9 Q Okay. So let's -- I want to go back through
10 each of those categories and make sure we unpack them and
11 understand how they relate to Jill Barganier's memory
12 formation. But can you give us, again, a really basic
13 premier on how our brain works and -- first of all, do our
14 brains work like a video recording? Do we have stored in
15 our brain memories that we can rewind and fast forward?

16 A No, we don't. Again --

17 Q I mean, how do we know we don't?

18 A Well, we know that we don't -- if you have a
19 videotape of an event, you get all the information and --
20 and even -- you know, if I put a DVD into the monitor and
21 start watching it -- I've been in a situation where I've
22 missed something, missed what I think is a crucial line in
23 a show and have gone back to rewind it. It's always gonna
24 be there, because that's the nature of the DVD recording;
25 it records everything that's going on. And even if you're

1 not attending to it at the moment, you can go back and
2 find it. If you haven't attended to it as a real-life
3 mem- -- in person while creating a memory, it's never
4 stored. You have to attend to the information to store
5 it.

6 So it's not like a DVD in that way because
7 there's all sorts of missing information and the amount of
8 information that is missing is completely depended upon
9 the conditions under which you have encoded the memory.
10 Because there are things -- some situations where you're
11 gonna have better illumination, closer distance, more time
12 to look at something and encode it. All sorts of
13 variables could affect how well you encode that -- that
14 information. So just to start, it's not like a DVD
15 because there's great variability in the amount of
16 information that's encoded in the memory where the DVD
17 always has all of it. And the DVD, unless you break it or
18 look like it warped in the sun, it's gonna play the same
19 way every time. And that's not the way memories work
20 either.

21 And we know that if you have a DVD, all of
22 a sudden, a new actor's not going to appear in your show.
23 We've -- there's not going to be new information provided
24 later on that interferes with that -- or changes what that
25 DVD looks like, and that memory does work that way, that

1 sometimes we incorporate information into our memories
2 that just didn't happen. Absolutely, flat out didn't
3 happen. And we know those from our experimental studies.
4 And so that's another way in which it doesn't work like a
5 DVD.

6 Q Let me ask you. So is -- it's fundamentally a
7 storage issue? If we had a video camera running all the
8 time that was recording everything we experienced, we --
9 we would simply -- our brains would be overwhelmed?

10 A Correct. We just don't have that -- in all
11 areas of decision-making we find that we have to take
12 shortcuts because we have limited cognitive capacity to
13 take in all the information that's available to us. And
14 so that's just the way the brain works, as to find ways of
15 limiting yourself to certain types of information or
16 certain amounts of information so that your brain will not
17 be overwhelmed.

18 And then, you know, there's also issues we
19 didn't talk about in terms of retrieval. With a DVD, I've
20 got a chap- -- you know, it says Chapter 1, Chapter 2, and
21 it tells you what's there -- that chapter for the DVD.
22 Your memories don't work that way. It's not like you can
23 just go back, necessarily, and accurately say, okay, at
24 this moment, what was I doing. Because we find that we
25 don't necessarily always have the right retrieval queues

1 to go back to the -- the -- what was laid down at the time
2 we witnessed an event. Sometimes we go back to things
3 that we witnessed after the event; and we think it was the
4 event we witnessed initially, but it was something that
5 happened to us later.

6 Q Is that one of the problems with hypnosis,
7 that -- at least the way it was performed in this case,
8 that it's premised on this idea that you can direct
9 somebody to go back and retrieve like it's a file on a
10 computer, a memory?

11 A Well, it is -- it is -- one problem with it is
12 that it is based on this premise that you could go back
13 and replay a memory in its totality and accurately and --
14 just given the right prompts that you will uncover
15 something that has been hidden there all the time. And so
16 it's one of the several problems with hypnosis.

17 Q Because that's just not the way memory works?

18 A Memory does not work that way.

19 Q Now, when you were using the phrase, you have to
20 attend to something in order to store it in memory, can
21 you explain to us what that means in terms, perhaps, of
22 studying for a test?

23 A Well, if you don't read particular material,
24 it's not going to be in your memory for later retrieval;
25 or if you spend more time studying a particular topic,

1 you're going to likely have a better performance on the
2 test on that material, than other material you spent less
3 time on. The idea is that the more time you spend
4 attending to something, the better chance you have
5 encoding it for later on. And if you don't attend to it
6 at all or for a very brief period of time -- you can
7 attend to something so briefly that you -- that it'll
8 never be encoded in memory.

9 Q So if something happens -- you have fleeting
10 observation, you don't have the ability to revisit it
11 because you can't go call it up in your brain and just
12 replay that scene over and over again with any guarantee
13 of accuracy; is that what you're saying?

14 A Not if it was ever -- never encoded into memory.
15 That's correct.

16 Q Okay. And, again, what does it mean to encode
17 in memory?

18 A It basic -- that's a good question. It
19 basically just means that we've paid enough attention to
20 it that we have stored the information in memory. So
21 it had -- at some level -- at a neuro level, it has to do
22 with whether a particular receptor is alert later on to,
23 you know, cells in the brain alert particular stimuli, but
24 for the basic premises of what we're talking about
25 today -- and just the idea that you -- if you've encoded

1 it, it's something that you've stored into memory for
2 later use.

3 Q And can even encoded memories decay?

4 A Oh, absolutely. That's what -- decay. Yeah,
5 there's no -- if there's nothing encoded, there's nothing
6 to decay.

7 Q Okay.

8 A So if it's been encoded, it will decay.

9 Q All right.

10 A And it's one of the oldest phenomenas discovered
11 by psychologists is that memories decay and that they
12 decay pretty rapidly after the initial encoding. And so
13 it's a- -- I'm sorry -- asymptotic function, so -- which
14 means that you have a very rapid drop-off immediately
15 after the event, in terms of loss of information, and then
16 it tends to plateau out, but that's because you have such
17 a rapid decrease in stored information in memory right
18 after the event, even -- you know, a couple of days later
19 you've lost more than half of what you initially knew.

20 Q Let's talk about the encoding phase in terms of
21 what the science teaches us now about the ability to
22 recognize strangers' faces. What -- what -- what does it
23 take to encode a memory of glimpsing a stranger's face in
24 order for it to become part of memory?

25 A Well, we know that greater length of exposure

1 time matters. Do we have a -- we don't have a cut-off
2 that says this is the amount that you have to attend to
3 it, but the greater lengths of exposure time to a face
4 matter. You have to be able to --

5 Q So wait. Let me ask you.

6 A Yeah.

7 Q So there is a direct correlation, longer
8 disp- -- exposure to face tends to enable encoding in
9 memory more easily; is that fair?

10 A Exactly.

11 Q What other variables affect the ability to
12 encode?

13 A Well, illumination and distance. You know, it's
14 perhaps not surprising that if it's dark, you can't see a
15 face and it will be hard to encode details about it; and
16 that if it's very far away, it will also be difficult.

17 What some of the research has shown is that
18 if the illumination is low -- so let's say low as in
19 there's -- it's before sunrise, and it is -- there's no --
20 it's not an urban area where there's lots of light.
21 It's -- even random street lights don't provide enough
22 light to get enough light to get good identifications, and
23 then you pair with it -- you're not face to face with
24 somebody, but there's not an egregious distance between
25 you. The problem you have with that is that people make

1 false identifications under those -- have a greater risk
2 of making false identifications under those circumstances
3 because of the accommodations, the low light with some
4 distance, not huge distance, leaves people comfortable
5 enough that they were close enough to see something even
6 when they didn't have full ability to encode because of
7 the light.

8 Q Did you find in your review of the records or in
9 the testimony yesterday that there were issues affecting,
10 likely, Jill Borganier's memory related to duration of
11 exposure, illumination and distance?

12 A From listening to her testimony, I noticed a
13 couple of things -- and from some of the exhibits shown
14 during the testimony. I didn't see any street lights
15 available in the vicinity of where the viewing would have
16 occurred. The viewing, according to her, occurred at 6:45
17 in that vicinity, and that was before sunrise. So that
18 would have suggested low illumination. She was viewing --
19 at least -- there was at least a length of a room between
20 the window that she was viewing and the end of her house,
21 and then also you have some grass and a driveway. And the
22 passenger would have been on the far side of that car. So
23 you have a decent distance. It's certainly not a football
24 field, but it is a distance that would make it difficult
25 at that light to see well but not so far away that it

1 might cause the witness pause to make an identification
2 based on that type of information. So there's that.

3 Also, she talked, both at trial and the
4 hypnosis session and yesterday, about the beer bottle
5 and -- that was being carried by the driver and how that
6 was unusual. And she seemed to pay quite a bit of
7 attention to that and because -- and there is some
8 evidence in the literature that when there's unusual
9 objects of -- in -- when witnessing a crime that people
10 tend to spend attention looking at the unusual objects and
11 not on the perpetrator's face and that that presence of an
12 unusual object then decreases accuracy for
13 identifications. And just -- the presence of multiple
14 perpetrators is something that divides attention. And,
15 you know, the driver's closer to her, so it was probably
16 easier to see and -- had the unusual item. So the concern
17 would be that the attention was devoted to him and not to
18 the passenger. All of those things together would suggest
19 that she might not had -- have had enough attention to
20 reliably encode the face.

21 And then you add to that the issue of
22 cross-racial identification. And we know that
23 identifying -- that when we see perpetrators of races
24 other than our own that we have difficulty encoding those
25 faces. And it's not because of racial bias. It's not

1 because of racial animus. It really doesn't even have to
2 do with the extent to which you live in a multicultural
3 community and have exposure to other faces. It really
4 seems to be that people of -- tend to lack experience
5 differentiating among people of other races and that
6 there's different facial features for each of the races
7 that are more diagnostic in helping you identify and
8 differentiate among them later on. And so that unless you
9 have practice looking to those areas of the face that
10 allow you to make those discriminations later, you're
11 encoding the wrong information. So white people look at
12 certain areas of the face. And those are -- those are
13 helpful for discriminating among white people but not
14 necessarily people of other races. And so you're not
15 looking at the information that will be most diagnostic
16 later on when trying to make a determination about whether
17 you've seen somebody before. And that was present here as
18 well.

19 Q And -- well, it was present here if, in fact,
20 the passenger was Hispanic. And did you hear any
21 testimony or see any evidence in the record suggesting
22 that was not her impression throughout the 13-month
23 interval between observation and in-court identification?

24 A No. But it would suggest when making the
25 identification of a Hispanic man that she had not looked

1 at the right parts of the face to make that -- those
2 discriminations.

3 Q And she had not been the one to suggest that
4 there was a passenger of a different race; she was just
5 presented with photos of people of the different race,
6 correct?

7 A That's correct.

8 Q You used the phrase the finite attention that we
9 have in talking about this beer bottle phenomenon.

10 A Yes.

11 Q Can you explain that a little more fully? I
12 mean, she's looking through the mini blinds at this scene.
13 How do we understand that in terms of this concept of
14 finite attention?

15 A So let's say she's glancing out of the window
16 for a minute because she's on her way to get her -- we
17 don't know exactly how long. And even she told us, we
18 wouldn't know exactly how long because people are not
19 particularly good at estimating time. But let's say she
20 glances out the window, because she hears the car and
21 wants to see what's going on before she goes to get her
22 kids from school -- from school. So she looks out a
23 minute. And she's looking at the car, she's looking at
24 the beer bottle, she's looking at the driver and then
25 she's looking at the passenger. And how she allocates

1 that minute to each of those things determines how well
2 each of them will be encoded.

3 Q So it's a finite resource, so if I devote a
4 certain amount to one aspect of the scene, I'm reducing my
5 ability to take in the other information; is that fair?

6 A That's exactly correct.

7 Q Now, you also mentioned earlier something about
8 retention interval and the ultimate identification. What
9 does the research show us about how retention interval
10 matters?

11 A Yeah. So retention interval is just our fancy
12 name for how much time passes between the witnessed event
13 and the identification that happens later. And in this
14 case, it was 13 months. And what our research has
15 shown -- and it's been shown across, really, all different
16 types of memory -- is that when we learn material -- or we
17 encode information for later use, we lose lots of that
18 information right up front. We're losing it -- within 20
19 minutes, we've lost a lot of information. Within a day,
20 we've lost even more. Within two to three days, we've
21 lost about half of what we're going to -- half of what
22 we've learned initially. And it tends to -- the loss
23 tends to slow down after that, but the loss is really
24 rapid right early on. And it's not like you can get it --
25 once it's gone, it doesn't come back; it's gone.

1 And when I'm talking about loss of half the
2 information, it's not that they've got 50 percent of what
3 was present for them to view; it's 50 percent of what they
4 originally encoded.

5 Q Right.

6 A So -- so nobody's starting with a hundred
7 percent accurate memory of what they saw, but we were
8 talking about losing half of what you've learned during
9 that period of time.

10 Q So you -- you use the phrase, once gone, it's
11 gone, there's this rapid decay. So are you saying that
12 hypnosis is not a tool to be able to bring back something
13 that has not been truly encoded in memory?

14 MS. LAMBERT: We would object at this point
15 that she's not an expert on hypnosis and can't offer an
16 opinion on that.

17 THE COURT: I'll sustain that objection.

18 Ask your next question.

19 Q (By Ms. Sween) Are there studies that you're
20 familiar with as an expert in eyewitness identification
21 that do look at the forensic use of hypnosis?

22 A Yes -- yes, there are.

23 Q And just relying on the studies with which you
24 have familiarity, are there empirical results about how --
25 whether hypnosis can retrieve something from memory that

1 was never encoded?

2 A What the research shows is that when people are
3 hypnotized, as opposed to not, that witnesses recall more
4 information but more of that information is inaccurate.
5 So it actually changes the ratio of correctly recalled
6 information to inaccurately recalled information.
7 Basically, inaccurate information tends to come out. And
8 the reason behind this is what seems to happen with
9 hypnosis is that it changes the witness's willingness to
10 respond and report something without a concurrent increase
11 in their ability to access anything.

12 And so when we talk about eyewitness
13 identification accuracy, we talk about two phenomenon that
14 really go into allowing us to predict accuracy. One is
15 discriminability. So is it easy to discriminate the
16 suspect or the perpetrator from among other people?
17 Right? So how easy is that to do? And then we talk about
18 response criterion. And that is the willing --
19 willingness of a witness to report. These two things are
20 independent. But what we find with hypnosis is that we
21 have a increase in willingness to report without any
22 increases in the ability of the witness to discriminate
23 whether the perpetrator is present or not. And that's
24 where the inaccuracy comes from.

25 Q Because the hypnosis instills its false

1 confidence in what it really -- confabulations?

2 A Well, that's another result of it, yes. And
3 what we see is that -- especially with the techniques that
4 we saw in the video where one is asked to imagine that
5 something happened or to use your imagination in replaying
6 this, that the act of imagining things causes people to be
7 more likely to report false information as having happened
8 previously and having been previously seen. It's called
9 the imagination inflation effect. And not only are you
10 more likely after this imagination procedure to report
11 things that didn't happen, you also have a very high
12 confidence that they in fact did happen.

13 And so these are the three things we see
14 from the hypnosis studies that have been conducted. You
15 have this increased willingness to report information that
16 is not -- has not related to the witness's ability to
17 discriminate what is accurate versus not, and so you get
18 an increased report of false information. Then you
19 have -- and part of that comes from this imagination
20 inflation effect where if you imagine things, it tends to
21 help you create false memories that then you report with a
22 high degree of confidence.

23 Q So this willingness to report information that
24 may be false, the inability to discriminate between true
25 and false memories, you're not saying that this is

1 something that is consciously done by people asked to make
2 eyewitness identifications?

3 A Oh, no. Oh, no. I mean, the issue with
4 eyewitness identifications is that people who make
5 inaccurate identifications, they believe that there's
6 accurate -- they believe that they're speaking the truth.
7 They're not lying. They're reporting what they remember.
8 It's just that we know that there are certain factors that
9 influence the likelihood that that memory is accurate or
10 not.

11 Q Going back to Jill Barganier's observation, is
12 the fact that she had this divided attention and she
13 glimpsed the scene in the moment not knowing it's
14 something significant, are there any studies related to
15 that versus in her subsequent stress when she realized,
16 oh, I may have witnessed something really important as she
17 described yesterday?

18 A I mean, I think that -- to the -- to the extent
19 that she didn't -- we don't attend to things that we don't
20 think are important, and so that would suggest that there
21 was limited attention there. You know, this is why I said
22 I don't think stress really is relevant to the encoding --
23 when we talk about stress and eyewitness memory, we're
24 talking about the encoding of the event. And that's where
25 the research has been done. I don't know of any research

1 that's been done about stress that subsequently occurs.
2 So I can't speak to that because I don't know of
3 scient- -- any scientific data on that issue. But to the
4 extent -- I mean, things have to be important enough to
5 you for you to spend the resources to look at something.
6 And if you don't know what's important to remember later,
7 you don't attend to it. It's just like -- if you don't
8 know that something's going to be on the quiz, you choose
9 not to study it; and, therefore, you don't encode it,
10 which is why all my students ask me, Is it going to be on
11 the quiz? And the answer is always yes.

12 Q So when you have that stress afterwards that it
13 was on the quiz and you didn't give it any attention,
14 that's --

15 A Well, it's certainly not -- having the stress
16 afterwards is not going to impede the encoding that --
17 because the encoding's already done. Right? It may
18 affect other things, but it's not going to affect the
19 ability of the witness to encode at the time. That's why
20 we've been talking about other factors other than stress.

21 Q And encoding is only happening there when the
22 observation is being made, essentially, unless you can
23 revisit the material, so to speak?

24 A No. Encoding only happens when you're in front
25 of the material.

1 Q Okay.

2 A So, you know, you can try and reinforce the
3 memory later on by rehearsing it. It's very hard to do
4 that with facial -- to remembering faces. It works a
5 little bit better with words and things like that.

6 Q If, for instance, you had a picture of a child's
7 fourth birthday party, is -- the ability to go back to
8 that photograph of the birthday party that occurred years
9 ago, is that an ability to enhance the memory or is it
10 actually a myth that you're even really remembering that;
11 you're just remembering seeing the photo? Does that make
12 sense?

13 A No, I think you asked two different questions,
14 but maybe I'm wrong.

15 Q Let me break that down. Does having a
16 photograph -- is that something like material that you can
17 use to refresh the memory, and, therefore, re-encode it?
18 Is that --

19 A Well, it can. I mean, so you can look at that
20 and there's maybe things that you can encode -- if it's --
21 assuming that's an accurate depiction of what happened and
22 what you saw from your viewpoint, then you could reinforce
23 what you saw before and strength it. But there certainly
24 has been evidence that people remember things that they
25 can't possibly remember having seen a photo. We all have

1 had family stories passed down -- at least I have -- about
2 the embarrassing things we did when we were too little to
3 remember and -- you know, unless your parents were more
4 merciful than mine, they'd tell you the story, right? And
5 you -- that I'll have a memory of it having happened to
6 you even though you didn't actually originally have a
7 memory because you were too young to form a memory. And
8 so then sometimes people promise -- so there is -- both
9 things can happen, right? You could -- if you actually
10 saw it, it can reinforce; and if you don't have a memory,
11 it could create a new memory.

12 Q Okay. So let me make sure I understand. So
13 there's the problem that encoding happens only in the
14 instance, and then we can have these influences like a
15 photograph that can make us think we're really remembering
16 something when really what we're remembering is being
17 shown the photograph or being told the story about our
18 party when we were four years old. We don't remember
19 that. We remember being told the story and being told the
20 story and being told the story. Is that what you're
21 saying?

22 A Right, until we believe that we actually
23 remember the original event without the benefit of the
24 story. Certainly, what can happen is that post-event
25 information can be provided to witnesses that can then be

1 incorporated into the original memory. So it can either
2 be -- and the research shows both -- one of two things
3 happening; either that post-event information can actually
4 override the original memory and be incorporated so
5 that -- that original memory, as it was originally
6 encoded, can never be retrieved again, or the new
7 information can be encoded sort of side by side with the
8 original memory. And so then when you go to retrieve the
9 memory, it's possible for you to go back and accidentally
10 get the wrong one because people have problems with what
11 we call source monitoring.

12 The idea that -- when you have these two
13 memories sitting side by side and one came from the
14 original event and one came from something you saw
15 afterwards but it's related to in some way so they're
16 stored in a similar space in memory, sometimes we're not
17 really good at remembering where we saw the information
18 before, where we got the information, so differentiating
19 between information that we sought at the time and
20 information we sought later.

21 People have source monitoring problems when
22 it comes to information, and it -- it then causes problems
23 when information is introduced. Like I believe --
24 Jill Barganier testified that she had seen photos of the
25 Applicant on the news. She was shown photos of the

1 Applicant by the police. And those could be incorporated
2 into her memory so that later on she could really believe
3 that this is -- when she makes the identification, that
4 this is the person that she saw before even if it hadn't
5 been because of this incorporation of the new information
6 into the old memory.

7 Q Because you -- when you talk about retrieving
8 from storage, again, it's not like there are videotapes in
9 our mind and it's just, Oh, we picked the wrong tape out;
10 it's much more complex in that how memory is distributed?

11 A There's cells firing in neural networks. It's
12 -- so it's basically cells firing in response to retinal
13 stimulation and -- yeah, so it's much more complicated
14 than a memory.

15 Q And we don't have any -- and we don't have time
16 to control over all of that, essentially --

17 A No --

18 Q -- that we can say, I need to remember now what
19 happened to me on January 29th; I will press button and it
20 will come up?

21 A It doesn't work like that.

22 Q Okay. Now, most of what we've been talking
23 about so far seems to be under the category of the
24 variables that are not under the control of law
25 enforcement --

1 A That's correct.

2 Q -- in terms of her observation on that critical
3 day. Can we now turn to talking about some of the police
4 procedures that you heard about that are relevant to both
5 affecting her memory and her ability to make an eyewitness
6 identification that was accurate?

7 A Well, we've touched on one of those already.
8 She was shown a photo array with the Applicant in it, and
9 she did not make an identification. And according to the
10 studies that have been done, that is the identification
11 that is most likely to be reliable, that subsequent
12 identifications done with other procedures or procedures
13 that include the same person as a suspect -- again, it's
14 subsequent procedures -- increases the risk of false
15 identifications of suspects.

16 So if you show somebody the same photo
17 repeatedly or even at the same time in the context of
18 being a suspect, each -- each time they see them, they're
19 going to be more and more likely to make a suspect
20 identification. And so that's one thing -- one thing that
21 certainly the research recommends that only the
22 identification from that initial identification procedure
23 should be used and that, alternatively, that other
24 evidence should be sought by the police instead of an
25 eyewitness identification at that point.

1 MS. SWEEN: Your Honor, if we may look at
2 the photo array that Jill Barganier was shown of
3 Mr. Flores. It's already in evidence as Applicant 30. I
4 may need some technical assistance here.

5 Q (By Ms. Sween) And let me ask you, Dr. Kovera,
6 while we're going through this: Hypothetically, if the
7 same imagine was used in a photo array and then
8 distributed to the media and appeared in media that was
9 available to the public and there were repeated exposures,
10 might that be something that creates this phenomenon you
11 were talking about, where you feel like you've seen a
12 person before and you project that back, where you -- that
13 really wasn't the person you had seen before?

14 A Well, what it does is it increases the
15 familiarity of that face. So every time you're exposed,
16 you have increased recognition of that face later on. And
17 the problem becomes when you're presented with that face
18 again and you have that sense of familiarity, you may not
19 remember the source of that familiarity, that that picture
20 was shown to you by the police, that you saw it on the
21 news and -- and however else you saw it. And that it --
22 especially, given that it was shown, I would say, in the
23 police station in connection to the -- and everything was
24 in connection with the crime, it then -- the way memories
25 are stored, they tend to be stored together in terms of

1 information that is related has stronger associated paths,
2 meaning that if one part of the memory is activated,
3 another part will be as well. And so -- and we also know
4 that information that has been repeatedly and recently
5 activated is more likely to get activated again. And so
6 that whole -- all that process leads to a heightened sense
7 of familiarity for -- to a picture that's been repeatedly
8 shown.

9 Q And I'm try -- and I -- for some reason --

10 A I see it.

11 Q -- it's only showing up here.

12 A I see it.

13 Q You can see it?

14 MS. SWEEN: Does the Judge see it? But I'm
15 not -- and I'm -- how do you -- oh, okay. Thank you. I
16 apologize for my lack of technical dexterity.

17 Q (By Ms. Sween) Do you recall from the testimony,
18 Dr. Kovera, that Jill Barganier was not able to say if
19 this was exactly the photo array she was shown?

20 A I do recall that.

21 Q But it's the only one found in the Farmers
22 Branch Police Department records, and we know she was
23 shown a photo array from the trial record that included
24 Charles Flores, correct?

25 A Correct.

1 Q Okay. So assuming this was shown to
2 Jill Barganier -- and the record isn't clear if the photo
3 lineup she was shown the day of the hypnosis was this, but
4 that seems to be a likely assumption -- is there anything
5 about this photo array that would also have been unduly
6 suggested in terms of trying to form a memory -- or effect
7 a memory that was -- was or was not encoded?

8 A Yeah. All the guidelines for proper
9 construction of a photo array from the National Institute
10 of Justice, from the International Associations of Chiefs
11 of Police, from the National Academy of Sciences, all of
12 them -- oh, and the American Psychology-Law Society, who
13 has a set of recommendations as well -- they all clearly
14 state that there should be nothing about the suspect that
15 makes him or her stand out from among the fillers. And in
16 this photo array, it is clear that there is white blocking
17 out something. So there's white coming up the chest of
18 all of the people in the lineup -- in the photo array,
19 except for Mr. Flores.

20 Q So you're referring to this little strip here?

21 A Right. There's little strips of white above all
22 of them, which --

23 Q All except for No. 2?

24 A All except for No. 2, which would be something
25 that would make the No. 2 stand out as different. And

1 that's something that is deemed to be suggestive by just
2 about every manual put forward for procedures, at least
3 nationally.

4 Q And you refer to all these national standards.
5 Did these standards exist in 1998 -- on February 4th of
6 1998 when Ms. Barganier was shown this photo array?

7 A The standards really -- were first promulgated,
8 I -- well, 1998, the American Psychology-Law Society had
9 put forward their recommendations for that in '98. I
10 don't know whether -- I certainly don't know if they had
11 trickled down to the police yet, if they ever have. But
12 the NIJ first issued their guidelines in 1999. So that
13 was clearly afterwards. And I believe also the
14 International Association of Chiefs of Police and the
15 National Academy of Sciences are more recent than that.

16 Q Okay. Is there anything else that is relevant
17 to affecting the memory and the integrity of the witness
18 identification from this particular photo array?

19 A Well, I think, again, the issue for me would be
20 that once you have seen a photo array or a lineup with the
21 suspect in it and have said, I cannot make an
22 identification from this, then that witness can no longer
23 be a reliable source of information about whether that
24 suspect is in fact the perpetrator because you have now
25 exposed them to the face. You've exposed them to the face

1 of the suspect. And any subsequent identification
2 procedure you're going to do will include that same face.
3 And, likely, at least according to the way that this
4 police department appears to conduct repeated
5 identification procedures, it will be the only face that
6 is the same across the identification procedures because
7 we did see two identification procedures for Childs. And
8 in those, Childs was the only suspect in both of those
9 photo arrays and the fillers were different. And so
10 you're alerting the witness to who the suspect is when you
11 do that, when the only person who remains the same --

12 MS. LAMBERT: Objection. I think this is
13 going outside the scope of what the Judge has ordered this
14 hearing to be.

15 THE COURT: I'll sustain that objection.
16 Move along.

17 Q (By Ms. Sween) And what we need to look at is
18 what we know from the record in the Farmers Branch Police
19 Department records about their policies and procedures
20 that would inform how Jill Barganier was potentially
21 unwittingly manipulated before she got to the moment of
22 making this in-court identification. So is it relevant to
23 look at how they were conducting photo lineups, generally,
24 at least based on the production that they have given to
25 us?

1 MS. LAMBERT: Objection. Same objection
2 that's before the Judge. I think that's outside the scope
3 of your Court's ruling and what this proceeding is about.

4 THE COURT: I'll sustain that objection.

5 Q (By Ms. Sween) Can we then go through what other
6 suggestive pretrial procedures Jill Barganier was exposed
7 to before she got to the point -- 13 months later -- where
8 she made the in-court identification? Because we talked
9 about the ones police officers can't control. You teach
10 future police officers. What do you teach them about what
11 not to do that you saw in this record?

12 A Well, I teach them that they should warn the
13 witness that the perpetrator may or may not be in the
14 lineup, because that's an important instruction that
15 reduces mistaken identifications with the idea that people
16 often come -- you don't want people coming into the
17 situation thinking they have to identify somebody. Then
18 the other one is --

19 Q And let me ask you: Did you hear anything in
20 the testimony yesterday that suggested Jill Barganier was
21 given that instruction, that she did not have to find a
22 suspect in a photo array?

23 A I didn't hear a previewing of the -- a
24 pre-instruction before viewing the photos that she should
25 remember that the perpetrator may or may not be here. She

1 was told that she didn't have -- she needed to be a
2 hundred percent certain that the perpetrator was there,
3 but she was never told that the perpetrator may not be
4 there. And so that was missing.

5 And then also missing was the fact that the
6 procedure was conducted by an officer who knew who the
7 suspect was. And from my own research, as well as the
8 research of others, we're showing that that is a highly
9 suggestive procedure. And it's not -- not that the police
10 are doing it intentionally. And I don't want to suggest
11 that in any way. It's just normal human behavior that if
12 you have a hypothesis that you tend to communicate that to
13 other people through nonverbal behaviors, through small
14 changes and verbal behavior in what you say, that
15 communicate that hypothesis to the witness. So in our
16 studies when we have people administer lineups who either
17 know who the suspect is or don't, when they -- for those
18 witnesses who are paired with an administrator who knows
19 who the suspect is, they are significantly more likely to
20 pick out the suspect, even when that suspect is not the
21 perpetrator.

22 Q And so the photo lineup that included
23 Charles Flores we know that was administered by
24 Investigator Callaway, correct?

25 A Correct.

1 Q And from your review of the record and from the
2 testimony yesterday, was it clear he was the lead
3 investigator on the case?

4 A That was clear to me, yes.

5 Q And was it clear that by February 4th, at the
6 very least, he knew that Charles Flores had been
7 identified as a suspect?

8 A That's how it appeared to me, yes.

9 Q And that was from interrogations that have been
10 conducted by the police, including the ones of Vanessa
11 Stovall?

12 A That's correct.

13 Q Now, backing up -- now -- okay. Next, so the
14 problems with this photo lineup procedure -- anything else
15 we need to know about what not -- what should not have
16 been done?

17 A Well, I -- the only other thing we talk about
18 with these procedures is -- would be relevant if she had
19 made an identification. And the -- the other thing we
20 prescribed, if she had made an identification, is that the
21 confidence statement be taken by an administrator who does
22 not know who the suspect is immediately after the
23 identification. And that's because there's now a whole
24 body of research that shows that confidence is malleable.
25 It is changeable. So that feedback given to the witness

1 that they made the correct identification or that they
2 identified the suspect tends to inflate this -- the
3 confidence of the witness and the accuracy of their
4 identification. The problem is accuracy is not movable.
5 You know, once you've made an identification, you're
6 either accurate or not. Confidence you can change around
7 all over the place. And correlations work if two
8 variables change at the same rate in the same direction.
9 And so if you increase the accuracy while you increase
10 confidence, you would maintain a relationship between
11 accuracy and confidence. If accuracy goes up, confidence
12 goes up; if confidence goes down, accuracy goes down. But
13 that's not what happened. Accuracy is what it is. It's
14 either present or not, but confidence is movable, which
15 makes it then a very imperfect marker of witness accuracy
16 and, especially, under the conditions that we see here
17 where we have a single blind lineup administrator and --
18 who might have been doing some suggestion unwittingly
19 because they know who the suspect is. And then we see --
20 you know, the confidence is coming after what I would
21 consider a very suggestive identification procedure.

22 The whole point about identification
23 procedures is to test the hypothesis, that the suspect is
24 the perpetrator. And if you're doing this properly, you
25 should be able -- if a witness is -- a witness does

1 identify as a suspect as a perpetrator, if you're gonna
2 have confidence in that data, you have to be able to rule
3 out all alternative explanations for why a witness might
4 have identified this person as the perpetrator. And
5 that's what we try and do with lineups, right, or photo
6 arrays? We have fillers. Because if we do showups, we
7 know -- we know they're inherently suggestive because
8 we're just showing one person. And we use the fillers to
9 try and rule out the alternative explanation that
10 witnesses are just guessing and don't know for sure that
11 that's the person.

12 Well, if you go to an in-court
13 identification, what you have is a lot of information
14 going to the witness about who the suspect is in the case.
15 They're sitting at Defense counsel table. They may be the
16 only person in the room who matches the -- you know, the
17 description at this point or at least the only person who
18 matches the photos you'd been shown by the police. And
19 that's the person then you pick. And you have that
20 alternative explanation, that they have all this
21 non-memorial information that they're using to make that
22 identification as opposed to a true test of witness
23 memory, which would rely solely on the witness's memory
24 and rule out these alternative explanations for why they
25 made the identification.

1 Q When you say that accuracy of an identification
2 and confidence in the identification are not necessarily
3 correlated, are there studies in fact that support that --
4 that -- that you can't say just because someone is
5 confident that means they're accurate?

6 A Oh, there's a lot of studies and -- thereby what
7 we call meta-analyses on this topic. Meta-analyses are
8 the statistical combination of a large number of studies
9 that test the same proposition, and you kind of combine
10 them together into one big study and calculate the numbers
11 based on all these different tests. Those studies show a
12 weak to moderate correlation between accuracy and
13 confidence. But since the time that meta-analysis --
14 meta-analysis was conducted, people started doing all this
15 research on how confidence can be pushed around by all
16 sorts of extraneous factors.

17 And so I think the current thinking on this
18 is really represented by a new paper recently published
19 by -- interestingly enough, somebody who typically
20 testifies for the Prosecution and somebody who typically
21 testifies for the Defense, so -- John Wixted and Gary
22 Wells. And what they've done with the reanalysis of a
23 number of studies is show that there are certain
24 conditions under which witness confidence is highly
25 predictive of accuracy, but those conditions have to be

1 met for that relationship to hold. And those -- those
2 conditions are not present in this case.

3 The conditions are there has to -- the
4 identification procedure has to be a one-suspect array,
5 either live or photo, with fillers. We don't have --
6 this -- this identification had no fillers. So it doesn't
7 meet that criteria.

8 Q And by that, you mean the in-court
9 identification?

10 A The in-court identification had no fillers.
11 It's the only identification that I know of. They have to
12 have instructions that the perpetrator may or may not be
13 in the lineup. We don't have that here.

14 The lineup has to be fair in that there
15 have to be fillers that are -- look reasonably like the
16 suspect and the witness's description of the perpetrator.
17 We don't have that here. And we, in fact, have a previous
18 exposure to a lineup that was suggestive.

19 We have to have a double-blind
20 administrator. People in the courtroom knew who the
21 suspect was in this case for that identification. And we
22 have to have a non-blind administrator take that -- I'm
23 sorry -- a blind administrator take the confidence
24 judgment immediately after the identification. And we
25 don't have that met either.

1 So none of the criterion that are necessary
2 for ensuring that accuracy is related to confidence were
3 present here. We have none of them.

4 Q When you refer to studies that are meta-analysis
5 that support this proposition that you only get a
6 correlation between accuracy and confidence when all these
7 variables are met, what do you mean by a meta-analysis?

8 A Again, a meta-analysis is looking at a large
9 number of studies on -- on -- testing the same hypothesis
10 or testing the same research question. And then you can
11 use procedures to estimate the effects across all those
12 studies. And one of the reasons we do that as opposed to
13 just counting, how many studies found "X," how many
14 studies found "Y" to how many studies found support for
15 the hypothesis and how many didn't, is that studies have
16 different participant numbers. And that affects the
17 weight that they should be given in the analysis. Because
18 it's easier to find the facts when you have more people,
19 is one of the variables involved in that calculation. And
20 so you could have a study that shows no effect of a
21 variable, but they are -- have not enough power to do --
22 detect an effect because they have too few participants.

23 So the way around that is to do the
24 statistical reanalysis of these numbers of studies with
25 large numbers of participants when you combine them all

1 together and it gets you a sense of what the effect of a
2 variable is across different laboratories, across
3 different ways of what we say operationalizing a
4 particular variable, so had -- you know, doing a -- the
5 instructions that I give in my lab that I think are --
6 that are fair might come across different than the
7 instructions given in a different lab that they think are
8 fair. The way you do it is a little bit different, and
9 that could have an effect. And we try and wash all that
10 out by combining everything together and looking overall
11 our unbiased instructions better than biased instructions and
12 our sequential lineups better than simultaneous lineups.
13 And those are the types of things that we can get at with
14 the meta-analysis.

15 Q So from a scientific perspective are
16 meta-analyses deemed to have more integrity in terms of
17 the results of the studies; they're more rigorous?

18 A I mean, it certainly depends on how
19 meta-analysis is conducted. I've seen poorly conducted
20 meta-analyses, so -- but I think when you have a
21 well-conducted meta-analysis that is based on a large
22 enough number of studies that have been well-conducted,
23 then you can draw -- it allows you to draw better
24 conclusions across a large number of studies than looking
25 at -- cherry-picking the studies that worked for you

1 versus those that don't.

2 Q So, in other words, if the studies themselves
3 were not constructed in a fair or scientific manner, just
4 having a number of studies you say supports a hypothesis
5 would not be a good meta-analysis?

6 A That's correct. And there's even bad ways of
7 doing meta-analysis. There's better ways than others, and
8 so you have to evaluate that as well.

9 Q All right. So I'd like you to focus on the good
10 meta-analyses. And is there -- are there such studies,
11 for instance, on the effect on juries of hearing the
12 testimony from eyewitnesses who claim to be very confident
13 about making an identification? Is that something that
14 has been studied?

15 A There's not a meta-analysis on the topic, but
16 there are a number of studies on that topic, and they all
17 reach the same conclusion. So it's pretty clear that a
18 meta-analysis would as well.

19 And the studies show that jurors are highly
20 influenced by expressions of witness confidence, almost to
21 the exclusion of any other variable that -- about the
22 witness's viewing conditions or the procedures used by the
23 police. And so the single biggest predictor of jurors'
24 findings about an eyewitness are the expressed confidence
25 of that witness.

1 Q And were these studies available back in 1999?

2 A Yes, they were.

3 Q And were they -- were they affecting the way the
4 legal community was seeing eyewitness identifications?

5 A Not that I can see. I still don't think they
6 are.

7 Q So this is still an evolving tension, what
8 studies are showing versus what scientists are coming in
9 the courtroom and saying about eyewitness identifications?

10 A Yeah. I think there's always a lag between what
11 happens in case law and courts and what happens in the
12 scientific community.

13 Q And that's a great segue to the next topic I
14 wanted to explore a little. You teach future law
15 enforcements officers, correct?

16 A Some --

17 Q I mean, that's some of your student population?

18 A We're known as a college that educates future
19 police officers, yes.

20 Q And future attorneys, too?

21 A Yes.

22 Q I know you're not the hypnosis expert, but have
23 you looked at how the law enforcement community has
24 utilized hypnosis and how the law has treated hypnosis as
25 something that affects the reliability of eyewitness

1 testimony?

2 A Well, in terms of my reading of the literature
3 of -- of the involvement of the use of hypnosis in terms
4 of a memory enhancement technique, that it -- that
5 certainly scientists were doing controlled studies showing
6 that there were problems with confabulation as a result of
7 hypnosis. And we're arguing against the use of
8 hypnotically refreshed testimony. But you also had --
9 those were the experimental people who were doing
10 experiments on a topic.

11 You also had practicing clinicians who
12 don't necessarily engage in science on a regular basis.
13 They might have had exposure to it when they were in
14 graduate school, but they don't necessarily keep up with
15 the science over time. And when they're doing -- their
16 continuing education classes tend to be more focused on
17 practice issues as opposed to science issues. That you
18 would see when clinicians would write about it, they would
19 say, yeah, there are these studies, but in my clinical
20 experience, this person retrieved more information after
21 having been hypnotized, and, therefore, I think it's
22 helpful.

23 And the problem I have coming at it from a
24 scientific standpoint is that there is no way for that
25 clinician to know the ground truth. So, yes, this person

1 has come up with more information, but unless the
2 clinician was present and also witnessed the same event,
3 there would be no way for them to know whether that
4 additional information that was elicited was accurate or
5 not.

6 And it's a problem -- whenever you study
7 accuracy of memory in the forensic context, ground truth
8 is always a problem. That's why we do eyewitness
9 identification studies in laboratories and simulate them
10 as opposed to looking at field studies. Because I can
11 look at case -- you know, police files of whether
12 identifications are made of suspects or not, but I don't
13 know whether those suspects are the perpetrators. And I
14 don't know which lineups are target absent or -- you know,
15 have a perpetrator absent or a perpetrator present. So
16 the fact that somebody picks out a suspect doesn't tell me
17 whether they made a correct identification or a mistaken
18 identification, if that makes sense.

19 So the idea is that whenever you're looking
20 at these forensic evaluations of whether somebody's more
21 accurate or not, you really need to know the ground truth.
22 And the best way to know ground truth is to do experiments
23 where the ground truth is known, because the experiment
24 gets to be God and know the -- know exactly what happened
25 and what was seen.

1 Q The science at issue in this particular
2 proceeding is what was proffered by the State in the Zani
3 hearing. Is that your understanding?

4 A That's my understanding.

5 Q Are you familiar with the Zani versus State case
6 out of the Texas Court of Criminal Appeals?

7 A Probably not as familiar as you all are, but,
8 yeah, I have -- I have read it.

9 Q And do you have any understanding of how -- why
10 that -- that hypnosis case was even brought to the CCA?
11 How did hypnosis by law enforcement and how that affected
12 an eyewitness's ability to testify become an issue, do you
13 know?

14 A I actually don't.

15 Q Are you familiar with the New -- I know you're
16 from New Jersey. Are you familiar with the New Jersey
17 Supreme Court case Hurd, State v. Hurd?

18 A I am -- I -- I'm vaguely familiar with it. I
19 believe it was decided about 20 years before I moved to
20 New Jersey, so forgive me if I'm not up on early New
21 Jersey law.

22 Q Are you aware that it's been overruled by the
23 New Jersey Supreme Court in the Moore case?

24 MS. LAMBERT: Objection; relevance.

25 THE COURT: I'll sustain that objection.

1 Q (By Ms. Sween) Okay. So if we need to ask about
2 the history of these case laws related to hypnosis and
3 eyewitness identification, we should ask our hypnosis
4 expert?

5 A I think that would be probably a better way to
6 go.

7 Q But would you say there's a scientific consensus
8 now among experts in the field of memory and eyewitness
9 identification regarding whether or not hypnosis is an
10 inherently suggestive pretrial process?

11 A I do. And I actually have data to support --
12 it's not just my sense of what the field -- I mean, I have
13 a sense based on what people are writing about and the
14 people who are writing who are conducting scientific work
15 have a consensus that hypnosis is problematic. But, also,
16 one of the things that we have done in the eyewitness area
17 is try to measure expert opinions on different scientific
18 phenomena to see whether there's general acceptance among
19 the expert community that certain scientific principles
20 have been proven or not proven. And so there is a study
21 of eyewitness experts that looks to see how reliable they
22 think a variety of phenomena are.

23 And in that survey conducted by Saul Kassin
24 and some of his colleagues -- Kassin is K-a-s-s-i-n --
25 what they did is they surveyed people who were experts on

1 memory. So, specifically, people who would know about
2 whether a technique affected memory of eyewitnesses. And
3 they identified everybody who had published a paper on
4 eyewitness memory in the past five years. So they went to
5 the people who were the researchers. And they asked them
6 a series of questions about different phenomena, about
7 confidence in accuracy, about the use of a sequential
8 lineup, about -- hypnosis is one of the things they talked
9 about. And they asked two questions on hypnosis in that
10 survey, one asking whether hypnosis made people
11 suggestible, and one whether they thought hypnosis
12 increased the accuracy of the testimony provided. And in
13 both situations -- for both questions, around 90 percent
14 of the experts viewed -- answered in a way that indicated
15 that they did not believe hypnosis was a helpful technique
16 and indeed that it was a harmful technique for memory.

17 Q Okay. So the -- the consensus reached, based on
18 this study, is that experts themselves don't think that
19 hypnosis is effective for refreshing memory?

20 A That these experts in the science of eyewitness
21 memory believe that hypnosis is problematic in terms of
22 negatively affecting the accuracy of eyewitness memory.

23 Q So problematic means negatively --

24 A Negatively affect -- yes, negatively affect.

25 Q And -- and negatively affecting the accuracy and

1 inflating the confidence?

2 A They didn't ask that question in the survey.
3 But, certainly, from reading the literature, you can see
4 that that is an overwhelming view of the scientists that
5 it inflates confidence.

6 Q As an expert in memory and eyewitness
7 identification, would you agree that the hypnosis session
8 that was conducted on Jill Barganier cannot be viewed as a
9 nonevent in terms of assessing the accuracy of her
10 subsequent in-court identification?

11 A I certainly looked at at least two features of
12 the -- two features of the session that were particularly
13 problematic to me. One was the -- well, maybe three.

14 First, the -- the implication that memory
15 is like a video recorder that can be played is
16 problematic; two, the witness was repeatedly asked to
17 imagine things and to imagine things makes one believe
18 that -- have difficulty differentiating between things
19 that were imagined and things that were actually
20 experienced. So that's a problem. And I think also
21 that -- that final feature where there was the reassurance
22 that more memory would come later. Memory generally does
23 not work like that, where all of a sudden this memory will
24 pop up later down the road, especially a year or so later
25 and it be accurate. This is not a phenomena that we see.

1 And so instead it seems almost like an
2 instruction that you -- you know -- it's an instruction
3 that would affect response criterion, right? Maybe -- you
4 know, we do show in the studies that the effects of
5 hypnosis, at least one of them, are to increase the
6 likelihood that someone would report new information later
7 on. It's not surprising to me that people do that,
8 especially if they're being told that they're going to
9 remember more things later on. And, again, the problem
10 with the research studies is these more things that are
11 remembered are not necessarily accurate.

12 Q But being told that you will or may be able to
13 remember more later gives you confidence when you have
14 that feeling that you've remembered, whether or not it's
15 accurate?

16 A Certainly, we see that -- with hypnosis, we see
17 that inflated confidence, yes.

18 Q I have a bizarre hypothetical for you. There's
19 a famous novel called Remembrance of Things Past by
20 Marcel Proust that begins with him eating a madeleine
21 cookie and then suddenly remembering his entire life. And
22 that's what the novel is. And I think we've all had that
23 sense that we taste something or smell something, hear a
24 piece of music, ah, these memories come back to us. Does
25 the research support that; and if so, how is it that you

1 can say that that -- or what is it that would lead you to
2 suggest that didn't happen with Jill Barganier?

3 A Well, I think what he's talking about in the
4 novel is what we would call a retrieval queue. And that
5 certainly there are things that serve as retrieval queues
6 that allow us to access information that was there before,
7 but it's not that you wouldn't have been able to recall it
8 without the retrieval queue necessarily. So you hear a
9 song and you remember where you were in college when you
10 heard that song. You know, these things spark memories.
11 This is not what we're seeing in this -- I don't see the
12 relevance to this particular situation, because it --
13 it's -- the retrieval queue triggers something --
14 remembering something else. You can't have the -- the
15 suspect be the retrieval queue for the suspect. It
16 doesn't -- it's an analogy that --

17 Q It's bootstrapping?

18 A It's an analogy that doesn't work for me.

19 Q Okay. Well, and is it also fair to say that
20 whatever Marcel Proust may have felt about his ability to
21 remember an entire novel it was a work of fiction, work of
22 imagination, not necessarily something that can be
23 empirically tested as accurate reconstruction of his life
24 story?

25 A That's also correct.

1 Q And I want you -- you were talking about how
2 this was a false analogy for eyewitness identification.
3 You hear a song and it takes you back. Explain to us
4 about what that moment where there was the potential
5 encoding with Jill Barganier where there was not something
6 like a song that was underscoring her encoding of this
7 memory.

8 A Right. Well, there's no song playing at the
9 time, then all of a sudden, she -- that triggered her
10 memory, then she made the identification. That's not what
11 we have going on here. And the problem is for that to
12 happen, you actually have to have a memory encoded in the
13 first place. And I think we've seen that the chances that
14 she encoded a really strong memory that would survive 13
15 months without any influence from other intervening events
16 is just very unlikely.

17 Q Was there anything in the multiple descriptions
18 she gave before she eventually made the in-court
19 identification that suggested anything had been
20 consistently reported such that it may have been encoded?

21 A Well, certainly, she -- she consistently
22 reported hairstyle and race.

23 Q And the hairstyle was?

24 A Longer.

25 Q And the -- that the passenger hair was longer

1 than the driver's?

2 A Correct.

3 Q And the --

4 A And the race was white.

5 Q Race was white. What about -- was she
6 consistent in reporting this notion that she'd seen
7 somebody drinking out of a beer bottle?

8 A She was consistent about that over time.

9 Q Do you remember that she, though, confused in
10 talking about the beer bottle episode, the passenger and
11 the driver a couple of times?

12 A Yes.

13 Q She did that in the --

14 A Hypnosis.

15 Q -- in the interview to the hypnosis session?

16 A Correct.

17 Q And then did it on the stand?

18 A Correct.

19 Q Is that significant from the perspective of a
20 memory expert that confusion? Is that just a slip of the
21 tongue? Do we --

22 A People make inconsistencies like that, so
23 it's -- and, again, they should be more likely when their
24 memory is weaker.

25 Q So the -- the initial description shortly after

1 the event being quite vague, does that -- is that data
2 that is important from the perspective of a memory expert,
3 evaluating her ultimate in-court identification?

4 A The research on this is that descriptions of
5 perpetrators are quite vague. It doesn't mean that
6 they're inaccurate. They just don't provide a whole lot
7 of detail.

8 Q So it could be accurate, but what if it ends up
9 being inconsistent with the in-court identification; is
10 that telling?

11 A We don't have a lot of good research on that.

12 Q What about the -- the fact that she was asked to
13 do these composite sketches. Did that have any -- is
14 there any study about how that -- or studies about how
15 that affects memory, the process of doing a composite
16 sketch, which she said was -- was difficult, painful?

17 A Yeah. There is a study showing that the process
18 of creating a composite sketch like that actually
19 interferes with the ability to make an identification
20 later on. So you're less likely to make an identifica- --
21 accurate identification later after having created
22 yourself a composite.

23 Q And she did two composites of two different
24 people. Does that compound the problem?

25 A I don't know that we have studies that have

1 looked at that. They just looked at the -- the studies
2 just looked at you saw somebody, you drew a composite or
3 you didn't, and then you made an identification. So I
4 wouldn't be able to answer that question.

5 Q I want to talk just a moment about the merging
6 scientific consensus about in-court identifications. They
7 are certainly still happening, correct?

8 A Correct.

9 Q But what is the consensus about what makes these
10 problematic? Can you walk us through that?

11 MS. LAMBERT: Judge, I'm going to object to
12 this is outside the scope of what's been raised in the
13 writ.

14 MS. SWEEN: Your Honor, starting at trial
15 and in the writ and in Dr. Lynn's affidavit, the issue of
16 the hypnosis is directly tied to the in-court
17 identification. And so understanding why in-court
18 identifications are problematic to begin with is material
19 to understanding why the hypnosis compounded that problem,
20 as Justice Newell even noted in his concurrence in
21 remanding this.

22 MS. LAMBERT: Right, but the claim is about
23 emerging science in hypnosis, not emerging science on
24 in-court identification. There's no evidence presented in
25 the writ on that, and that's not the claim that was

1 remanded.

2 MS. SWEEN: The problem with in-court
3 identifications are expressly mentioned in Dr. Lynn's
4 affidavit, and this unduly restricted definition of what
5 is pled in the writ is just -- it's -- it's -- I
6 understand the strategic reason the State is doing it, but
7 it's not a fair representation of the claim or what was
8 remanded or what the evidence was or even what happened at
9 trial. Hypnosis mattered because she was there to make
10 this in-court identification at the 11th hour.

11 MS. LAMBERT: But why is new science
12 related to in-court identification relevant?

13 MS. SWEEN: Because it speaks to the
14 materiality of her providing that testimony. And Dr. Lynn
15 speaks to that. He talks about juries over privileging
16 eyewitness identification. He talks about the problems
17 with in-court identifications. He himself was not an
18 expert in that. He, though, was part of the pleading that
19 allowed us to then come in and have an expert on that
20 broader issue.

21 THE COURT: I'm going to sustain that
22 objection.

23 Move along.

24 Q (By Ms. Sween) In order to understand whether
25 the hypnosis had any possible suggestive effect on

1 Ms. Barganier, don't we have to look at what she
2 ultimately testified to in court? I mean, it doesn't --
3 if she never testified, we don't care if it was unduly
4 suggestive, if it was junk science to say hypnosis session
5 wasn't suggestive, whatever?

6 A I'm sorry. Could I get you to rephrase the
7 question?

8 Q Yes, yes. I'm asking: The only reason the
9 Court held the Zani hearing is because after being
10 hypnotized the eyewitness was going to testify, correct?

11 A Correct.

12 Q And to assess whether or not her testimony was,
13 in fact, reliable in the wake of this hypnosis, we have to
14 look at what she ultimately testified about in court,
15 correct?

16 A I mean, I think you can probably evaluate that
17 absonant just based on the problematic procedures that are
18 used. I don't know what she would have testified to in
19 the absence of the hypnosis because we don't have that
20 condition -- I don't have that information. It's not
21 available to any of us. So I'm not sure I agree with
22 that.

23 Q What -- you're -- you're saying you don't even
24 need to know what her testimony was to be able to
25 understand if her identification was problematic?

1 A Right. Because the evidence available on
2 experiments from hypnosis -- comparing hypnosis to
3 non-hypnosis suggests that it increases the unreliability
4 of the information that's provided and increases the
5 confidence in which people hold to the accuracy of that
6 information they produced. And so that to me is enough to
7 suggest that there's a problem.

8 Q So are you saying --

9 A There's also -- there's also an additional
10 problem with the in-court identification in that it's --
11 it's suggestive procedure.

12 Q Would the fact that she made this in-court
13 identification and represented to the jury that she was
14 more than 100 percent confident be tied to the pretrial
15 suggestive proceedings, including hypnosis? Is that what
16 your focus is on?

17 A Yes. So whether the -- the ID was accurate, I
18 think is something I don't need -- whether or not an ID
19 was made, I don't need to know. But the fact that she
20 made the ID and was one hundred percent confidence --
21 confident in what she said and what she recalled, that's
22 the issue, if that's what -- where we're going. And,
23 certainly, the hypnosis and all the literature on hypnosis
24 suggests that one holds one's beliefs with greater
25 confidence after that hypnotic session as opposed to when

1 you don't have the hypnotic session. And so to say that
2 you're over a hundred percent confident, which isn't even
3 possible, suggests that there were some sort of influence
4 of the hypnotic session, certainly, since having seen
5 Mr. Flores' photo previously and not being able to make an
6 identification and certainly not with that accuracy is
7 problematic.

8 Q Okay. And I think I was just asking a bad
9 question. What I was saying is unless we look -- it
10 doesn't matter from a legal perspective that she was
11 hypnotized unless she's a witness who claims to have an
12 accurate identification; that's what I was getting at.
13 You're saying, from a scientist, you don't even care that
14 she came to court and testified, you already can make the
15 conclusion that she had an unreliable memory; is that what
16 you're saying?

17 A I think that's what I'm saying. I mean, I guess
18 if she doesn't -- if she gets hypnotized and never comes
19 to court, then perhaps the accuracy of what she remembers
20 is not relevant because she's not testifying in a
21 situation where she has to be accurate. It's certainly
22 not -- but it's important legally because she came in and
23 said it, whether it's accurate.

24 Q Now, you know from reading the Zani transcript
25 that the State's expert on hypnosis and how it may or may

1 not affect memory, such as to make a witness's testimony
2 reliable, was George Mount, correct?

3 A That's correct.

4 Q Had you heard of Dr. George Mount before you
5 read the testimony that he offered in the Zani hearing?

6 A I had not.

7 Q Have you since taken a chance to look at his
8 resume that was submitted in the Zani hearing?

9 A I have.

10 MS. SWEEN: Your Honor, if I may approach
11 with what's been marked as Applicant's 51, which was
12 State's Exhibit 86 at trial.

13 THE COURT: You may.

14 Q (By Ms. Sween) And, Dr. Kovera, did you have a
15 chance to take a look at this resume of Dr. Mount before
16 today?

17 A I did.

18 Q And did you have any -- does anything jump out
19 at you in terms of assessing his qualifications to opine
20 about how hypnosis might affect memory?

21 MS. LAMBERT: Judge, I think this is also
22 outside the scope of what they proffered at the 705
23 hearing as to what they were going to be offering today.

24 THE COURT: What's your response, Counsel?

25 MS. SWEEN: We certainly didn't discuss

1 Dr. Mount per se, but the State intends to call him. He
2 was the -- she said she reviewed and relied on the Zani
3 hearing testimony. He was the State's science expert at
4 that hearing. And so the State's on notice that she's not
5 going to say whether or not he's thoroughly qualified, but
6 just talk about some of the issues with his CV from the
7 perspective of an expert in memory and eyewitness
8 identification.

9 MS. LAMBERT: And at the 705 hearing, I
10 asked her what opinion she would be offering. There was
11 no proffer of testimony where she's going to be offering
12 opinions on Dr. Mount or his qualifications or anything in
13 his CV. And I think that's also outside the scope of what
14 this witness should be doing. I think that's for the
15 Judge to decide. Dr. Mount's going to be a witness. I
16 think that's properly something that the Court should make
17 a determination about.

18 THE COURT: I'm going to sustain that
19 objection. He's supposed to testify today at 2 o'clock so
20 you can ask your questions then.

21 MS. SWEEN: Thank you, Your Honor.

22 Q (By Ms. Sween) All right. Dr. Kovera, I want to
23 now actually wrap up the package, get to some of your
24 overarching conclusions. In your professional opinion,
25 why should law enforcement care about these best practices

1 for obtaining eyewitness identifications of suspects when
2 you're out there consulting? Why -- why, from the
3 perspective of this case, does it matter for law
4 enforcement to care?

5 A Well, best practices increase the likelihood
6 that you have correct identification -- when suspects are
7 identified those -- those identifications are correct
8 rather than mistaken. And here's why that's important for
9 police to be concerned about. I think that sometimes
10 there's -- we focus on the idea that when people like me
11 come in and testify about best practices that we're trying
12 to get people off. And I would argue that testifying
13 about best practices for me is the idea of trying to
14 encourage that we get the right person. Because every
15 time someone is mistakenly identified, it means that the
16 person who actually committed the crime has gone free. So
17 you have two errors, you have the error of wrongfully
18 accusing somebody and perhaps convicting them plus you
19 have the error of the person who actually committed the
20 crime going free. So best practices work to eliminate
21 both of those problems.

22 Q Were you here for the testimony of Mr. Serna,
23 former Officer Serna?

24 A I was.

25 Q And he's the man that conducted the hypnosis

1 session?

2 A That's correct.

3 Q Did you hear any testimony from him about his
4 own recognition as a police officer about the effects of
5 memory and misidentification, how that changed his
6 practices as a police officer?

7 A My memory of his testimony is that he spoke
8 about learning about practices that led to wrongful
9 convictions, including the work done by the Innocence
10 Project, and then he took it upon himself to come back to
11 his own practice and try and implement some of the best
12 practices because he thought it was important to reduce
13 mistaken identifications.

14 Q Is it fair to say that these critiques of these
15 suggestive pretrial procedures leading to identifications,
16 it's about caring about reliability of results?

17 A It's about justice. It's about making sure that
18 we get the right person.

19 Q Has the scientific understanding of what makes
20 an identification process suggestive -- the things that
21 law enforcement do, has it changed since 1999?

22 MS. LAMBERT: Objection; relevance.

23 THE COURT: I'll sustain that objection.

24 Q (By Ms. Sween) Let me ask you: Have -- was it
25 the practice in 1999 to do double-blind photo arrays, for

1 instance?

2 A No, it wasn't. And still if you look at the
3 most recent data, despite the recommendations, only about
4 a third of jurisdictions are using them.

5 Q So you're saying practice is still lagging
6 behind the empirical studies?

7 A Not only the empirical studies, the Federal
8 guidelines. You know, the National Academy of Science is
9 recommending double-blind, NIJ -- the Department of
10 Justice is recommending double-blind lineups. So it's not
11 only that they're lagging behind science, they're actually
12 lagging behind Federal agencies that are recommending
13 these new practices.

14 Q But in terms of the use of hypnosis by law
15 enforcement as a forensic tool, has there been a clear
16 shift since the '80's and '90's?

17 A In terms of a lack of --

18 Q In terms of --

19 A -- a lack of use of them?

20 Q Yes. And the understanding that they -- they
21 increase the probability of unreliable results in
22 eyewitness identification.

23 A I think you even see -- I think, yes. And I
24 think even among scientists you see evidence that it's
25 just a settled fact. You see review papers written -- I

1 mean, at least among the scientific community, the people
2 who are conducting experiments on these things, that it is
3 a settled issue that it is problematic. And I think that
4 another piece of evidence would be that when we try and
5 update these surveys of experts on their beliefs about
6 eyewitness phenomena periodically so we -- because we know
7 new science comes and sometimes we change our beliefs
8 based on that new science.

9 There has been some follow-up by a
10 different set of researchers on that original survey of
11 experts. And they kept in previous items where they
12 thought science had been evolving and wanted to get new
13 takes on it, and they took out items that they thought had
14 been resolved. And there was really no -- there would be
15 no movement in expert opinion because there was no new
16 science recently to change people's opinions. And
17 hypnosis was one of the things they took out just because
18 it was so settled. The results were so clear from the
19 previous survey that experts did not believe -- again,
20 those scientific experts who study eyewitness
21 identification and eyewitness memory, it was so clear
22 that -- that hypnosis was not a reliable technique, and it
23 was problematic that they didn't even bother to
24 investigate experts' beliefs going forward because it was
25 a settled issue.

1 Q I know you don't want to opine about the
2 ultimate issue. But in terms of the accuracy of
3 Jill Barganier's identification and then her confidence in
4 that eyewitness identification, I just want you to share
5 with us your conclusion as to what did you see in the
6 record that indicates a reason for concern, first, about
7 the accuracy of her ultimate 13-month-later
8 identification.

9 A Yeah, you're right. I won't opine on the
10 ultimate issue only because I don't believe I have access
11 into her head. And so I'll leave that to the trier of
12 fact. But I have grave concerns based on what I know
13 affects the accuracy of eyewitness identifications.

14 I believe her ability to encode the face of
15 the passenger in the car was severely eliminated by
16 illumination and distance. The amount of exposure time
17 that she had potentially -- the multiple perpetrators --
18 so just this -- and the tension that the beer bottle drew
19 from -- drew from her. So I think that limited her
20 attention to the passenger's face, potentially a
21 cross-racial encoding -- or at least a cross-racial
22 identification.

23 Thirteen months is an extremely long time
24 between exposure and identification that makes it very
25 difficult to remember, much at all, at that time about

1 what was sought previously. And the suggestiveness of the
2 photo array that she was shown by the police that
3 contained Mr. Flores, her viewing of Mr. Flores in the
4 media, and then the in-court -- and then we have the
5 hypnosis and the lack of double-blind administrators
6 during the procedures that she was engaged in. You know,
7 all these things taken together, plus then you take the
8 inherent suggestiveness of an in-court ID, I have grave
9 concerns about the accuracy of this identification. And I
10 have many alternative explanations for why it is she could
11 have identified Mr. Flores, other than the fact that that
12 was the person she saw.

13 In addition to that, because of the
14 hypnosis in particular, I have concerns -- again, grave
15 concerns because hypnosis is known through experimental
16 scientific studies to increase confidence in remembered
17 events. Remembered events that may not be accurate.

18 I have grave concerns about really
19 attending to the confidence with which this witness made
20 the identification because it is not made under the
21 conditions that we know promote significant relationship
22 between accuracy and confidence and none of the conditions
23 that we know allow for that faith in the confidence
24 accuracy correlation to exist were present in this case.
25 And for all those reasons, I have grave concerns about

1 this ID.

2 MS. SWEEN: Pass the witness.

3 THE COURT: All right. We're at a good
4 stopping point. So we are going to be in recess till
5 1 o'clock. So at this time we're on break.

6 (Court in recess; 12:12 - 1:15 p.m.)

7 (Open court, Applicant present.)

8 THE COURT: All right. Back on the record.
9 State is present. Applicant is present
10 with his attorney. So I believe Applicant's attorney
11 wanted to get something on the record.

12 MS. LEPINGWELL: Yes, please, Your Honor.
13 I believe Dr. Mount is now in the audience. We would like
14 to have the Rule invoked as to Mr. -- as to Dr. Mount.
15 We're not under any notice that he's being provided as an
16 expert, as a -- we -- it's our understanding that he's a
17 fact witness in relation to the original hearing.

18 THE COURT: All right. Thank you,
19 Counselor.

20 Dr. Mount, if you can step out. We'll get
21 you whenever we need you.

22 MS. LEPINGWELL: Thank you.

23 THE COURT: All right. State, you may
24 proceed.

25 **CROSS-EXAMINATION**

1 **BY MS. LAMBERT:**

2 Q Hi, Dr. Kovera.

3 A Hello.

4 Q Okay. I'm just kinda go back over some of the
5 stuff that you covered on direct. You testified that
6 memories decay. And that's, like, one of the oldest
7 phenomenons that psychologists have known over time; is
8 that correct?

9 A Correct.

10 Q Do you have an estimate of how long those
11 studies have been going on or what that dates back to?

12 A Late 1800s.

13 Q Okay. So quite some time?

14 A Quite some time, yes.

15 Q And would that be true for this concept that
16 memory is fallible as well, that concept has been around
17 for quite some time?

18 A Well, certainly the idea that -- that we're not
19 always accurate, yes. Some of -- much of which I -- what
20 I testified about today is more recent.

21 Q So -- but in terms of memory decaying that goes
22 back to the 1800s. You talked about scientific studies
23 showing that unduly suggestive lineups can affect the
24 forming of memory. Do you know when those studies
25 originated?

1 A I don't believe I said that unduly suggestive
2 lineup procedures can prevent the forming of memories.

3 Q Affect the forming of memories.

4 A Yeah, they can't affect the forming of memories.
5 They can affect the accuracy of memories but not the
6 formation of them because they haven't happened yet.

7 Q Okay. So they affect the accuracy of the
8 person's recollection?

9 A Yes.

10 Q Okay. And how far back do those studies go?

11 A It depends on the particular studies. The first
12 studies on double-blind were conducted in -- around 19 --
13 in the mid 1990s -- no, sorry. That's not correct. It
14 was first published in the mid 2000s. Studies on
15 instructions were starting to be conducted in the '80 --
16 mid -- around mid '80s. Studies on -- a lot -- most of
17 the stuff on lineup suggestiveness, in terms of its
18 composition, was really going on in the '90s and more
19 recently in the 2000s and even later.

20 Q You cited some organizations that had already
21 adopted those beliefs and promulgated best practices by
22 1999, correct?

23 A The NIJ did, in fact, before the
24 recommendations -- or the first time in 1999.

25 Q Okay. And then I think there was another one

1 that you cited?

2 A The American Psychology of Law Society first
3 came out with some recommendations in 1998.

4 Q Okay. So certainly those studies would have
5 been conducted at least before that time, correct?

6 A Some of -- the -- I --

7 Q Some of them?

8 A Some of them. Actually, the -- the
9 recommendation that the American Psychology of Law Society
10 made in favor of double-blind administration was actually
11 made before there were any studies on double-blind lineup
12 administration. And they based their recommendation on
13 what we know about double-blind procedures in other
14 context and not specifically in the eyewitness context.

15 Q And when was that?

16 A In 1998.

17 Q Okay. And you mentioned studies showing that
18 jurors are highly influenced by the expression of witness
19 confidence. And you said that those studies existed in
20 1999.

21 A Those started to be reported in the late '80s,
22 around '87, '89.

23 Q You -- you relied on some studies showing that
24 witnesses who have hypnotized [sic] recall more
25 information but the information is inaccurate. Do you

1 have those studies with you?

2 A I don't have those studies with me.

3 Q Okay. Do you think you could get a copy of
4 those for us?

5 A Sure.

6 Q Do you know the author?

7 A Some of them were presented by Wagstaff.
8 There's a reviewed paper by Erdelyi, E-r-d-e-l-y-i, I
9 believe.

10 Q Okay. You also mentioned studies showing that
11 witnesses who have undergone hypnosis have more of a
12 willingness to respond or report something and at the same
13 time have a decreased ability to discriminate between
14 suspects. Is that the same studies that you were
15 referring to previously or different studies?

16 A I'm sorry. Could you repeat the question?

17 Q And I wrote it down so -- 'cause I tried to say
18 exactly what you said, so correct me if I misstate. That
19 there were studies showing that witnesses who have
20 undergone hypnosis have more of a willingness to respond
21 or report something and at the same time have a decreased
22 ability to discriminate between suspects.

23 A I think what I said was that they have -- I
24 said -- I think you're combining two things that I said.
25 That -- I talked about the idea of response criterion and

1 discriminability as separate from the studies on hypnosis
2 that show that hypnosis lowers people's response
3 criterions.

4 Q Okay.

5 A And I just -- then I explained how response
6 criterions interacted with discriminability in the
7 eyewitness situation.

8 Q Got it. So are there any studies that support
9 that?

10 A Well, certainly that support the idea that
11 hypnosis lowers response criterion, and then the idea
12 of signal -- it's -- the idea of response criterion and
13 how it interacts with discriminability. It's just a
14 feature of signal detection theory, which is a theory
15 that's used in the eyewitness area.

16 Q And that's been around for how long?

17 A It's been around -- it's been used in the
18 eyewitness area primarily -- really more recently in the
19 last decade or so is when it's really hit that area.

20 Q Okay. So the articles that you're referring to
21 that relate specifically to hypnosis, did you bring those
22 with you?

23 A I just said I don't have them. I have access to
24 them on my computer, but I don't have them with me.

25 Q Okay. Those are the ones that you just talked

1 about. So it is the same articles, Wagstaff, Erdelyi?

2 A Yeah, and there's -- I'm sure there's others.

3 Q And you'll get me a copy of those? Yes?

4 A Yeah.

5 Q And then you refer to the -- is it Kassir or
6 Kassir?

7 A Kassir.

8 Q Okay. And so there were two of those done,
9 right? One was in 1988; is that right?

10 A One was in 1988, and it was updated in 2001.

11 Q Okay. And so -- and correct me if I'm wrong --
12 you said that the '88 study included hypnosis, but then
13 they took that off because it was accepted in the
14 scientific community at that point, in your opinion, to be
15 unreliable?

16 A No, that's not what I said.

17 Q Okay.

18 A I said -- I was talking about the 2001 study.
19 And so there's actually another study done by Daftary,
20 D-a-f-t-a-r-y, and Penrod, that is -- they have the data
21 for but is not yet published, in which they took it out,
22 but I've seen it presented in conferences and things like
23 that.

24 Q Okay. Would you agree that there is a
25 difference among scientists about the use or the

1 reliability of hypnosis?

2 A Not according to eye -- people who specialize in
3 eyewitness identification. I don't think there is
4 disagreement.

5 Q Okay. So not with eyewitness identification
6 experts, there's not a disagreement. But in the
7 scientific community, is there a disagreement?

8 A About -- about what about hypnosis?

9 Q About the reliability or the -- the use of
10 hypnosis as an accepted practice.

11 MS. SWEEN: Objection; vague. The use of
12 hypnosis for relaxing people or the use of hypnosis to
13 enhance memory? There's a critical distinction in this
14 case.

15 MS. LAMBERT: Well, could the expert answer
16 the question?

17 MS. SWEEN: Well, the State is -- said this
18 is only about how hypnosis may have affected the
19 eyewitness identification, so whether or not there's
20 scientists who say there's efficacy in using hypnosis to
21 relax people or to fight chronic pain really isn't
22 relevant to the question before this Court.

23 MS. LAMBERT: I'll just move along. I
24 mean, I believe that they were calling hypnosis junk
25 science. So my understanding was that their position was

1 that it's not accepted at all in the scientific community.

2 MS. SWEEN: There's no argument in the writ
3 application about whether or not hypnosis can help people
4 who are struggling with chronic pain. It's total
5 irrelevant to this issue. The writ is about hypnosis as a
6 reliable technique to enhance recovery of memory and thus
7 enable accurate eyewitness identification. That -- that's
8 our understanding of the claim.

9 MS. LAMBERT: Okay. I'll move along.

10 Q (By Ms. Lambert) Okay. So you talked about the
11 testimony yesterday regarding the police procedures that
12 were used. And you mentioned that you did not hear any
13 testimony about the police officers telling her beforehand
14 you may or you may not see the suspect in this lineup,
15 correct?

16 A Correct.

17 Q Was that question specifically asked of her?

18 A No, not that I -- I didn't hear them talk about
19 any instructions given to her.

20 Q Okay. So they could have been given, we're not
21 sure, because that wasn't actually specifically asked of
22 her?

23 A Nor -- nor did it appear anywhere in the record
24 and recommendation is to document the instructions that
25 are given to witnesses.

1 Q Okay. But Detective Callaway is deceased. Did
2 you know that?

3 A Yes, I heard that yesterday.

4 Q Okay. So he wasn't here to talk about what he
5 may or may not have said to her prior to giving her the
6 lineup, correct?

7 A It's generally recommended that it's put in the
8 police report.

9 Q I'm -- just answer the question that I'm asking
10 you. Did -- was Detective Callaway here yesterday to
11 testify about what he told Jill before he showed her the
12 lineup?

13 A Obviously, not.

14 MS. SWEEN: Objection. Officer Callaway is
15 dead, but also the State made an aggressive attempt to
16 limit the number of witnesses we could put on in this
17 hearing, so to rely on absent witnesses is somehow
18 relevant to attacking the credibility of the science
19 presented here seems like badgering the witness.

20 THE COURT: All right. Overruled.

21 Just answer the question, Doctor.

22 Q (By Ms. Lambert) And you gave an opinion earlier
23 that you thought the photo lineup that contained a picture
24 of Flores was suggestive, correct?

25 A That's correct.

1 Q But she did not pick any one out of that photo
2 lineup, correct?

3 A That's correct.

4 Q You've talked about -- you've opined about what
5 you think Jill encoded at the moment the event happened,
6 at the moment that she saw two men get out of the
7 multi-colored Volkswagen in front of the Blacks' house on
8 the morning of the murder. And you talk about how the
9 beer bottle and her mentioning that could have shifted her
10 focus, her attention to the beer bottle and, therefore,
11 shifted her attention away from other aspects. Is that a
12 fair summary of what...

13 A I don't think I said that I -- I don't think I
14 opined on what she saw. I opined on the types of things
15 that were present and the environment that could have
16 limited what she saw.

17 Q Right. Okay. So -- but you can't tell the
18 Court or any one here that -- how much time she attended
19 to each aspect of that perception, correct?

20 A That's correct.

21 Q So the fact that she saw the beer bottle and she
22 mentioned that doesn't necessarily mean that she spent
23 more time attending to that particular fact than any other
24 fact?

25 A It makes it more likely because she mentioned

1 it, but I can't tell you how much time.

2 Q We -- we weren't there, and we can't get in her
3 mind to know exactly what she encoded, correct?

4 A That's correct.

5 Q And you also testified that in that moment she
6 was not under stress or fear because the murder had not
7 yet occurred or she did not know about it at that moment,
8 correct?

9 A That's correct.

10 Q Okay. And we also don't know in that moment
11 what may or may not have been important to her, correct?

12 A Other than what she reported.

13 Q So I think you testified that that can make a
14 difference in what people attend to or what they encode,
15 correct?

16 A Correct.

17 Q But we don't know, other than what she testified
18 to, what may or may not have been important in that
19 moment?

20 A That's correct.

21 Q You talked about the importance of knowing the
22 ground truth as it relates to hypnosis, correct?

23 A Well, in terms of being able to evaluate whether
24 a procedure affects accuracy, you do need to know what the
25 ground truth is to be able to determine what's accurate.

1 Q And I think you said that that's why it's better
2 to do it in a lab because then you can always control the
3 ground truth?

4 A Well, you know what the ground truth is, yes.

5 Q Right. Unfortunately, crimes don't happen in a
6 lab, right?

7 A I wasn't talking about doing crimes in --
8 that -- that in a lab. I was talking about how you
9 evaluate science.

10 Q Right. But crimes don't happen in a lab
11 setting, correct?

12 A That's correct.

13 Q So we don't get to control the ground truth?

14 A Correct.

15 Q And so sometimes -- I mean, it would be awesome
16 if it was because then it would be great to know that all
17 of our witnesses are giving us accurate information,
18 correct?

19 A You wouldn't need trials.

20 Q But we don't have that unfortunately, right?

21 A Correct.

22 Q So what other evidence can we -- I mean, what
23 other things can we look at -- in addition to what you've
24 testified to, all these factors that you can examine and
25 all of these procedures that we can implement that help

1 improve the reliability, is there anything else we can
2 look at to help us know whether an eyewitness
3 identification is accurate?

4 A I mean, I think that in terms of knowing whether
5 the eyewitness identification is accurate, all you can
6 have is -- if there's strong, corroborating evidence. And
7 that's up to the trier of fact. That's -- you know,
8 it's -- all I can testify to is what is -- what -- because
9 a witness can make an identification for the wrong
10 reasons, right? You can -- you can identify the right
11 person without ever having a memory of them. And so part
12 of what my job here is to talk about is, is this piece of
13 evidence a good piece of evidence based on what we know
14 from science?

15 And so, you know, I could look at a
16 lineup -- I -- there are studies of lineups that are not
17 fair. And I've had this where I've had an attorney come
18 to me and say, hey, I want you to look at this lineup and
19 tell me if it's fair. Gives me a description of the
20 perpetrator. And I say, well, your client's No. 4. And
21 he's like, How do you know that? Well, I can -- the
22 only -- the only person who matches that description is
23 No. 4. Now, it could be that that is in fact the
24 perpetrator, but we have no idea of knowing that based on
25 my identification. And, I mean, I never saw the person.

1 I identified the perpetrator perhaps, but I never saw the
2 person, which makes an ID not based on my independent
3 source of witnessing the crime, if that makes sense.

4 Q I understand what you're getting at. Let me get
5 back to what I'm -- what I'm trying to get at, is that in
6 a court of law one of the things we look at is
7 corroborating evidence, right, to help evaluate the
8 accuracy and reliability of an eyewitness identification?

9 A And I assume that the Court will do that.

10 Q Okay. Well, as an expert, you're forming an
11 opinion that you have grave concerns about her eyewitness
12 identification in this case, correct?

13 A My -- that the conditions under which she
14 witnessed the event left her with the memory that was not
15 capable of surviving the suggestiveness of the procedures,
16 allowing her to make an independent -- an identification
17 of the perpetrator.

18 Q Right. You have grave concerns about whether
19 Flores was actually there?

20 A I have grave concerns about her ability to make
21 an identification based on her experience and the
22 procedures that were used to elicit that identification.
23 And that's -- you're trying to expand my areas of
24 expertise. And I'm trying to keep them to what they are
25 based on what I know.

1 Q Right. Well, so -- I'm just gonna go through a
2 couple of things with you, and you can tell me if it might
3 change your opinion about whether you think that her
4 eyewitness identification would be accurate.

5 A We can. There's nothing -- again, my basis for
6 having my opinion is based on science. And so I don't
7 have the requisite expertise to judge the corroborating
8 evidence, and so I don't think I can form an expert
9 opinion on that.

10 Q Okay. So I think you testified earlier that
11 basically over time we lose about 50 percent of our memory
12 of an event, right?

13 A Well, you lose that much by about three to four
14 days, yeah.

15 Q Okay. So that means it could be 50 percent
16 could remember -- they could have encoded the event,
17 stored it and recall it with clarity? 50 percent of the
18 people? 50 percent of the time? What's the -- what is
19 that --

20 A No, that you've lost 50 percent of the
21 information that you originally encoded.

22 Q Okay.

23 A And so you're not starting at a hundred percent,
24 and everybody's losing information, and it's hovering
25 around 50 percent because some people will lose more and

1 some people will lose less.

2 Q So some people lose more; some people lose less.
3 We don't really have a way of knowing -- if you look at
4 Ms. Sween, look at myself, how our individual memory --
5 she could remember less; I could remember more. Is that
6 fair?

7 A That's correct.

8 Q It's always variable?

9 A Yes.

10 Q Right. So there's no way of knowing exactly
11 what percentage of what Jill saw that day she has encoded
12 and retrieved?

13 A That's why I'm not giving a percentage
14 likelihood that she's accurate or not, yes.

15 Q Right. Okay. So -- because the science is
16 variable, wouldn't the corroborating evidence be
17 important?

18 A The science isn't variable. There are
19 individual differences in how people react to different
20 situations and their different abilities.

21 Q Okay. Well, would the driver of the car --
22 would he be able to tell us whether Jill's ID was
23 accurate?

24 A You know, I would have to depend on whether he's
25 lying or telling the truth or any number of things that I

1 don't have information on, so I couldn't tell you.

2 Q Hypothetically speaking, if the driver of the
3 car was there, admits he was there, and says that Flores
4 was there, and that they were in front of Ms. Barganier's
5 house, walking up to the Blacks' house, just as she
6 described it, would that prove that Jill's ID was
7 accurate?

8 MS. SWEEN: Objection. This calls for
9 radical speculation because this hypothetical is premised
10 on the idea that this mysterious driver is truthful and
11 had no motivation based on his own status, vis-a-vis law
12 enforcement, et cetera, et cetera, to make some truthful
13 representation to law enforcement that's not before this
14 Court, was not before the jury and -- you know, I -- I
15 think counsel is trying to inject into this their own
16 interpretation of corroborating evidence that was never
17 presented to any trier of fact.

18 THE COURT: Response?

19 MS. LAMBERT: I was just asking her opinion
20 whether that hypothetical would show that Jill's ID was
21 accurate.

22 THE COURT: All right. I'm going to
23 overrule your objection.

24 And remember to stand when you give your
25 response.

1 MS. LAMBERT: I'm sorry, Judge.

2 A So I would say that I don't know enough about
3 the driver or their eyesight or what their motivation
4 might be for making an identification. I also know
5 that -- in -- you know, take the case of Kirk Bloodsworth
6 who was exonerated by DNA after being on death row. He
7 was identified by five witnesses who said he was the
8 person who committed the crime, and he wasn't. So, no, I
9 don't think that that would necessarily change my opinion.

10 Q (By Ms. Lambert) Okay. What about if -- okay.
11 So what if we had six other witnesses who put the
12 Defendant and Mr. Childs together and corroborated
13 Mr. Childs' account?

14 MS. SWEEN: Objection; same objection.
15 This is a speculative hypothetical that's divorced from
16 the record and the issues the Court is to determine.

17 THE COURT: I'll overrule that objection.

18 A I don't know that six witnesses is any better
19 than five. The point is that people make mistaken
20 identifications. Unless I had the ability to evaluate the
21 record on what -- what -- on and around their encoding and
22 the witnessing and the identification procedures, I can't
23 make -- I don't have an opinion on that.

24 Q (By Ms. Lambert) Okay. So you have the entire
25 Farmers Branch police file, correct?

1 A I did.

2 Q So you would have had all the information about
3 the police investigation, all the suspects, all the
4 witness statements? All of that, correct?

5 A And as I said, what I reviewed was the issues
6 surrounding Jill Barganier's eyewitness identification,
7 not anything else. Because I'm here as an eyewitness
8 expert, not an expert on evaluating the statements of
9 other people.

10 Q So the corroborating evidence has no relevance
11 to you whatsoever, in your opinion?

12 MS. SWEEN: Objection. The State filed a
13 motion to exclude our ability to challenge the
14 corroborating evidence. And now they're trying to speak
15 in vague terms characterizing what the corroborating
16 evidence is without us being able to impeach that. And
17 it's just not relevant to this witness's expertise on the
18 accuracy of the only eyewitness identification made before
19 the jury.

20 MS. LAMBERT: Okay. This is
21 cross-examination of an expert they proffered in their
22 case, who has reviewed the entire police file, and she is
23 telling us that nothing in that file changes her mind
24 about whether Jill's ID was accurate. I think it
25 certainly goes to her bias and the weight of her opinion

1 that this Court can consider.

2 MS. SWEEN: It is not relevant to the
3 accuracy and the false confidence of Jill Barganier's
4 eyewitness identification whether or not there are a sea
5 of documents that are a bunch of hearsay from law
6 enforcement thrown into a box in crazy order, including a
7 few transcripts of interrogations, that totally contradict
8 themselves. She was certainly not asked to analyze all
9 that evidence and to present it as somehow this
10 mystery-gotcha thing is inappropriate, unless we're able
11 to bring in those witnesses and start testing that -- that
12 box of evidence.

13 THE COURT: I'm going to overrule that
14 objection.

15 A I -- first of all, I have not opined that
16 Jill Barganier was accurate or inaccurate. All I have
17 said is that I identified issues surrounding her
18 identification that give me concern because they are known
19 factors, through science, that -- that increase the
20 likelihood of mistaken identification. I have not opined
21 about her accuracy; and, therefore, I did not take into
22 account any of the corroborating evidence because that was
23 not part of what I was tasked with doing.

24 Q (By Ms. Lambert) Okay. So why were you given
25 the police file?

1 A So that I could locate the information that was
2 relevant to Jill Barganier and the ID.

3 Q The information that was relevant to your
4 opinion?

5 A Yes.

6 Q So the other information you don't view that as
7 relevant?

8 A That is actually what eyewitness experts
9 generally consider -- we -- we consider the issues that
10 are relevant -- we're not the fact finder to determine
11 whether a person is innocent or guilty. We're just here
12 to evaluate the conditions under which an eyewitness made
13 an ID.

14 Q Okay. She asked you also about Jill's trial
15 testimony. And you said that you did not review that
16 because you didn't find that to be relevant to your
17 opinion as well, correct?

18 A I'm sorry. I don't believe I said that, no.

19 Q She said, In order to understand whether
20 hypnosis influenced Jill, don't we have to look at what
21 she testified to in court? And you said, I don't think
22 the trial testimony is relevant.

23 Do you recall saying that?

24 A I don't recall saying that.

25 MS. SWEEN: I think it misrepresent- --

1 objection; misrepresents the testimony. The -- the
2 question -- and it was in response to a challenge by the
3 State to her being able to opine about the scientific
4 problems within court identifications. And -- and I asked
5 a question -- made an argument, in fact, that -- to know
6 what she had ultimately testified to was important to
7 evaluating whether the hypnosis had -- potentially had any
8 influence. And there was a suggestibility issue. And she
9 wasn't allowed to go into detail about the problems with
10 in-court identifications. So that was the issue, was the
11 in-court identification under attack per se, and she said
12 it doesn't matter because it was already a problem with
13 the reliability, as I recall.

14 THE COURT: All right. Ask your next
15 question or rephrase your question.

16 MS. LAMBERT: I'm sorry, Judge?

17 THE COURT: Rephrase your question or ask
18 your next question because she already said she didn't
19 think that's what she was -- that --

20 Q (By Ms. Lambert) That -- you don't think that's
21 what you said. But do you think her trial testimony is
22 relevant?

23 A In terms of what?

24 Q Well, so the opinion that you're offering is
25 based on these things that happened prior to her trial

1 testimony. Her identification, in your opinion, you have
2 grave concerns about its accuracy, right? So do you think
3 what she testified to at trial is relevant to that
4 opinion?

5 A In terms of -- I mean, she testified about a lot
6 at trial. Is there anything specific that --

7 Q Right. Well, for example, I mean, she testified
8 to the description she gave initially versus the
9 description she gave during hypnosis. Do you think that's
10 relevant?

11 A Actually, I -- usually what we think is relevant
12 is the initial -- initial description given because we
13 know that over time people do drift, especially when we're
14 gonna get other types of information post-event. And so
15 we -- statements of confidence, statements of viewing
16 conditions, these are all things that change as a function
17 of moving towards trial. And so, no, actually, I don't
18 pay attention to what the trial statements are. I take
19 what was done from the original police reports.

20 Q So it doesn't -- it wouldn't matter to you
21 whether some of those statements were consistent over time
22 because the only one you really care about is the initial
23 one?

24 A Yeah, if they're -- well, if they're consistent
25 over time, then it won't matter that I'm only paying

1 attention to the initial one, will it?

2 Q I mean, I'm asking the questions. So would you
3 agree that you only care about the first one?

4 A I agree that I look at the first one because
5 it -- according to the research, it's the most accurate,
6 yes.

7 Q Okay. So if you're making an opinion based on
8 literature that you've read about hypnosis affecting her
9 identification, you don't think it's important to look at
10 what she testified to regarding what she said before the
11 hypnosis, during the hypnosis and then what she testified
12 to at trial to see if it changed?

13 A Well, but change is her making an
14 identification.

15 Q Well, you never read the testimony or did you?

16 A I did read the testimony.

17 Q Okay. So did you consider it in making this
18 opinion about hypnosis and it affecting her
19 identification?

20 A My opinion about whether hypnosis affects
21 people's memory is based on the science.

22 Q Has nothing to do with the circumstances of this
23 case whatsoever?

24 A It does, whether hypnosis occurred and the types
25 of techniques that they used are consistent with the types

1 of techniques that -- which are shown in the science to
2 increase -- you know, I can't -- I don't have the ground
3 truth, so I don't know what's in her head. So all I can
4 pay attention to is what the science says and how the
5 science says hypnosis affects people's memory.

6 Q Okay. And basically, in your opinion, hypnosis
7 always negatively affects someone's memory?

8 A I can't say that, no. I said --

9 Q Well, if you don't look at what they testify to
10 after the fact, how can you know if it's changed or if
11 it's affected their memory?

12 A Again -- I think I've been pretty clear that I'm
13 not talking about whether it has changed her memory. I've
14 talked about the science and whether overall in the
15 studies that have been conducted, people who have been
16 hypnotized have poor memories than people who have not
17 been hypnotized because it increases their response
18 criterion without increasing their accuracy. I have not
19 said anything about her specifically; therefore, talking
20 about what happened for her is not relevant to my opinion.
21 My opinion is based on the scientific studies.

22 MS. LAMBERT: Well, then why are we here,
23 Judge, if it's not relevant to Jill?

24 MS. SWEEN: Objection. I mean, that's not
25 a question.

1 THE WITNESS: The hypnosis is --

2 MS. SWEEN: Improper rhetorical question.

3 THE COURT: Doctor, hold on. All right.

4 MS. SWEEN: I think there's some bad faith
5 here. State cut her off in trying to talk about the
6 science related to in-court identifications. That was the
7 discussion. They were saying that's not relevant to the
8 issue. She never said what the substance of her testimony
9 was was not relevant. She went on at length about how --
10 her statement about being more than 100 percent certain
11 was, first of all, an absurd statement because you cannot
12 be more than one hundred percent certain. And, second,
13 that it was likely influenced by the suggestive pretrial
14 proceedings, including foremost hypnosis. So nobody's
15 ever said her testimony wasn't relevant. It's that they
16 wouldn't let her talk about the in-court identification
17 science.

18 THE COURT: All right. So do you have any
19 more questions, Ms. Lambert, or are you done?

20 MS. LAMBERT: No, I have more questions.

21 THE COURT: Okay. Well, then ask your next
22 question.

23 (Brief pause in proceedings.)

24 MS. LAMBERT: Sorry, Judge. Just one
25 moment. Just going through...

1 (Brief pause in proceedings.)

2 MS. LAMBERT: Okay. That's all I have,
3 Judge.

4 THE COURT: All right. Any --

5 **REDIRECT EXAMINATION**

6 **BY MS. SWEEN:**

7 Q Just a few questions, Dr. Kovera. You consider
8 yourself a scientist, first and foremost, correct?

9 A I do.

10 Q Do scientists like to be asked questions that
11 involve categorical statements, like "any," "always,"
12 "never"? Do they like to answer questions like that?

13 A Never.

14 (Laughter.)

15 A There's a good joke about attorneys wanting --
16 always looking for a one-handed psychologist because we
17 always have another hand and -- because things always
18 depend. And so, you know, as a scientist, we don't talk
19 about what individuals do. We're looking at differences
20 in behaviors under different conditions. And so I can't
21 make a statement about what any individual person can do.
22 That's not what scientists do. We talk about group
23 tendencies. And the group tendencies are with hypnosis
24 that it is -- it increases the response criterion. And in
25 doing so, increases the report of inaccurate information,

1 and it increases one's confidence in the reports of that
2 information. And that's what people who are hypnotized do
3 versus those who are not hypnotized in an eyewitness
4 memory tasks.

5 Q (By Ms. Sween) So being asked a question about,
6 does something always lead to blah, blah, blah, you're
7 just not gonna be comfortable, as a scientist, answering
8 such a question?

9 A I would have to say no because I don't --

10 Q You can't even answer that because it's --

11 A Because "always" just makes me cringe. Yeah,
12 because there's always exceptions to everything and
13 there's always somebody who may even just be randomly
14 responding. And I don't -- they actually -- if they've
15 been paying attention would respond.

16 Q So you wouldn't have come into this court and
17 said, under the conditions that were present, when
18 Jill Barganier made this observation predawn January 29th,
19 1998, from that certain distance, at a certain location,
20 with certain divided attention, in those conditions, you
21 always have "X." That's not what you're reporting to do
22 here today?

23 A No.

24 Q What -- what are you trying to do with science?

25 A I'm trying to educate the fact finder, trier of

1 fact, about what science knows about the relationship of
2 particular variables to the accuracy of memory. And then
3 it is the trier of fact's job to take that information and
4 incorporate it with the rest of the evidence before that
5 person to make a decision about how much weight they give
6 either my testimony or the -- or the identification. I'm
7 just trying to help educate people in understanding what
8 can go wrong when making an eyewitness identification.
9 And not based on my supposition, not based on my clinical
10 experience, but based on what scientific studies tell me
11 have replicated over and over again as factors that reduce
12 the likelihood of mistake -- reduce the likelihood of a
13 correct identification.

14 Q You were asked a question about how crimes don't
15 happen in a lab. Do you recall that?

16 A Yes.

17 Q Does that mean that criminal investigations
18 cannot be enhanced in terms of accuracy by looking to
19 controlled studies that take place in labs?

20 A I think we've been making great efforts to try
21 and improve police procedures, to reduce suggestion, with
22 the very purpose of reducing mistaken identifications.
23 And we do that based on laboratory studies. We do that
24 with laboratory studies for a number of reasons,
25 primarily, that ground truth is not known in real cases

1 and we can't know for sure whether the interventions are
2 working or not unless we know what the ground truth is.
3 A corroboration -- corroborating evidence is not always
4 what it's cracked up to be. You know, we thought
5 confessions for a long time were great corroborating
6 evidence until we discovered that a whole bunch of them
7 were false and the types of factors that led to false
8 confessions. So, you know, it'd be great if there was DNA
9 in every case and -- but there's not. And so we're
10 sometimes left with imperfect corroboration.

11 Q You talked about working hard to educate law
12 enforcement, right?

13 A Correct.

14 Q And that process can take time?

15 A Yeah, it appears to be glacial in its speed.

16 Q Have you ever heard of Galileo?

17 A Yes.

18 Q And is there a lesson to be learned about
19 Galileo's scientific insights and how long it took for
20 there to be a true paradigm shift, even in the scientific
21 community, about what reality is?

22 MS. LAMBERT: Objection; relevance.

23 THE COURT: I'll sustain that objection.

24 Let's keep it to this writ. I'll -- you know, ask your
25 next question. I'll sustain that objection.

1 Q (By Ms. Sween) Counsel asked multiple questions
2 about what discreet facts were known -- were there studies
3 about memory decay dating back to the 1890s. Were there
4 studies about this at this point? And I'm really trying
5 to get at, how does science work? Is there -- once
6 there's one guy saying concern about this or we might be
7 wrong about this, does that mean that the current
8 scientific understanding is all on board?

9 A No. We like this thing called replication,
10 which means that we find the same thing over and over
11 again. And I think for the example of the work that I do
12 on double-blind lineup administration, sure, we knew that
13 double-blind procedures were great medicine, but -- and
14 people were recommending similar types of procedures be
15 used with police, but we didn't have studies on that. And
16 so, you know, it takes time. And we've done those
17 studies. And now it's still taking time for the police to
18 catch up with the benefits of doing it that way.

19 Q And, certainly, many of these studies you were
20 referring to about, for instance, memory and eyewitness
21 identification and then adding hypnosis into the equation,
22 these are pieces that are being put together slowly over
23 time; is that correct?

24 A That's correct. And I think you even have
25 the -- you know, in addition, you've got -- especially in

1 psychology, you have somewhat of a schism between the
2 scientists and the practitioners. And you see this in a
3 variety of ways. The major national organization, the
4 American Psychological Association ended up having a huge
5 group split off and form a new national organization
6 called the Association for Psychological Science because
7 those scientists who split off believed that the mother of
8 national organization was protecting only guild interest.
9 So the ability of practitioners to practice in a way that
10 increase their income and not necessarily were they
11 protecting science.

12 And so, you know, in this field, we've got
13 a bit of a schism between the experimentalists who really
14 looked to science and what science has to say and
15 clinicians who sometimes look to science but other times
16 just look to their personal experience and say, you know,
17 I thought it helped the person that I saw; and, therefore,
18 I think it's a great technique. Well, the problem is it's
19 not a very scientifically valid way of looking at whether
20 a technique is effective or not because -- for the very
21 reasons we don't have people take new drugs by having
22 doctors give them the new drug and then say, Oh, I think
23 it helped them; therefore, I'm going to prescribe it to
24 everybody. That's not scientific, and the FDA, I think,
25 would have something to say about that if we did that.

1 Q So is there a difference between science and
2 intuition based on personal experience?

3 A It's a little bit beyond personal experience,
4 too. It's clinical experience, and there's some training
5 involved in it, but it's not scientific training. It's
6 training to listen to a patient. It's training to listen
7 to what they have to say. And usually it's training
8 that's in the service of helping that person feel better.
9 As a scientist, I'm not really concerned about whether
10 these suggestions for conducting lineups make people feel
11 better. I'm concerned about whether they make people more
12 accurate. And so I think there's a split and division
13 there as well.

14 Q And so perhaps it's -- is it fair to say there's
15 a difference between research-based science and clinical
16 science where, as you said, the goal is to heal people
17 or --

18 A Well, I think there's a clinical --

19 Q -- treat people?

20 A There's a small group that actually does
21 clinical science, whether they're doing randomized
22 controlled experiments. I think it's a small portion of
23 it. What we're talking about is clinical practice and the
24 people who are not conducting research on the benefits of
25 techniques, but learning from other people how to do a

1 technique and using their anecdotal experience and their
2 observations in their own practice. Again, there don't
3 seem to be concerns in that vein about the extent to which
4 these practices affect the ground truth of the accuracy
5 that the person develops, the ideas -- that the beliefs
6 that the person develops is to help them feel better.
7 Because that's the goal, is to help them feel better.

8 Q Is it true that doing experiments sometimes then
9 challenges very widespread intuitions about how the mind
10 works?

11 A Those are some of the best experiments.

12 Q Are you familiar with one that's been referred
13 to as that -- the Invisible Gorilla Experiment?

14 A Yes.

15 Q Can you describe that to the Court?

16 MS. LAMBERT: Objection; relevance.

17 THE COURT: Yeah. I'm going to sustain
18 that objection.

19 MS. SWEEN: It's -- it's an experiment
20 directly on memory attention and the ability of subjects
21 to make accurate observations that -- that -- that has
22 sort of blown people's mind about how we encode memory.
23 It's perfectly relevant to her expertise.

24 THE COURT: I'll sustain that objection.
25 Ask your next question.

EXHIBIT 9

Declaration of Charles Arlan Linch

My name is Charles Arlan Linch. My birthdate is May 14, 1953. My address is 906 N 59th Street, Waco, Texas. I am over 21 and competent to make this declaration. I could testify to the following facts under oath in a court of law if called upon to do so. This declaration is based on my personal knowledge. I declare as follows:

1. I was employed by the Southwestern Institute of Forensic Sciences (SWIFS), comprised of the Dallas County Medical Examiner and the Dallas County Crime Lab, from 1980 until 1999, with the exception of one year during which I was a criminalist supervisor at the Harris County Institute of Forensic Sciences. I worked for SWIFS in several capacities over the years, but primarily as a trace evidence analyst. From 1990-1999, I worked on forensic microscopy, hair and fiber examination, firearm discharge distance determination, GSR analysis (atomic absorption), glass examination, paint analysis, fracture match, fabric separation, crime scene/autopsy evidence collection, and crime scene reconstruction/blood stain analysis, energy dispersive X-ray determination of elements in clothing/tissue items, and X-ray crystallography identification of powders. It is noted that accredited labs limit staff to working in only 2 or 3 of these areas. In the 1990s, I was frequently asked to testify about the results of my analyses, including in several high-profile capital murder cases in and around Dallas County.
2. While employed at SWIFS, I also took the initiative to conduct research, including a study of how hair root morphology and growth stage are related to nuclear DNA typing success and a study of decomposition of hair roots. Additionally, I initiated setting up a Mitochondrial DNA sequence analysis lab after seeking and paying for my own training in that area.
3. By 1999, I had concerns about the general efficacy of trace evidence analysis and about the lack of competent leadership at SWIFS. I raised these concerns to my supervisors and asked repeatedly for additional training and the chance to work on the DNA side, which was plainly where the science of hair examination was developing. That year I resigned, and moved on to a position as a senior forensic scientist in the trace evidence section at the Virginia Department of Forensic Science, Richmond, VA. My duties there were limited to hair examination and fabric separations.

4. Shortly before I left SWIFS, I was asked by members of the Dallas County DA's Office to do some testing for a case then already in trial. The defendant was Charles Don Flores. I remember the case all these years later because it was the only time I recall being asked to look for evidence of potato residue inside a firearm.
5. I recently had an opportunity to review my case file as well as my trial testimony from the Flores case. These records show that a .44 Magnum was submitted to SWIFS for testing by an investigator with the Dallas County DA's Office on March 19, 1999, but without any specific exam request. Therefore, it went to, and sat in, the Firearms Section until the DA's office called on March 23, 1999, saying they needed to pick it up for court. Then it became a rush to the Trace Evidence Section for a potato residue exam that same day. My handwritten notes show that I undertook the analysis. I then prepared a typed report announcing these results:

RESULTS:

A sterile surgical blade and powder free latex gloves were used to remove gray/black granular material from the grooves of the item 75 revolver barrel interior. This material was examined by polarized light microscopy and found to consist of starch grains, white and blue cotton fibers, and amorphous apparent carbonaceous particles. No foreign material was recovered from the 76 pistol.


Charles Linch
Trace Evidence Analyst

6. The next day, March 24, 1999, I went to court and testified for the State about my analysis without opportunity for a pretrial meeting with the State or Defense counsel. I have reviewed that testimony. I was not asked beforehand or while on the stand about why or how the DA's Office believed that there might have been potato starch inside the barrel of the .44 Magnum. Nor did anyone explain what role this hypothesis played in the case.
7. Looking back on this experience, I am struck by two things. First, I am struck by the fact that it was presumed that I could be asked to conduct testing, prepare a report, and then opine about the results the very next day. When I moved on to work for the state lab in

Virginia, that lab had a convention that required reports to be issued at least one week prior to trial. This was just one example of the kind of quality control measure in place in Virginia. SWIFS, by contrast had virtually no rules or meaningful supervisor in the forensic lab when I was employed there. Second, I doubt there is anyone on the planet who can say that potato residues (starch particles) can be found in a revolver barrel if a potato is jammed on the barrel and the gun is fired. I would certainly expect potato residues to be found inside the barrel if the gun is not fired after the potato is jammed on and removed, (gun not fired before exam). Starch gelatinizes at about 60 degrees C (140 degrees F) and starch is soluble in boiling water, 100 degrees C (212 degrees F). Gunpowder ignites at temperatures higher than the decomposition temperatures of potato starch. A small explosion occurs in the barrel when the gun is fired. In addition, before the intense temperatures from that explosion travel the gun barrel, the tight-fitting bullet travels the barrel removing some foreign materials from the barrel. Experimentation would be required to see if intact starch particles can be found in a gun barrel (.44 cal) after firing with a potato jammed on the barrel. Inferences made by the State in 1999, which my testimony was used to support, have not been, to my knowledge, proven by science. The ability of potato residues to persist in a gun barrel after it has been fired is not, seemingly, known.

8. Based on my subsequent experience working in labs with more quality control measures, it would not have been expected of me to undertake the analysis that was asked of me on March 23, 1999 without assurances regarding a chain of custody for the firearm, without sufficient notice in advance of trial, and without some supervision and oversight to ensure objectivity and reliability. My report would have been subject to Technical and Administrative Review in an accredited laboratory. A second qualified examiner's review of the results is also customary. If asked today to testify about my results, I would decline to do so. Neither the testing nor the testimony regarding the results would be deemed acceptable in light of today's consensus standards for forensic labs or the standards I developed for myself over the decade that followed my time at SWIFS.

I declare under penalty of perjury that the foregoing is true and correct. Executed on this 13th day of October, 2020, in McLennan County, Texas.

A handwritten signature in blue ink, appearing to read "Charles Arlan Linch", written over a horizontal line.

Charles Arlan Linch
Declarant

EXHIBIT 10

1 Can I see the attorneys up here?

2 (Off-the-record bench conference.)

3 THE COURT: All right. Call your next witness.

4 MS. SWEEN: The Applicant calls Officer Serna.

5 THE COURT: All right. Will somebody go get
6 Officer Serna?

7 MS. LAMBERT: Okay. I'm going, Your Honor.

8 (Witness enters courtroom.)

9 THE COURT: All right. Come up to the witness
10 stand, Officer Serna. Let the record reflect this witness
11 has previously been sworn. All right. Go ahead and proceed,
12 Ms. Sween.

13 MS. SWEEN: Thank you, Your Honor.

14 **ALFREDO ROEN SERNA,**

15 having been previously sworn, testified as follows:

16 **DIRECT EXAMINATION**

17 **BY MS. SWEEN:**

18 Q. Will you please introduce yourself for the record
19 and spell your name?

20 A. My name is Alfredo Roen Serna. It's A-l-f-r-e-d-o.
21 R-o-e-n. S-e-r-n-a.

22 Q. You were a police officer with the Farmers Branch
23 Police Department in 1998, correct?

24 A. That's correct.

25 Q. What was your first job in law enforcement?

1 A. My first job in law enforcement was with the
2 Robstown Police Department, and that was from 1991 to 1996.

3 Q. So you weren't a rookie when you joined the Farmers
4 Branch police force?

5 A. That's correct.

6 Q. But what was your position?

7 A. With Farmers Branch?

8 Q. Yes.

9 A. I was a police patrolman. I started out as a police
10 patrolman.

11 Q. And did you start -- were you still in that position
12 in 1998?

13 A. Yes, I was.

14 Q. Was it the practice of the Farmers Branch Police
15 Department to have patrol officers involved in crime scene
16 investigation?

17 A. At that time, yes. It was sort of new to -- to --
18 crime scene investigation, was sort of new to our department.
19 The chief had developed a team of crime scene investigators,
20 so we -- several of us were sent to have specialized training
21 in that.

22 Q. And by that, are you referring to the Criminal
23 Investigations Division?

24 A. No. It -- they -- it was separate from the Criminal
25 Investigations Division. We were patrol officers who worked

1 different patrol shifts. We were trained at Northwestern
2 University's Traffic Institute in crime scene technology.

3 And the purpose of the unit was to sort of have
4 crime scene technicians available on different shifts in case
5 they were needed to respond. So, in essence, we wore two
6 hats, right.

7 Q. So -- and -- and you said that was a fairly new
8 development for Farmers Branch in 1998?

9 A. Yes. It was about -- it was about that time that we
10 had gotten trained.

11 Q. Because you were involved in the crime scene
12 investigation in the Betty Black murder, correct?

13 A. That's correct. I was one of the crime scene
14 technicians.

15 Q. And, in fact, it seemed like a number of people were
16 who may not have been part of the ordinary Criminal
17 Investigations Division; is that right?

18 A. You know, I'm not sure. I -- I might be able to
19 name two of the other crime scene technicians that worked
20 inside the house.

21 Q. So certainly -- did all patrol officers have access
22 to broadcast about breaking developments, such as a crime of
23 this nature?

24 A. Well, if the patrol officer had a radio and he had
25 the information, but that typically comes from somebody who's

1 developed that information and if it readily needs to be
2 broadcasted.

3 Q. So -- but was it important to the police department
4 that everybody who might potentially be involved in
5 investigating crimes had up-to-date information?

6 A. Yes.

7 Q. And that would include updates about potential
8 suspects?

9 A. That's correct.

10 Q. Now, I believe you testified that you did hear one
11 of these broadcasts the morning of the crime about two white
12 males seen outside the Blacks' home in a multicolored
13 Volkswagen Bug?

14 A. You know, I -- I don't remember. I -- I -- it's
15 been -- it's been a -- it's been so long. I don't even
16 remember if I was working that day as a -- as a patrol
17 officer.

18 Q. So if the testimony was based on a representation by
19 another officer that you would have heard this broadcast, is
20 there a reason to doubt that?

21 A. Well, I think the -- I think that there may be a
22 reason to doubt that just by the nature of how we were called
23 out, and -- and if I could explain.

24 We were all issued department pagers. And so
25 if -- if we were on duty that day, then we would be sort of

1 notified by our supervisor, hey, you need to process this
2 crime scene, and so we would change hats.

3 If we were not on duty that day, then we would
4 receive a page from Dispatch requiring us to call back and
5 then they would give us the assignment saying, hey, you're
6 needed at a crime scene.

7 Q. So you did go to the crime scene on January 29,
8 1998, correct?

9 A. Yes, I did.

10 Q. And are you aware that there was already information
11 from neighbors right away about two potential white males
12 seen exiting a multicolored Volkswagen Bug?

13 A. I -- I don't know that I was aware of that at that
14 time.

15 Q. You don't know if you heard any talk about that at
16 the crime scene?

17 A. No.

18 Q. And you -- do you recall meeting any of the
19 neighbors?

20 A. No. I don't think I did.

21 Q. Now, you -- aside from some initial crime scene
22 investigation, you then were involved in this hypnosis
23 session with a neighbor, Jill Barganier, correct?

24 A. That's correct.

25 Q. Do you recall when the first time was you heard her

1 name?

2 A. I don't. I believe just -- just from reading my
3 transcript, I believe that I had been notified the night
4 before of the hypnosis session, and that might be when I
5 first heard her name. But I certainly don't recognize the
6 name until the actual day when I -- when I actually met
7 her.

8 Q. So the night before that would be February 3, 1998,
9 correct?

10 A. Correct.

11 Q. And who called you and told you you'd be needed to
12 do this hypnosis session?

13 A. I believe it was Investigator Callaway, but I'm not
14 for certain.

15 Q. And before that date, had you ever done a hypnosis
16 session with a potential witness?

17 A. No. That was my first hypnosis session.

18 Q. And did you, thereafter, do any hypnosis sessions
19 with any potential witnesses?

20 A. No. That was my only hypnosis session.

21 Q. This was your one and only one?

22 A. Yes.

23 Q. So let's back up a second and talk some about the
24 training you received.

25 A. Okay.

1 Q. You got a certification in 1996 in investigative and
2 forensic hypnosis; is that correct?

3 A. That's correct.

4 MS. SWEEN: I'd like to approach the witness
5 with what has been marked as Applicant's 34, if I may?

6 Q. (BY MS. SWEEN) This was admitted at trial as a
7 State's exhibit. Do you recognize that --

8 A. I do.

9 Q. -- Officer Serna?

10 MS. SWEEN: We offer Applicant 43.

11 (Applicant's Exhibit No. 43 offered.)

12 MS. LAMBERT: No objection.

13 A. Can I -- can I just clarify? I'm no longer an
14 officer. I don't want to portray that I am.

15 Q. (BY MS. SWEEN) Okay. I'm sorry. How would you
16 prefer I address you today?

17 A. Mr. Serna is fine.

18 Q. Mr. Serna. Okay. It's hard because in this, the --
19 the history here, you're Officer Serna.

20 A. Yes.

21 Q. All right. So --

22 THE COURT: So --

23 Q. (BY MS. SWEEN) -- Mr. -- Mr. --

24 THE COURT: -- Applicant's -- Applicant's
25 Exhibit Number 43 is admitted.

1 (Applicant's Exhibit No. 43 admitted.)

2 MS. SWEEN: Thank you, Your Honor.

3 Q. (BY MS. SWEEN) All right. Mr. Serna, you see here
4 you obtained a certificate from the University of Houston
5 Downtown Criminal Justice Center; is that correct?

6 A. That's correct.

7 Q. And what exactly did you have to do to get this
8 certification?

9 A. I believe it was a 40-hour training at the
10 University of Houston put on by Doc- -- Michael Boulch, I
11 believe his name was, the instructor. And the training
12 consisted of review -- reviewing materials and -- and
13 basically how to conduct hypnosis interviews.

14 Q. Now, can you give me a little education here. Are
15 there two different categories, investigative hypnosis and
16 forensic hypnosis? Are those two different things?

17 A. I don't think so. I think they're the same.

18 Q. So it's just two adjectives for the same thing?

19 A. Correct.

20 Q. Did your employer who, I guess, then was the
21 Robstown Police Department --

22 A. The Robstown Police Department.

23 Q. -- Robstown Police Department, did they pay for you
24 to get this training?

25 A. Yes, they did.

1 Q. So it was seen as a legitimate thing for a police
2 officer to do at that time?

3 A. That's correct.

4 Q. And it looks like you got this train- -- and you got
5 this certificate on February 22, 1996, correct?

6 A. Yes.

7 Q. And so that was just a few months before you left
8 the Robstown Police Department?

9 A. Yes. I started working in Farmers Branch at -- on
10 October 1 of 1996.

11 Q. Now, do you have any idea how Officer Callaway, or
12 whomever it may have been, knew that you had this training?

13 A. I don't. I think they probably had access to my
14 resume, since I was still a fairly new officer and had just
15 gone through the hiring program. So I -- I would imagine
16 that it was probably that way.

17 Q. So you were -- you were relatively new, but -- and
18 you hadn't done a hypnosis session before, but you at least
19 had this certification, correct?

20 A. That's correct. Yes.

21 Q. Do you have to do anything, any kind of continuing
22 education when you get a certification like this?

23 A. I believe -- I believe now they may. You know, my
24 career path just didn't -- it kind of veered off into
25 accident investigation and into crime scenes and so -- and

1 then, later, police supervision. So it just wasn't a field
2 that I stayed current in. So I don't know.

3 Q. So you don't know if you needed to, but because you
4 never did another session, it didn't really matter?

5 A. Correct. Following the state exam, I didn't -- I
6 didn't follow it.

7 Q. Okay. Do you know if this particular course,
8 investigative in forensic hypnosis is still being offered by
9 the U of H Criminal Justice Center?

10 A. I don't.

11 Q. Would it surprise you that it's no longer being
12 offered?

13 A. No.

14 Q. Why not?

15 A. It just wouldn't surprise me.

16 Q. Now, you joined the Farmers Branch Police Department
17 in 1996, right --

18 A. That's correct.

19 Q. -- and did this one hypnosis session?

20 And we're going to talk about the setup to that
21 as much as you can remember. Again, if you don't remember
22 that's fine. So this was on February 4, 1998. So that was
23 six days after the -- the crime that was being investigated,
24 correct?

25 A. Correct.

1 Q. And do you know if any suspects had been identified
2 for members of the Farmers Branch Police Department by
3 February 4th?

4 A. I did not know that.

5 Q. So you -- you weren't keeping up with that degree of
6 the development in the case?

7 A. I don't think I was in the need to know --

8 Q. Okay.

9 A. -- if that makes sense.

10 Q. All right.

11 MS. SWEEN: Now, I'd like to approach the
12 witness with what has been marked as Applicant's 52, if I
13 may?

14 THE COURT: Permission granted.

15 Q. (BY MS. SWEEN) Mr. Serna, see if you can find your
16 name on this log and tell me what it is?

17 A. This looks like a crime scene log which would have
18 been established at the home on Bergen. And I see my name.

19 Q. Did you say you did see your name or did not?

20 A. I do.

21 Q. Okay.

22 MS. SWEEN: We'd like to offer 52.

23 (Applicant's Exhibit No. 52 offered.)

24 MS. LAMBERT: No objection.

25 THE COURT: Applicant's Exhibit 52 is admitted.

1 (Applicant's Exhibit No. 52 admitted.)

2 Q. (BY MS. SWEEN) So I -- I think I was able to find
3 your name here twice, Mr. Serna; is that correct?

4 A. That's correct.

5 Q. And it looks -- can you explain to me -- what does
6 the first column mean?

7 A. Well, the purpose of the crime scene log is to check
8 in who is coming in and out of the crime scene.

9 Q. So is it fair to -- to assume this column is check
10 in and this is check out?

11 A. Yes.

12 Q. So it looks like you were there for several hours
13 the first time; is that correct?

14 A. That's correct.

15 Q. And then, later on, you -- you came right back after
16 a very short break; is that correct?

17 A. Yes, ma'am.

18 Q. And we don't know when you checked out?

19 A. That's correct.

20 Q. And you were -- you were there a considerable amount
21 of time that first day?

22 A. Yes.

23 Q. But you weren't considered one of the people that
24 needed to know developments like potential suspects being
25 developed?

1 A. No. I mean, our primary focus was to document and
2 collect and -- and preserve the physical evidence that was
3 found inside the house.

4 Q. What was your understanding of who were the
5 need-to-know people on the Farmers Branch Police Force at
6 that time for this particular crime?

7 A. I would probably say the division lieutenant, the
8 division sergeant and their investigators.

9 Q. All right. Let's go there. The division
10 lieutenant, who was that?

11 A. I believe Dan Porter was the lieutenant.

12 Q. And the --

13 A. And Sergeant Stapleton, Richard Stapleton, I
14 believe, is his first name, was most likely the sergeant
15 then.

16 Q. Who else were you saying would be part of the need
17 to know?

18 A. It would be part of the Criminal Investigations
19 Division, right, so it would be whoever the investigators
20 were within the division.

21 Q. And so that would have included --

22 A. It would have -- it would have included Investigator
23 Callaway, for example, right, who was -- who I believe was
24 the primary investigator. And I'm trying to think back to
25 who else was in investigations at that time.

1 Q. And were you aware that Jerry Baker was the second
2 detective on that case?

3 A. I don't know if I became aware. I may have. I'm
4 not sure.

5 Q. But if the record reflects he was appointed the
6 first day as the second to Callaway, you have no reason to
7 dispute that?

8 A. No, not at all.

9 Q. All right. What is the -- we've got Crime
10 Investigations Division. Then wasn't there this thing, a
11 Special Investigations Division?

12 A. Yes.

13 Q. What is that?

14 A. Okay. So we had -- it was -- it's the Criminal
15 Investigations Division, which is referred to as CID. And
16 CID investigates all these sort of -- all -- all the crimes
17 that you think of that an investigations division would --
18 would investigate, right, property crimes, crimes against
19 persons and so on.

20 Special Investigations Division consisted of
21 our Narcotics Division and also our Juvenile Division. And
22 so they were sort of -- you know, it's -- it's a different
23 division with different responsibilities.

24 Q. Isn't it true that sometimes people in these
25 different divisions work together on one crime?

1 A. Yes.

2 Q. For instance, this one?

3 A. Correct.

4 Q. That both the CID and the SID had people involved in
5 this case?

6 A. Yes.

7 Q. Do you -- are you -- do you remember any of the
8 names of the SID officers who were involved?

9 A. I mean, I can tell you just because, you know,
10 details that I've read about the case. You know, I believe
11 Maury Stanton was one of the officers that was involved,
12 and by association, from memory, you know, I know that he was
13 in Narcotics with Jeff Ashabranner and probably Jack
14 Taylor.

15 Q. And would these gentlemen have been involved because
16 there was immediate suspicion that there were -- this was --
17 there were serious drugs and poss- -- possibly involved in
18 this crime, something to do with drugs?

19 A. Well, and that could -- that's possible. It -- it
20 could also be that CID needed man -- more man power to help
21 with the investigation. I mean, I think there might be a few
22 reasons.

23 Q. Wasn't the victim's son known to be a drug dealer
24 who has been in prison?

25 A. Yes.

1 Q. All right. Now, the -- the hypnosis session, do you
2 recall whose idea it was to have the session at the police
3 off- -- the police station itself?

4 A. I don't.

5 Q. We -- I think there's testimony about this in the
6 record, Volume 36, page 53. So we'll see if this helps
7 refresh your recollection. I'm sorry we're technologically
8 impaired here. There we go. Okay.

9 MS. SWEEN: Can you scroll down? All right.

10 Q. (BY MS. SWEEN) So you start out -- but this is on
11 Cross-examination in the Zani hearing, just to give you some
12 context.

13 A. Okay.

14 Q. So this is the defense lawyer asking you questions.

15 And did Callaway tell you where you were to do
16 this hypnosis session?

17 A. I believe he did. If I answered yes --

18 Q. Yeah.

19 A. -- that's where my memory would --

20 Q. And where did he tell you to do it?

21 That we were going to do it there at the police
22 station.

23 A. That's correct.

24 Q. So that helps refresh your -- your memory there?

25 A. Yes.

1 Q. So it was Officer Callaway who made that decision,
2 and you thought it was okay?

3 A. Well, did I say I -- that believed it was Callaway
4 or --

5 Q. You answered yes to: And did Callaway tell you
6 where you were to do this hypnosis session? Yes.

7 A. I thought I -- I'm sorry. Just for clarif- --

8 Q. I'm sorry. The line number 8 through 11.

9 A. No. But I -- I thought I had answered earlier that
10 I believed it was Callaway. Maybe that was asked a few
11 questions before.

12 Q. All right. Now, I'm sorry. I'm on page 52, line
13 21: So when -- whoever called you -- was it Callaway that
14 called you and asked you to hypnotize Ms. Barganier?

15 I believe so, which is the same thing you've
16 told us today.

17 A. Okay.

18 Q. And did you explain to Officer Callaway that you
19 really shouldn't be doing that since you're not independent
20 of the police force out there, you're not independent of the
21 investigators? I did not inform him of that, no.

22 All right. So -- so at least at that time, it
23 seemed like Callaway was the one who said this is where I
24 want it done, and you didn't tell him there was a problem
25 with that, correct?

1 A. Correct.

2 Q. That -- either you conducting the session because
3 you had been involved somewhat in the crime scene, and you
4 didn't say there was a problem with it taking place at the
5 police department, right?

6 A. That's correct.

7 Q. And in your training at U of H Criminal Justice
8 Center, did -- were there any instructions saying you should
9 not conduct these things at the police station?

10 A. I don't -- I don't know if there were instructions.
11 I know that, you know, the Zani case was one that, you know,
12 we had reviewed pretty heavily during the course. But as far
13 as instructions, I don't -- I don't think so.

14 Q. Okay. So you don't recall, from this training, them
15 saying never, ever have this at a police station?

16 A. Well, I don't know that that was the -- the -- sort
17 of the reason for not having it at the police station.

18 Q. And do you remember testifying that you thought
19 Ms. Barganier seemed sufficiently relaxed at the police
20 station?

21 A. I thought -- from my memory, I thought that she
22 seemed pretty nervous and anxious, but...

23 Q. Do you recall that she had already been to the
24 police department several times before the hypnosis
25 session?

1 A. I -- I don't know that I know that -- that I knew
2 that.

3 Q. No one shared that with you?

4 A. No.

5 Q. Do you remember what time you commenced the hypnosis
6 session there at the police station?

7 A. I believe it was in the morning.

8 Q. Was there any kind of interview conducted with
9 Ms. Barganier, any testing, any paperwork she had to fill out
10 before you commenced the session?

11 A. Not with me. I believe I just did the prehypnotic
12 interview, but that was on the video.

13 Q. So the only substance related to hypnosis is what we
14 see on the videotape?

15 A. That's correct.

16 Q. And you just recently had a chance to refresh your
17 recollection of what went on in that session, correct?

18 A. Correct.

19 Q. I want to try to figure out -- the tape starts at a
20 moment in time, as all tapes do, correct?

21 A. Yes.

22 Q. So can you help us figure out who met Ms. Barganier
23 at the station and got her to this room?

24 A. I -- I do not know. I don't know. I don't know who
25 escorted her to the room.

1 Q. Were you there in the room waiting for her?

2 A. More than likely, I would have been in the room
3 waiting for her.

4 Q. And were you there in the room when Jerry Baker was
5 setting up the video equipment?

6 A. I -- I don't remember if that was already set up
7 when I got there or if he was doing it while I was there.

8 Q. But you remember that he operated the video
9 recorder?

10 A. Actually, I didn't remember that the last time I
11 testified.

12 Q. Okay. So you saw that in the video, correct?

13 A. Correct.

14 Q. That he makes a brief appearance on screen?

15 A. Yes.

16 Q. And you recognize Mr. Baker --

17 A. Yes.

18 Q. -- off screen?

19 You were colleagues?

20 A. Yes.

21 Q. And I forgot to ask you. How long were you with the
22 the Farmers Branch Police Department?

23 A. I retired. Well, I was with the Farmers Police
24 Department for 20 years. I retired in July of 2016.

25 Q. All right. Now, I believe there was some testimony

1 about who picked the location for the hypnosis session. So I
2 want to bring this up to see if this helps refresh your
3 recollection. This is Volume 36, page 46.

4 You were -- you -- there was reference to a
5 lieutenant in the Narcotics Division. And just going by your
6 memory at the time, do you know who the lieutenant in the --
7 and I guess that's -- the SID --

8 A. Yes.

9 Q. -- is the Narcotics Division?

10 A. Yes. I -- I don't remember who the lieutenant was
11 back then.

12 Q. Would it have been Stanton?

13 A. No. He was never a lieutenant.

14 Q. What about Ashabranner?

15 A. He was a lieutenant at some point in his career. I
16 don't know if he was in the Patrol Division or as a narcotics
17 lieutenant.

18 Q. And what about Koehlar?

19 A. Koehlar was never a lieutenant.

20 Q. Never a lieutenant. So it's some -- whoever was
21 their boss, it would have been a lieutenant of the Narcotics
22 Division, correct?

23 A. Correct.

24 Q. Okay. So if we look here --

25 MS. SWEEN: Where is that? I think we need to

1 scroll down. Is this Volume 36, page 46?

2 MS. LEPINGWELL: Yeah.

3 MS. SWEEN: I'm looking for a reference. Oh.
4 I'm sorry.

5 Q. (BY MS. SWEEN) We used an office -- this is from
6 the hypnosis session -- that belonged to the lieutenant of
7 our Narcotics Division. The office is -- it's fairly away
8 from everything and probably the quietest spot we could find
9 in the department.

10 So the lieutenant of the Narcotics Division
11 permitted you guys to have this hypnosis session there,
12 correct?

13 A. Correct.

14 Q. But you have no memory of talking to the lieutenant
15 of the Narcotics Division about it?

16 A. I don't.

17 Q. Or who exactly that was?

18 A. Correct.

19 Q. Now, do you know that the special investigators unit
20 did play an ongoing role in this investigation, however?

21 A. Yes.

22 Q. Did you know that Ms. Barganier had already ID'd
23 Rick Childs twice as the driver of the suspect vehicle before
24 the hypnosis session?

25 A. I did not know that, no.

1 Q. Okay. And you had no information about the suspect
2 at all?

3 A. Correct.

4 Q. What were you supposed to -- if they weren't keeping
5 you up to date on potential suspects, how were you supposed
6 to provide breaking information if you didn't know who were
7 the need-to-know people on the force?

8 A. Well, I believe all that I was told was that they --
9 they had a witness who thought that she had seen the
10 suspects, but she, I guess, had requested that she be
11 hypnotized for her interview because she may have been
12 nervous or scared. That's kind of what I remember.

13 Q. What I'm trying to understand is if there's a --
14 capital murders don't happen very often in Farmers Branch,
15 correct?

16 A. That's correct.

17 Q. You were there 20 years?

18 A. Correct.

19 Q. How many capital murder investigations were you
20 involved in?

21 A. Well, I -- I mean, we -- we average probably two
22 murders a year, sometimes three.

23 Q. So I would assume that it would be important to keep
24 the whole department up to speed on breaking developments in
25 the case so that if anybody gets any additional information

1 it can get to the people who need to know as soon as
2 possible. That wasn't the practice at the time?

3 A. I don't -- I think that in some cases that wasn't
4 the practice at the time, no.

5 Q. So at least you weren't being kept in the loop about
6 these breaking developments?

7 A. Correct.

8 Q. Now, I want to talk to you about the technique that
9 you used in this session, the hypnosis session.

10 A. Okay.

11 Q. Now, I'm talking from a law enforcement perspective,
12 which is what you had and the training you had. That's where
13 these questions are coming from.

14 What was your goal in hypnotizing Ms. -- in
15 attempting to hypnotize Ms. Barganier?

16 A. The primary goal was to get her to calm down and to
17 relax enough to where she would be able to feel comfortable
18 talking about what it is she thought she saw.

19 Q. So was it to relax to enable her then to remember
20 more fully what she had seen?

21 A. Sure. Yes.

22 Q. Now, the trial judge said that the goal, as reported
23 to him, was to release what was in her unconscious mind.

24 Would you agree, from a law enforcement
25 perspective, that that's what you were trying to do with this

1 hypnosis?

2 A. Well, I think that that's part of really inter- --
3 any interview, whether it's under hypnosis or not. You want
4 to get what that person knows, and that information comes
5 from their mind. Some of it is readily available, and some
6 of it is in their subconscious mind. So I think, in essence,
7 you're eliciting the same information.

8 Q. So the assumption was that there was stuff locked in
9 her mind that, if she relaxed enough, it might come out,
10 correct?

11 A. Correct.

12 Q. And you used what you referred to as the movie
13 theater technique in this hypnosis session, correct?

14 A. That's correct.

15 Q. And I believe you said that you made this decision.
16 You thought it was the appropriate technique?

17 A. Correct.

18 Q. Can you describe -- what is this technique?

19 A. Well, I mean, it's a technique where you place a
20 witness -- you place a witness in a movie-theater-type
21 environment. And you hand the witness a remote control, and
22 you give them the opportunity to play the movie, right.

23 Q. And I'm sorry. Is it literally a remote control, or
24 is it an imaginary remote control?

25 A. It's an imaginary remote control. And so, you know,

1 you press play and -- with the expectation of the witness
2 leading you through the movie, correct.

3 So you want to ask open-ended questions to
4 which -- if they -- if they're hung up in certain areas to
5 sort of get them -- get them from one scene to the next.

6 There are times when you have to fast forward
7 the movie. There's times when you have to pause the movie,
8 if you're trying to get more specific details about what the
9 witness is telling you.

10 Q. And is the premise that the movie itself is
11 something stored in the mind?

12 A. I think the -- the premise is -- is -- is their --
13 it's their memory. So if it's something that you call stored
14 in their mind, then, yes.

15 It's -- but it's -- it's simply like any other
16 witness that you ask, tell me what you saw, there's a thought
17 process that goes along with that. The only difference here
18 is that when placing this witness in a more relaxed state, in
19 a -- in a hypnotic state, so that she can -- so that can
20 assist her through the interview.

21 Q. But the only value would be is if there really were
22 something stored in her mind that was a true memory,
23 correct?

24 A. Correct.

25 Q. And so the idea that you could access this memory

1 with the -- the video metaphor and imagine, fast forward and
2 rewind, et cetera, correct?

3 A. Correct. That's part of it.

4 Q. All right. And who taught you that approach?

5 A. It would have been taught at the -- at the training
6 at the University of Houston.

7 Q. And did you say your instructor was Michael
8 Boulch?

9 A. That's correct.

10 Q. Did I pronounce that correctly?

11 A. Yes, I believe so.

12 Q. Is is that B-o-u-l-c-h?

13 A. Yes.

14 Q. Now, he trained many, many police officers in Texas,
15 correct?

16 A. I believe so.

17 Q. And have you -- you've heard of the Zani case
18 because I think you just mentioned it?

19 A. Yes.

20 Q. And the man who trained -- who was the hypnotist in
21 that case, was he trained by the same man, Boulch?

22 A. I thought he was the same man. I may have been
23 mistaken.

24 THE COURT: All right. We're going to actually
25 take a -- we've been going for a little over an hour and a

1 half. We're going to take a quick break. So we'll be back
2 at 4:20. All right. We're in recess.

3 (Court in recess; 4:05 - 4:30 p.m.)

4 (Open court, defendant present.)

5 THE COURT: All right. Back on the record.

6 Mr. Serna is on the stand. The attorneys are present.

7 Applicant's attorneys are present, along with the Defendant
8 who is in the courtroom. Let's proceed.

9 Ms. Sween.

10 MS. SWEEN: Thank you, Your Honor.

11 Q. (BY MS. SWEEN) Mr. Serna, we were talking about
12 Michael Boulch, and I think I -- I asked an inartful
13 question. He was the same individual who's mentioned in the
14 Zani case, correct?

15 A. I believe so. It's been a long time, since I've
16 read Zani, but...

17 Q. And -- but he was certainly someone who was
18 teaching, as you said, many law enforcement officers the --
19 the same techniques you were taught?

20 A. That's correct.

21 Q. And this became quite an industry after the Supreme
22 Court basically seen today that there can't be a per se ban
23 on witnesses testifying who have been hypnotized, correct?

24 A. I don't know about the industry.

25 Q. Were you familiar with a Supreme Court case called

1 Rock v. Arkansas?

2 A. What year was that.

3 Q. I believe it was 1984.

4 A. I -- I don't recall.

5 Q. Okay. But whether or not that's a case mentioned in
6 the Zani case, we'd have to look to that case to figure that
7 out, right?

8 A. Correct.

9 Q. You're not a legal scholar. But you know that
10 Mr. Boulch taught that course in 1996 when you took it?

11 A. That's correct.

12 Q. Did he disclose at that time when he was presenting
13 that course that a Texas capital murder case had been
14 reversed because of his mishandling of a hypnosis
15 recording?

16 A. I don't believe so.

17 Q. Were you aware of that fact?

18 A. I -- I don't. Maybe -- maybe if you can mention the
19 case, maybe I've heard it. I don't --

20 Q. Burnett v. State?

21 A. I don't remember that.

22 Q. He certainly didn't share that information with his
23 students when you took the course?

24 A. Well, if he did, I don't remember. It's been a long
25 time.

1 Q. A long time. Okay. Now, you've testified in the
2 Zani hearing that the movie theater that Boulch taught you
3 reduces the risk of confabulation, correct?

4 A. Correct.

5 Q. Confabulation is a term from psychology, right?

6 A. Well, at this point, I don't -- I was more -- I new
7 more about hypnosis and the terms, obviously, 19 years ago.
8 You might have to refresh my memory on some of them.

9 Q. Well, confabulation isn't a term you invented,
10 correct?

11 A. Correct.

12 Q. And it's -- and so you're not aware if it's unique
13 to the hyp- -- the study of hypnosis?

14 A. Correct.

15 Q. All right. Does it sound correct that it just means
16 the -- the production of fabricated, distorted or
17 misinterpreted memories?

18 A. It sounds right.

19 Q. And it's without the conscious intent to deceive.
20 It's not lying, right?

21 A. Correct.

22 Q. Confabulation is when you have these false memories
23 and you don't know their false memories, correct?

24 A. Correct.

25 Q. Now, before you used the movie theater technique on

1 Ms. Barganier, you believed that technique was appropriate in
2 light of contemporary scientific understanding, right?

3 A. I did.

4 Q. And you told the Court during the Zani hearing that
5 it was the best technique for the circumstances?

6 A. Yes.

7 Q. The most reliable method you thought you could use
8 with Ms. Barganier?

9 A. For that purpose, yes.

10 Q. And you were trained, though, that confabulation is
11 a risk associated with hypnosis, right?

12 A. Correct.

13 Q. And it had to do with the relaxed state you put
14 someone into, correct?

15 A. That's correct.

16 Q. Now, based on your understanding in 1998 -- I know
17 it's hard, but if put your mind back there -- how was this
18 movie theater technique supposed to reduce the risk of
19 confabulation?

20 A. Well, in -- in my mind, it was -- I knew that
21 Ms. Barganier was going to be in control of the interview, in
22 essence, that she would be telling me a story about what it
23 is that she saw from beginning to end. In my mind, no
24 different than really any other interview.

25 Q. Now, is confabulation, the -- the -- the creation,

1 unintentionally, of distorted or false memories something
2 that can only happen during hypnosis itself?

3 A. I don't know.

4 Q. So we'd need to ask an -- an expert?

5 A. Yes.

6 Q. So you weren't trained on whether confabulation is
7 something that can occur after the fact?

8 A. Correct.

9 Q. You testified in the Zani hearing that the movie
10 theater technique reduces the risk of hypersuggestability.
11 Do you recall that?

12 A. Yes.

13 Q. Were you trained that that is the only way a law
14 enforcement hypnotist could be suggestive, is asking leading
15 questions?

16 A. I think that that's by asking -- by not asking
17 leading questions, I think is a way to not fall into that
18 trap.

19 Q. Okay. For instance, did the driver have blue eyes?
20 That would be a leading question?

21 A. Yes.

22 Q. But were you trained that that's the only way you
23 can be suggestive is ask that kind of question?

24 A. I -- I don't recall.

25 Q. Is it suggestive to ask about, for instance, a

1 haircut when the witness has only talked about long hair?

2 A. No. I think there might be different types of long
3 hair.

4 Q. But if someone has said -- talked about long hair
5 and then then hypnotist asked about whether or not it's
6 neatly trimmed, isn't that suggestive?

7 A. It could be.

8 Q. And isn't the -- the -- the movie theater technique,
9 doesn't it require the premise that there is -- the mind has
10 like a video recording of our memories, but we just aren't
11 able to get to it?

12 A. Correct. It's -- it's -- if you -- you can think
13 about it as -- or think of it like a sort of playing back of
14 a movie.

15 Q. So we have a videotape -- at least we used to back
16 in the day --

17 A. Yes.

18 Q. -- and you could use that imaginary remote and
19 rewind and fast forward and play, correct?

20 A. Correct.

21 Q. Because you're thinking of the mind as storing
22 memories on videotape?

23 A. That's correct. Yes.

24 Q. Now, in the Zani hearing, you testified that you did
25 not notice any confabulation during the hypnosis session?

1 A. That's correct.

2 Q. Do you remember that testimony?

3 A. Yes.

4 Q. Can you notice whether someone is confabulating? Is
5 that something you see?

6 A. I don't -- I don't know. Maybe -- I -- I don't
7 know.

8 Q. So if somebody is having a false memory -- they
9 believe it's true, but it's false -- is there really a way to
10 see inside their brain and assess --

11 A. No.

12 Q. Okay. Now, before that Zani hearing that was held
13 during Charles Flores's capital murder trial, were you
14 prepared for that hearing at all?

15 A. I was.

16 Q. Who did you work with in advance of that hearing?

17 A. The prosecutors that were assigned to that case.

18 Q. Was that Jason January?

19 A. I remember that name, yes.

20 Q. And Greg Davis?

21 A. Yes.

22 Q. What did they discuss with you in advance of the
23 hearing?

24 A. Probably, like any pretrial hearing that we had back
25 then, you know, know your case, you know. In my case, it

1 would have been, you know, to review the -- the ten factors,
2 for example, or the four dangers, for example, to be able to
3 speak about, you know, what it is that we did.

4 Q. So let me -- so when you said the ten factors, those
5 are the Zani factors --

6 A. Correct.

7 Q. -- that are supposed to be safeguards against the
8 four dangers of hypnosis, correct?

9 A. Correct. And I -- and I think, also -- I'm sorry.

10 Q. I'm sorry?

11 A. I think, also, in my case, was I didn't know if I
12 was going to be asked questions related to the crime scene.
13 And so, you know, it was sort of a reconnecting with the
14 case.

15 Q. Did you watch the videotape in preparation for your
16 testimony?

17 A. I think I did.

18 Q. Did you meet with anybody else from the DA's office
19 at the time that you remember?

20 A. I don't think I did.

21 Q. Did you meet with any of the current members of the
22 DA's office in advance of your testimony?

23 A. I did.

24 Q. Who did you meet with?

25 A. I met Ms. Jaclyn -- I'm sorry, Jaclyn. Your last

1 name?

2 Q. Ms. Lambert?

3 A. Yes.

4 Q. And where did you meet?

5 A. Here. Here at the DA's office.

6 Q. And when was that?

7 A. It was last week. I don't recall the exact day.

8 Q. And you talked to me on the phone, correct?

9 A. Correct.

10 Q. Was -- was the meeting with the DA's office before
11 or after we had our phone call?

12 A. It was a few days after we had our phone call.

13 Q. Did they reach out to you, or did you call them?

14 A. I called them.

15 Q. Do you know who George Mount is?

16 A. I do.

17 Q. And he was the State's expert at the Zani hearing?

18 A. Correct.

19 Q. And he was past president of the Texas Association
20 of Investigative Hypnosis, right?

21 A. I think I read that.

22 Q. Now, his involvement with law enforcement was
23 extensive also, correct?

24 A. I believe so, yes.

25 Q. Did you ever take a course with him?

1 A. No. I've never met him.

2 Q. But he was considered, in 1998, an expert in
3 investigative and forensic hypnosis, correct?

4 A. Correct.

5 Q. Did you confer with him at all before you testified
6 in the Zani hearing?

7 A. I don't believe I did.

8 Q. Did -- so -- Dr. Mount, you don't recall him asking
9 you any questions about your training, about your particular
10 method in -- in this hypnosis session?

11 A. I -- I -- I don't remember meeting him.

12 Q. You don't remember meeting him at all?

13 A. (No verbal response.)

14 Q. Okay. So he -- but he vouched for the technique you
15 used in that hypnosis session?

16 A. Yes. I read that.

17 Q. And that's this movie theater technique?

18 A. Correct.

19 Q. Did you give Dr. Mount the videotape of the hypnosis
20 session?

21 A. No. I've never had it.

22 Q. You never had it. But -- so then you did view it
23 before you testified at the Zani hearing?

24 A. Yes. I probably did.

25 Q. Do you recall that viewing at the Farmers Branch

1 Police Department, or was it at the DA's office?

2 A. I probably would have viewed it at the Farmers
3 Branch Police Department.

4 Q. And do you know that Dr. Mount testified that using
5 the movie theater technique that you used was proper?

6 A. I believe so.

7 Q. All right. Now, you just, during a break, watched
8 the videotape of the hypnosis session for the first time in
9 many years, correct?

10 A. That's correct.

11 Q. I'm going to ask you some questions about what's on
12 that tape. And, if necessary, we'll -- we'll replay some of
13 those clips, but I'm -- I'm trying to just rely now on your
14 very short-term memory.

15 A. Okay.

16 Q. In that hypnosis session, you spent a number of
17 times asking Ms. Barganier to imagine things; is that
18 correct?

19 A. Correct.

20 Q. You asked her to imagine glue on her fingers?

21 A. Correct.

22 Q. Imagine a special building?

23 A. Correct.

24 Q. Imagine that it was her special place?

25 A. That's correct.

1 Q. And a special leather chair?

2 A. That's correct.

3 Q. Imagine an elevator ride?

4 A. That's correct.

5 Q. Imagine she had a yellow button to push on an
6 imaginary remote control?

7 A. Yes.

8 Q. And imagine watching a documentary movie about
9 the -- the day of the crime?

10 A. That's correct.

11 Q. And imagine magical letters floating over the two
12 men's head, A and B?

13 A. That's correct.

14 Q. And imagine a time travel door she could walk
15 through?

16 A. Yes. That's correct.

17 Q. Now, would you agree that when people use their
18 imagination, they can visualize things that never happened?

19 A. I think so, sometimes.

20 Q. They can imagine dragons?

21 A. Sure.

22 Q. They can imagine unicorns?

23 A. Sure. Yes.

24 Q. I mean, we can picture them in our mind even though
25 they never existed?

1 A. That's correct.

2 Q. And they can imagine even having a private movie
3 theater that belongs to them that never existed, right?

4 A. That's correct.

5 Q. Now, do you remember hearing on this videotape of
6 the hypnosis session how she went back several times to the
7 the idea of the beer bottle in someone's hand?

8 A. That's correct. Yes.

9 Q. And I don't know if -- if you caught this, but she
10 initially referred to the passenger as drinking out of a beer
11 bottle and then corrected herself later and described it as
12 the driver. Do you remember that?

13 A. I believe she said Person A or Person B, maybe.
14 I --

15 Q. Right.

16 A. But, yes, I -- I -- that did happen, yes.

17 Q. And you didn't know what she had told anybody before
18 the hypnosis session about somebody drinking out of a beer
19 bottle?

20 A. That's correct.

21 Q. You didn't read any investigative notes?

22 A. No.

23 Q. But you did notice she -- she was -- she was
24 remembering distinctly something with a beer bottle?

25 A. That's correct. Yes.

1 Q. Does that repeated description of the drinking out
2 of a beer bottle tell you anything about where her attention
3 was focused?

4 A. I -- I think that that -- it was a focus there
5 enough to where she wanted to keep coming back to it. But,
6 again, it wasn't something that -- if it wasn't coming from
7 her, I wasn't going to lead her down, sort of, that path.

8 Q. And wasn't it true that she kept coming back there,
9 so, finally, at one point, you said we're going to fast
10 forward past this --

11 A. Yes.

12 Q. -- because she just kept going back to that beer
13 bottle?

14 A. Correct.

15 Q. You heard her describe the hair of these two men, A
16 and B?

17 A. Yes.

18 Q. She said the passenger hair looked a lot like his
19 friend's. Do you remember that?

20 A. I do.

21 Q. That is like the driver's long hair?

22 A. Correct.

23 Q. And she described the driver's hair as dirty, long
24 and wavy, right?

25 A. Yes.

1 Q. But then you asked her about the passenger's hair
2 and whether it was neatly cut or trimmed?

3 A. I believe so, yes.

4 Q. But she had just said it was like the driver's,
5 dirty, long and wavy, correct?

6 A. That's correct.

7 Q. Were you aware that Charles Flores had a very
8 closely cropped haircut at that time?

9 A. No, I wasn't.

10 Q. Nobody had mentioned that to you?

11 A. I had never seen a photograph of him before or --

12 MS. LAMBERT: Objection. That's not a fact in
13 evidence, Your Honor. We don't actually know what the
14 defendant looked like at the time of the offense. There's
15 nothing in the record that would indicate that.

16 THE COURT: Response?

17 MS. SWEEN: In the -- in the record, there
18 actually is the most recent mugshot in Callaway's handwriting
19 and it is the very same photo they put into the photo array
20 that was shown to Ms. Barganier at some point. If it wasn't
21 what he looked like at the time, it's odd that that's what
22 they were putting before the witness.

23 MS. LAMBERT: That was a -- that was a mugshot
24 they obtained from Irving PD, and it was the only one they
25 could find. And there is no indication what date that photo

1 was taken.

2 MS. SWEEN: It was the month right before, and
3 that is in the record.

4 MS. LAMBERT: The date is not in the record.

5 MS. SWEEN: And, also, there's another photo
6 array that was the identification made by the Arlington PD
7 that has even shorter hair that was supposedly on January --
8 February 2nd, I believe.

9 MS. LAMBERT: The date --

10 THE COURT: I'll sustain that objection. Move
11 on, Counsel.

12 Q. (BY MS. SWEEN) All right. Sorry, Mr. Serna. The
13 hyp- -- in the hypnosis session that you just licensed to,
14 Ms. Barganier doesn't say anything about the passenger being
15 Hispanic, does she?

16 A. No, she doesn't.

17 Q. Or noticeably larger than the driver, correct?

18 A. Correct.

19 Q. And you never saw the photo array that included
20 Mr. Flores's face in it --

21 A. No.

22 Q. -- that --

23 A. I've never seen it.

24 Q. -- we were just talking about?

25 Never saw it?

1 A. To this day.

2 Q. Now, before you brought her out of the hypnosis
3 session, you told her several times that she may find she
4 will be able to recall other things as time goes on,
5 correct?

6 A. That's correct.

7 Q. You made a statement that gave her confidence in her
8 ability to remember things later on, correct?

9 A. Yes.

10 Q. And you suggested that she might be able to remember
11 more about the very event that she had witnessed for a few
12 seconds out of the window?

13 A. That's correct.

14 Q. Because that was the way you were trained,
15 correct?

16 A. Yes.

17 Q. That the memory might be stored in there there and,
18 over time, it might come back to her, right?

19 A. Yes. Not only trained, but by experience.

20 Q. Do you have any experience with empirical studies
21 about the ability to recall faces seen in passing months
22 later?

23 A. No.

24 Q. Did you have any information about Jill Barganier
25 extraneous to the hypnosis session?

1 A. No.

2 Q. Any information about how good her memory was?

3 A. No.

4 Q. About whether she had vision problems?

5 A. No.

6 Q. About any mental health issues?

7 A. No.

8 Q. Now, you did notice that she seemed very anxious,
9 correct?

10 A. That's correct.

11 Q. She was very fearful?

12 A. Yes.

13 Q. Okay. And she was eager to help?

14 A. Yes.

15 Q. Do you know if she had any kind of clinical
16 depression or anxiety issues?

17 A. I do not know that.

18 Q. Are those the kinds of things that would be relevant
19 to determine whether someone is suitable as a subject for
20 hypnosis?

21 A. It could be. I don't know that I am qualified to
22 make that decision.

23 Q. That wasn't something they trained you in at that
24 course you took?

25 A. Correct.

1 Q. So from what you were taught back in 1996 when you
2 took your course, was there anything that was a profile for
3 what makes a person suitable for hypnosis that you can
4 recall?

5 A. I -- I believe there was. And I believe that that's
6 sort of the purpose of the prehypnotic interview is to -- is
7 you sort of get a gauge on the person that you're about to go
8 through the session with. You know, are they lucid, you
9 know, can they communicate or verbalize, those sorts of
10 things.

11 Q. So the fact she could communicate in English
12 sentences?

13 A. Correct.

14 Q. All right. And she wasn't, you know, palpably
15 psychotic or something?

16 A. Correct.

17 Q. But it wasn't any real clinical interview of her
18 mental capacity?

19 A. No, it was not.

20 Q. Okay. Now, she said she -- at the very end, that
21 she was scared now?

22 A. Yes.

23 Q. That -- knowing that these two strange men were out
24 there and what they had done, correct?

25 A. Correct.

1 Q. Did you say anything after that to comfort her?

2 A. I don't believe I did.

3 Q. So how -- when this thing came to an end, did you
4 just walk out of the room?

5 A. Umm. I don't think so. I mean, I would -- just
6 because of the way my momma raised me, I probably would have
7 thanked her and -- you know. But other than that, no.

8 Q. So you don't remember any follow-up interview that
9 you participated in?

10 A. No.

11 Q. All right. Are you aware that she testified that
12 she was a wreck at that time and she felt responsible that
13 she hadn't been able to identify anybody?

14 A. Did I -- I don't -- did I testify to that? I
15 don't --

16 Q. She testified to that. Did anybody share that with
17 you, that she was feeling like she was a wreck?

18 A. No.

19 Q. You just thought she was nervous?

20 A. Yes.

21 Q. At the end of this hypnosis session, do you remember
22 how Jill Barganier, several times, said, did I help?

23 A. Yes.

24 Q. And she wanted reassurance from you?

25 A. Yes.

1 Q. And several times during the -- the hypnosis
2 session, you said, you're doing good; you're doing fine;
3 that's good?

4 A. Yes.

5 Q. Do you recall making those encouraging statements?

6 A. Yes.

7 Q. So I think you may have already said this, but I
8 want to make sure I didn't misunderstand. Was it your belief
9 at the time when you conducted the hypnosis session on
10 Ms. Barganier that her memory was such that she should be
11 capable of remembering something better many months later?

12 A. I think that's accurate, yes.

13 Q. And that is what you've been taught by people like
14 Michael Boulch?

15 A. Yes.

16 Q. And you told her it was not uncommon for people to
17 remember things more vividly after a hypnosis session?

18 A. Correct.

19 Q. And that would include 13 months after a hypnosis
20 session?

21 A. It could.

22 Q. Now, Jill Barganier did not remember what Charles
23 Flores looked like, had never given a description in the
24 hypnosis session of what he looked like for 13 months. Does
25 that seem like that is something that can happen with

1 memory?

2 A. It's possible. I -- I mean, I -- I don't know.

3 Q. Because you're not an expert in the -- the, you
4 know, cognitive science and nature of memory, correct?

5 A. Correct.

6 Q. You just know what you were taught by the criminal
7 justice center where you took the course?

8 A. Correct.

9 Q. And you know right after the hypnosis session Jill
10 Barganier participated in trying to make a composite sketch
11 of the passenger?

12 A. I -- I think I've come -- I found that out later.

13 Q. So you didn't take her over to a computer and
14 participate in that --

15 A. No.

16 Q. -- event?

17 Did you ever see the composite?

18 A. No.

19 Q. So you don't know if the composite matches what she
20 described in the hypnosis session?

21 A. No, I don't.

22 Q. And you don't know if it matches what Charles Flores
23 looked like at that time?

24 A. I don't.

25 Q. Now, you said you had been with the Farmers Branch

1 PD. You were there 20 years?

2 A. Correct.

3 Q. What position had you obtained by the time you
4 retired?

5 A. I retired as a lieutenant in the Patrol Division.

6 Q. And was Jerry Baker still there at the time?

7 A. I retired in 2016. I believe Jerry retired two or
8 three years before I did.

9 Q. Do you recall why he -- why he left? Was it just
10 retirement?

11 A. Yeah. I think he reached retirement.

12 Q. Now, when you started with the Farmers Branch PD,
13 did it have extensive written policies or procedures for
14 hypnotizing a witness?

15 A. No. I don't believe there were any.

16 Q. Any. All right. I want to show you what has been
17 marked, if I may, as Applicant 27.

18 MS. SWEEN: If I may approach?

19 THE COURT: You may.

20 Q. (BY MS. SWEEN) Mr. Serna, take a look and see if
21 you recognize those two pieces of paper.

22 A. I do, yes.

23 MS. SWEEN: We offer Applicant 27.

24 (Applicant's Exhibit No. 27 offered.)

25 MS. LAMBERT: No objection.

1 THE COURT: All right. Applicant's Exhibit
2 Number 27 is admitted.

3 (Applicant's Exhibit No. 27 admitted.)

4 Q. (BY MS. SWEEN) So I'm just putting it up here so we
5 can look at it a little easier. This first one, it says,
6 Farmers Branch Police Department hypnosis case data sheet.
7 Did you have to put this together?

8 A. This was brand new, yes.

9 Q. Okay. And it says -- it's a very short document.
10 But it says, reason for hypnosis referral. Do you see that?

11 A. Yes.

12 Q. Any additional information pertaining to the
13 suspect's identity and any other information pertinent to the
14 case. So that was the reason for the referral, correct?

15 A. Correct.

16 Q. So it wasn't just to help Ms. Barganier relax
17 because she was tense?

18 A. No. It was an interview. I mean, it was -- we
19 wanted to elicit information from her.

20 Q. The police aren't in the habit of just giving people
21 therapeutic hypnosis, correct?

22 A. No.

23 Q. All right. And then the second page here, is this
24 also a document you came up with --

25 A. Yes.

1 Q. -- to have some way to memorialize the session?

2 A. Yes.

3 Q. Would you agree with me that this is a very
4 abbreviated description of what you learned through the
5 hypnosis session?

6 A. I would, yes.

7 Q. Now, I'm going to ask you a few things. It says
8 here -- if you'll follow with me -- the purpose of the
9 session, which was witnessed by Investigator J. Baker, was to
10 hypnotize Barganier in attempt to obtain any additional
11 information on the crime which she has witnessed, correct?

12 A. Correct.

13 Q. Now, that purpose, that fits what you had said on
14 this form you created, right?

15 A. Yes.

16 Q. All right. And then after being induced into
17 hypnosis, the movie theater technique was used to elicit
18 additional information from Barganier.

19 So the point of this technique is to try to get
20 deeper into memory, correct?

21 A. Correct.

22 Q. All right. I'm going down here. For purposes of
23 the session, the two men were described as being Man A, the
24 driver, and Man B, the passenger.

25 Barganier described Man A as having dark, long,

1 wavy blonde hair. She further described it as being dirty.
2 She described his face as being oval shaped, kind of young,
3 blue pretty eyes. She also said that she had seen him with a
4 big brown beer bottle and that he puts it in the back of the
5 car.

6 And would you agree with me, having listened to
7 the tape, that initially she referred to the passenger?

8 A. Yes.

9 Q. So -- but then, later, she talked about Man A with
10 the beer bottle, correct?

11 A. Yes.

12 Q. She described Man B, the passenger, as having dark
13 brown or blonde, shoulder-length hair. Did I read that
14 correctly?

15 A. That's correct.

16 Q. She said that he had turned and looked at her and
17 she saw that he had brown eyes. I didn't find that in --
18 well, do you remember her description at him turning to look
19 at her?

20 A. I believe so.

21 Q. But I don't recall anything about brown eyes in that
22 tape.

23 A. I took some notes while I was watching it.

24 Q. Oh. Oh. I'm sorry. What are you referring to
25 there?

1 A. Oh. I -- I took some notes while --

2 Q. Notes, while you were watching the session?

3 A. -- while I was watching the video, if that's okay.

4 Q. Okay. Thank you.

5 A. If you need to see them, that's fine.

6 Q. Yes.

7 A. You may not be able to read them, but...

8 Q. I didn't hear anywhere in that tape a reference to
9 brown eyes.

10 A. Well, I believe -- I believe I -- I -- I don't --
11 now, I don't recall if I had seen that when I just watched
12 it, but...

13 Q. You listened to it. It was like 40 minutes long.

14 A. Yeah. But the -- but the part about Man B is --

15 Q. Um-hum.

16 A. -- fairly short.

17 Q. Um-hum.

18 A. It's towards the end of the -- of the session.

19 Q. Do you remember hearing her say brown eyes?

20 A. I -- I thought I did.

21 Q. All right. So we'll have to refer back to that
22 clip?

23 A. Yes.

24 Q. Okay. Let me ask you -- but you agree this is not a
25 complete attempt to transcribe what went on. It's just a --

1 A. No. It's not a transcription.

2 Q. It's just a summary. Okay. But this does
3 memorialize here, on the first page, that you had asked her
4 estimated level of hypnosis achieved. Do you see that?

5 A. Yes.

6 Q. And she had said medium?

7 A. Yes.

8 Q. So in her view, she had sustained hypnosis?

9 A. Yes.

10 Q. Now, back in 1980 -- '98, you said you had to invent
11 your own forms for the hypnosis thing because it was so
12 unusual, correct?

13 A. That's correct. Yes.

14 Q. Were there extensive policies and procedures about
15 doing eyewitness identification?

16 A. No, there were not either.

17 Q. No written policy about how to create a photo array
18 that wasn't unduly suggestive?

19 A. No.

20 Q. No written policy about whether the same witness
21 could be shown multiple photo arrays without creating
22 interference?

23 A. No policy.

24 Q. No written policy about the importance of avoiding
25 multiple identification procedures in which a witness viewed

1 the same suspect more than once?

2 A. Correct. No policy.

3 Q. And no written policy about the risk involving a
4 witness in different procedures, like hypnosis, making a
5 composite? There was no ban on that?

6 A. No.

7 Q. No policy about how that might be a problem?

8 A. That's correct. No policy.

9 Q. Are you familiar with the technical working group on
10 eyewitness evidence?

11 Q. Are -- are you referring to eyewitness
12 identification or --

13 A. Do you know an entity called the National Institute
14 of Justice?

15 A. Yes.

16 Q. And -- well, but you've never heard of the technical
17 working group on eyewitness evidence?

18 A. I've heard of eyewitness identification, maybe.

19 I -- I don't know if it's --

20 Q. All right.

21 A. I -- I could be confused.

22 Q. Don't worry. I'm just -- I'm -- this is not a test,
23 so...

24 Are you aware that there were standards much
25 more recently, like by the National Academy of Science in

1 2014, about appropriate eyewitness identification, assessing
2 the accuracy of eyewitness identification?

3 A. Yes. I'm very aware of that.

4 Q. Okay. Are you aware of a model policy for
5 eyewitness identification produced by the International
6 Association of Chiefs of Police in 2016?

7 A. Yes.

8 Q. Do you have any awareness of why there's been this
9 recent development of policies and best practices associated
10 with eyewitness identification?

11 A. I -- I mean, I do have an opinion on that. I -- I
12 attended some training put on at ILEA in Plano regarding
13 eyewitness identification, and I think maybe that's what was
14 throwing me off on the name. But the topic was, you know,
15 eyewitness identification as it related to photo arrays. By
16 this time, I was the -- I was promoted to the sergeant of our
17 Criminal Investigations Division.

18 Q. Um-hum.

19 A. What I had learned attending that seminar made sense
20 to me. It was convincing and compelling. So I did more
21 research on it and created the necessary policies for our
22 department in how we changed -- in how we show photo arrays.

23 Q. Okay. So let me make sure I've got this. So the --
24 the -- the kind of research you became aware of, this
25 involved the connection between wrongful conviction and

1 eyewitness identification. Is that what you're saying?

2 A. That's correct. Yes.

3 Q. So you took that information, went back and
4 implemented policies?

5 A. Correct.

6 Q. And that was in more recent history?

7 A. Yes. I believe that would have been around 2008.

8 Q. Did you continue to have concerns about the
9 information coming out about the correlation between
10 eyewitness identifications and wrongful convictions perhaps
11 by the Innocence Project?

12 A. Yes.

13 Q. You're familiar with that data?

14 A. I am, yes.

15 Q. Did you experience any pushbacks from folks on the
16 force when you tried to implement more rigorous policies
17 related to eyewitness identification procedures?

18 MS. LAMBERT: Objection. Relevance.

19 THE COURT: Sustained.

20 Q. (BY MS. SWEEN) Did you believe the changes were
21 necessary even if it was going against the grain?

22 A. Yes.

23 Q. Police officers really don't benefit any more than
24 anybody else from wrongful convictions coming from
25 misidentifications, correct?

1 A. Correct. I believe that if there was a better way
2 and more fair way to -- to show the photo arrays, then we
3 needed to be doing that.

4 MS. SWEEN: Pass the witness.

5 THE COURT: Thank you, Ms. Sween.

6 State?

7 **CROSS-EXAMINATION**

8 **BY MS. LAMBERT:**

9 Q. Hi, Mr. Serna. How are you?

10 A. I'm good.

11 Q. So you testified that you retired from Farmers
12 Branch PD in July of 2016, correct?

13 A. Correct.

14 Q. So how are you currently employed?

15 A. I'm an investigator with the Federal Public
16 Defender's Office here in the Northern District of Texas.

17 Q. So you switched sides, huh?

18 A. I did.

19 MS. SWEEN: Objection to characterization.

20 THE COURT: Overruled.

21 Q. (BY MS. LAMBERT) So as a -- during your time as a
22 police officer, did you receive any specialized training on
23 how to interview witnesses?

24 A. I did.

25 Q. So when would that have been? Would that have

1 been -- I'm sorry. Would that have been at the police
2 academy?

3 A. Well, yes. I mean, I think, initially, you receive
4 some basic training in interviewing witnesses. And then,
5 once you attend specialized classes for that -- I am
6 certified in the Reid technique in interview and
7 interrogation. But I believe that was maybe a few years
8 after this hypnosis session.

9 Q. So you received the normal training that all police
10 officers receive. And then, in addition to that, you also
11 attended this extra training where you received additional --

12 A. Correct.

13 Q. And you have a certification in that?

14 A. Yes.

15 Q. And you mentioned -- in 1996, that's when you were
16 employed in Robstown, correct?

17 A. Yes.

18 Q. What were the circumstances that led you to become
19 certified in investigative and forensic hypnosis?

20 A. Well, I -- while I was at the Robstown Police
21 Department, I had just transferred into an investigator's
22 position at Robstown. It just so happened that at the same
23 time as I was receiving this training, I was also going
24 through the hiring process here with Farmers Branch.

25 Q. Okay. So after you completed the training, shortly

1 after that, you took the employment in Farmers Branch?

2 A. That's correct.

3 Q. And after you came to Farmers Branch, this would
4 have been the first hypnosis that you did?

5 A. Correct.

6 Q. And it's the only one you've done?

7 A. Yes.

8 Q. Yes. And what happened in your career after that,
9 that sort of led you not to focus on hypnosis so much and to
10 kind of take another path?

11 A. Well, at -- at about that time, I was trained as a
12 crime scene technician and an advanced accident investigator.
13 So anytime we had a crime scene or fatality accident, I was
14 called out to investigate those. I did that for a few years,
15 and then I received my first promotion to corporal. And so I
16 was a corporal in the Patrol Division, and that's -- my
17 career path then kind of transferred into police supervision
18 and management.

19 After corporal, I made sergeant where I spent a
20 few years as a sergeant over our Narcotics Division and then
21 seven years as a sergeant in our Criminal Investigations
22 Division. Then I made lieutenant, and a month later, I
23 retired.

24 Q. And so it was not a decision that was related to
25 hypnosis or your dislike or whatever that led you to not do

1 hypnosis any longer --

2 A. That's correct.

3 Q. -- is that a fair statement?

4 A. That's correct.

5 Q. Okay. And back at the time that you did the
6 hypnosis session with Jill, that would have been close in
7 time to the training that you had received?

8 A. Yes.

9 Q. Would that be correct?

10 A. Yes.

11 Q. So everything you learned in the training would be
12 fresh in your mind?

13 A. Yes.

14 Q. As you sit here today, do you have independent
15 recollection of the four dangers of hypnosis?

16 A. I probably cannot speak with clarity on them, but I
17 may be able to answer a few questions.

18 Q. Well, you would have learned about Zani at your
19 training?

20 A. Correct.

21 Q. And is it fair to say that you would have done
22 everything you could to follow those procedural safeguards in
23 the Zani case on how to conduct a hypnosis session so as to
24 make the hypno- -- hypnotic -- hypnotically enhanced witness
25 testimony --

1 A. Yes. I think that's what I tried to do by, you
2 know, making sure that we had a secure location in the
3 building, making sure that she was in control of the
4 interview and that I recorded it, the interview, not just
5 audio recording but video recording, so that experts who know
6 more about the topic than me can ultimately determine whether
7 or not I did a good job or a bad job.

8 Q. Are you aware that law enforcement officers are
9 still trained and certified in investigative and forensic
10 hypnosis?

11 A. I'm not aware of that, no.

12 Q. So I guess you wouldn't be aware also that they
13 require continuing education? You're not aware of that?

14 A. No. I would imagine that they would.

15 Q. And you don't -- you don't know what that training
16 looks like now, correct?

17 A. No. I'm no longer involved in the field.

18 Q. So you've had the opportunity to review the
19 transcript from that hearing, correct?

20 A. That's correct.

21 Q. Do you have any reason today to disagree with the
22 testimony that you gave back then?

23 A. No.

24 Q. So like you said, that -- that record reflects that
25 the entirety of your conversations with Jill were recorded on

1 the video. You don't have any reason to disagree with
2 that?

3 A. That is correct. No.

4 Q. And if the record reflects that you did not have any
5 knowledge of the defendant, Flores, as a suspect or had not
6 seen a photo of him prior to the hypnosis, you don't have any
7 reason to disagree with that?

8 A. That's correct.

9 Q. And if the record and the hypnosis session reflects
10 that you didn't suggest anything to Jill, you wouldn't have
11 any reason to disagree with that?

12 A. That's correct.

13 Q. There was a question asked earlier about a
14 particular question that you asked her where you said, was
15 the hair clean-cut. Would you describe my hair as long
16 hair?

17 A. Yes.

18 Q. Would you describe my hair as clean-cut, or what was
19 the term that you used?

20 MS. SWEEN: Objection.

21 Q. (BY MS. LAMBERT) Cleanly cut?

22 MS. SWEEN: These are meaningless questions on
23 a cold record where no one has a picture of counsel's hair.

24 MS. LAMBERT: You specifically asked him
25 about -- a question about whether the hair was clean-cut. I

1 think I have the opportunity to go back and revisit it.

2 MS. SWEEN: "Neatly trimmed" were the words
3 used.

4 MS. LAMBERT: Neatly trimmed. Excuse me.

5 Q. (BY MS. LAMBERT) Neatly trimmed. Would you say
6 that my hair is neatly trimmed?

7 A. Yes.

8 MS. SWEEN: Objection. Relevance.

9 THE COURT: All right. Well, he's answered the
10 question already, so let's move on.

11 Q. (BY MS. LAMBERT) I'm going to show you this
12 picture. Would you say that he has long hair?

13 A. Yes.

14 Q. Would you say his hair is neatly trimmed?

15 A. No. I mean, it's hard to tell with the picture. It
16 doesn't appear to be.

17 Q. So a question like that could be to actually get
18 more details about the description that the person is
19 providing to you, correct?

20 A. Correct.

21 Q. Now, as we sit here today, can you positively tell
22 the Court that Jill was hypnotized?

23 A. No.

24 Q. Okay. And were you aware that a certain percentage
25 of the population is not hypnotizable?

1 A. I've read that, yes.

2 Q. So let's say hypothetically that someone were to
3 accuse you of being an in- -- you know, an ineffective or
4 terrible or inexperienced hypnotist. If that were the case,
5 would you agree that one logical conclusion would then be
6 that Jill was never hypnotized in the first place?

7 A. It could be.

8 Q. Okay. And did it occur to you at the time that you
9 did the hypnosis session in this case that that was a
10 possibility?

11 A. Yes.

12 Q. And if that were the case, what do we actually
13 have?

14 A. We have an interview.

15 Q. A witness interview?

16 A. Correct.

17 Q. Conducted by a police officer?

18 A. Yes.

19 Q. With specialized training in conducting witness
20 interviews?

21 A. Correct. It -- it -- I'm not sure. It may be
22 actually the only videotaped interview in this case.

23 Q. I was about to say, and it's entirely on video,
24 correct?

25 A. Correct.

1 Q. And during that, you asked open-ended questions?

2 A. Yes.

3 Q. You don't feed her any answers or make any
4 suggestions to her about how she should answer?

5 A. No.

6 Q. And when she's given the opportunity to use her
7 imagination or provide false answers, she doesn't do so,
8 correct?

9 A. That's correct.

10 Q. And I think that this was covered on Direct
11 Examination, but you didn't have any knowledge of any
12 descriptions that she may or may not have provided prior to
13 the hypnosis session, correct?

14 A. I have no knowledge.

15 Q. Okay. And you don't have any knowledge of anything
16 that she would have provided afterwards, other than what's in
17 the actual video, correct?

18 A. Correct.

19 Q. To the best of your recollection, does she expand on
20 her prehypnosis descriptions?

21 A. I have no idea.

22 Q. Okay. Well, you watched the video, today?

23 A. I did. But I don't know what her testim- -- I -- I
24 don't -- I don't know what she told the investigators after
25 the fact.

1 Q. Sorry. So in the prehypnosis, I guess, interview
2 and then during the hypnosis session --

3 A. Oh. I got it.

4 Q. -- does she expand on her descriptions of the men?

5 A. No. I believe they were pretty much the same.

6 Q. And I believe you touched on this earlier, but there
7 was some testimony about whether you would have heard the
8 description of the suspects over the radio.

9 A. Uh-huh.

10 Q. So you said that it's possible that you weren't
11 working that day. And if that were the case, you would have
12 gotten a page and just responded directly to the scene,
13 correct?

14 A. Correct.

15 Q. And so you would not have heard over the police
16 radio if any descriptions went out?

17 A. Correct, if I was not working that day.

18 Q. Okay. And then once you get to the scene, what are
19 you focused on doing while you're there?

20 A. Processing the crime scene.

21 Q. So you're not talking to -- to witnesses, correct?

22 A. No. We would have had, for example, going back to
23 this exhibit, the crime scene log, you know, we would have
24 had an officer posted out front for security purposes so that
25 we can work inside the house without -- you know, without

1 worrying about our safety.

2 Q. And so your testimony back then, as well as today,
3 is that you didn't have any knowledge of the suspects or of
4 the descriptions that were out there, correct?

5 A. That's -- that's correct.

6 Q. And you have not maintained your certification
7 occasion in hyp- --

8 A. No.

9 Q. -- -nosis, correct?

10 So you're not here to offer any sort of expert
11 opinion on the current state of hypnosis as a science in the
12 state of Texas, right?

13 A. That's correct.

14 Q. And you're not representing to the Court that you're
15 any sort of expert on hypnosis or memory, correct?

16 A. That's correct.

17 Q. The experts that they have and that we have are
18 probably better equipped to tell the Court about the science
19 of hypnosis; is that fair?

20 A. That's fair, yes.

21 Q. And they would also be able to better address the
22 particular technique used and the studies, the empirical
23 studies in the scientific community that address that,
24 correct?

25 A. That's correct. Yes.

1 Q. To the extent that there are any inaccuracies in
2 this hypnosis case data sheet, would it be fair to say that
3 the actual video itself would be the best evidence of what
4 she said?

5 A. Absolutely.

6 Q. Okay. They asked you questions about confabulation
7 and imagination. Was there any evidence to you during the
8 hypnosis session that Jill used her imagination?

9 A. Well, I mean, I used the word "imagination" in
10 asking for certain things, so --

11 Q. Let me be more specific. I'm sorry. That she used
12 her imagination in describing the two suspects?

13 MS. SWEEN: Objection. How can he know what
14 she was doing inside her mind?

15 MS. LAMBERT: Well --

16 MS. SWEEN: It calls for speculation.

17 THE COURT: Rephrase your question.

18 MS. LAMBERT: Okay. That was not a very
19 well-worded question. I'll just, actually, move on.

20 Q. (BY MS. LAMBERT) They asked you about Dr. Mount,
21 and you said you never met with Dr. Mount or discussed any of
22 this -- this case or your hypnosis session with him,
23 correct?

24 A. I -- I don't remember meeting him.

25 Q. Okay. In fact, you didn't even know what he had

1 testified to until you read the transcript, right?

2 A. Correct. I didn't -- I don't even think I knew his
3 name until I read the transcript last week.

4 Q. And there were some questions about the office that
5 was utilized for the hypnosis session. When you arrived that
6 day, do you recall if you participated in selecting the
7 location of the hypnosis session?

8 A. I -- I don't remember that.

9 Q. It's possible that they had already set that up?
10 You don't really remember?

11 A. It may have been something that I told them the
12 night before when they called me and told me to come in for
13 that. I -- I just don't remember.

14 Q. And you said it was -- or the record reflects that
15 it was a lieutenant's office from SID. And you testified
16 that that would not have been Ashabranner, Taylor or Stanton,
17 correct?

18 A. Correct.

19 Q. At that time?

20 A. And maybe -- Ashabranner was a lieutenant at some
21 point. I don't remember -- you know, I don't remember at
22 what point he was.

23 Q. Okay. But definitely not Taylor and not Stanton?

24 A. Correct. It may -- now -- well, no. Never mind.
25 Sorry.

1 Q. And in any event, none of the SID officers were
2 present during the hypnosis session?

3 A. Correct.

4 Q. And neither you nor Jerry Baker had ever seen a
5 photo or knew that Flores was even a suspect at that point,
6 correct?

7 A. I hadn't. I don't know about Jerry.

8 Q. The record would reflect what he knows. And we'll
9 probably hear testimony from him, so...

10 MS. LAMBERT: That's all the questions I have.
11 Thank you.

12 THE COURT: All right. Ms. Sween?

13 MS. SWEEN: Just a few follow-ups.

14 **REDIRECT EXAMINATION**

15 **BY MS. SWEEN:**

16 Q. First, I want to apologize, Mr. Serna. I took a
17 look at the transcript of the hypnosis session, and she does
18 mention brown eyes.

19 A. Okay. Thank you.

20 Q. Your memory is correct. But is it correct that she
21 does not make any reference to locking eyes with the
22 passenger?

23 A. I don't know if -- if that was something that was
24 mentioned in maybe the prehypnotic interview. I -- I don't
25 recall.

1 Q. So, again, the best the evidence would be go look at
2 that tape?

3 A. Yes.

4 Q. Okay. Now, the training that you described with
5 counsel about -- this additional training your received in
6 improving eyewitness identification, didn't all that occur
7 after 1998?

8 A. Yes.

9 Q. Would you agree with me that it's a suggestion to
10 say you will remember?

11 A. Yes.

12 Q. Now, Counsel also just seemed to say that the reason
13 for asking a question, like, was it neatly trimmed, would be
14 to get more details?

15 A. Yes.

16 Q. And isn't that a kind of leading question?

17 A. Well, I'm asking for more details.

18 Q. It's not an open-ended question to say, was it
19 neatly trimmed. You're narrowing the range of answers,
20 correct?

21 A. Well, I could -- I could make that even more narrow
22 by saying, can you give me more details, like, was it curly,
23 was it a buzz cut, was it -- but I didn't do that.

24 Q. But it is narrowing as opposed to open ended?

25 A. Yes. But that's the purpose of an interview.

1 Q. Okay. Now, George Mount, you know from reading the
2 transcript that he said you did an effective job?

3 A. Yes.

4 Q. He vouched for your technique, the movie theater
5 technique, correct?

6 A. Yes.

7 Q. And he -- and he vouched for your protecting against
8 the dangers of hypnosis?

9 A. Yes.

10 Q. Counsel asked you if you could really know whether
11 or not Jill Barganier had been hypnotized. Do you recall
12 that question?

13 A. Yes.

14 Q. Can't witness interviews be suggestive too even if
15 they aren't hypnotically induced?

16 A. Oh, sure. Yes.

17 Q. And, again, how would you have any way of knowing if
18 any of her answers were false if you didn't have access to
19 what was in her body of experience, unless you had
20 information about, for instance, facts that were established
21 in the crime? How would you know if she was not giving false
22 information?

23 A. Well, I -- I don't know. That's why I didn't
24 continue to press by asking further questions.

25 Q. Okay. So it's just -- whether she was providing

1 false information is just an unknown?

2 A. It's an unknown to me.

3 MS. SWEEN: No more questions.

4 THE COURT: All right. May this witness be
5 excused?

6 MS. LAMBERT: No objections, Your Honor.

7 THE COURT: All right. We're going to take a
8 10-minute recess.

9 You're excused, Mr. Serna.

10 We're going to take a 10-minute recess. Have
11 Mr. Baker ready to be up next.

12 (Court in recess; 5:20 - 5:30 p.m.)

13 (Open court, defendant present.)

14 THE COURT: We're back on the record. Let the
15 record reflect that the State is present. Applicant,
16 Mr. Flores, and his attorneys are present.

17 Jerry Baker is on the stand. Let the record
18 reflect this witness has previously been sworn.

19 You may proceed.

20 **JERRY BAKER,**

21 having been first duly sworn, testified as follows:

22 **DIRECT EXAMINATION**

23 **BY MS. LEPINGWELL:**

24 Q. Mr. Baker -- or is it Officer Baker? How would you
25 like me to refer to you?

EXHIBIT 11

MORE FROM HOMEPAGE

How will Texas' virtual schools work long term? Lawmakers need to decide

Child Protective Services draws scrutiny from Texas lawmakers eager to trim its duties, powers

Texas reports more than 1,900 new coronavirus cases; Tarrant adds 11 deaths, 259 cases

NEWS > INVESTIGATIONS

Texas Rangers stop using hypnosis after Dallas Morning News investigation reveals dubious science

Last year, The News revealed Texas officers continue to turn to hypnosis to investigate crimes, sending dozens of men and women to prison and some to their deaths.



The Texas Association for Investigative Hypnosis sold these commemorative medallions to members at its 2019 annual conference in Huntsville. The association is one of the few, if not the only, remaining societies for police employing hypnosis in criminal investigations. In January 2021, less than a year after The Dallas Morning News published a series exposing the dubious science underlying the practice, the Texas Department of Public Safety ended its hypnosis program after forty years. (Smiley Pool/Staff Photographer) (Smiley N. Pool / Staff Photographer)

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AUSTIN — The Texas Department of Public Safety has ended the controversial practice of using hypnosis to investigate crimes.

A department spokesman said the hypnosis program ended in January 2021, more than forty years after its inception, because its officers are now relying on better investigative practices.

The decision comes less than a year after *The Dallas Morning News* published a two-part series, “The Memory Room,” which raised serious questions about the efficacy of using hypnosis on criminal cases. *The News* investigation found Texas built one of the most prolific programs for police hypnosis in the country, repeatedly doubling down on the practice despite scientific evidence that hypnosis can distort witness memories and lead to false convictions.

“DPS has developed more advanced interview and interrogation techniques that yield better results,” Assistant Chief of Media and Communications Travis Considine told *The News*.

Considine did not answer questions about whether *The News’ investigation* contributed to the department’s decision to stop using hypnosis.



INVESTIGATIONS

U.S. Supreme Court declines to take up Texas death row case involving police hypnosis

BY LAUREN MCGAUGHY

“The Memory Room,” published in April of last year, revealed that Texas officers continue to turn to the debunked technique, sending dozens of men and women to prison and some to their deaths. The Texas Rangers are among the most prolific hypnotists in the state, *The News found*, performing at least 1,700 hypnosis sessions since the 1980s.

The Rangers used hypnosis to investigate an attempted kidnapping as recently as October 2020, just two months before the program was ended. Various officers at the Department of Public Safety performed a total of eight hypnosis sessions last year, including three that involved murder investigations, according to internal memos *The News* obtained through public records requests.

New information came out of seven of those sessions, the officers claimed. It’s unclear whether that evidence will still be used in investigations of these alleged crimes now that the program has ended.

Even without the program, local police departments may still be using hypnosis to investigate crimes. More than 800 law enforcement officers statewide have been approved to use hypnosis as an investigative tool since the 1980s, and Dallas and Houston once boasted the most hypnotists on staff.

Texas law also still allows evidence allegedly gleaned from hypnosis to be used in courts. In January, the U.S. Supreme Court declined to take up a Dallas death row case involving hypnosis, leaving the decision of whether to allow

How will Texas’ virtual schools work long term? Lawmakers need to decide



Child Protective Services draws scrutiny from Texas lawmakers eager to trim its duties, powers



Texas reports more than 1,900 new coronavirus cases; Tarrant adds 11 deaths, 259 cases



Gunman sought after killing 21-year-old woman, wounding 7 others inside northwest Dallas nightclub



Scattered showers could bring severe weather to Dallas-Fort Worth Monday evening



hypnosis up to each state. Nearly half of the states have banned or significantly restricted the practice among its law enforcement officers and prosecutors.

Texas remains the only state known to have an active certification program for law enforcement officers to learn hypnosis and is also the home to likely the nation's only extant police organization for investigative hypnotists.

State lawmakers in Texas — including one state senator who has tried to crack down on the practice for years — have filed bills this session to ban the introduction of so-called hypnotically induced testimony.

On Wednesday, Rep. James White asked an official with the Texas Forensic Science Commission, which reviews junk science techniques, about the Rangers' hypnosis program during a public legislative hearing. The commission official confirmed the department has ended the program.

"I am encouraged that TxDPS constantly reviews its investigatory processes to ensure that they are evidenced-based, peer-reviewed, and striving to earn and maintain the confidence of Texans," White, who chairs the House Committee on Homeland Security and Public Safety, told *The News* in a text message.

Marx Howell, one of the chief practitioners of police hypnosis in Texas, said he was not aware that the Department of Public Safety ended the program and expressed disappointment in the decision

"It is a viable investigative technique under certain circumstances in certain types of cases where you don't have any other leads," Howell told *The News*. "If DPS has stopped it, that will be a major effort to use hypnosis that has gone away."



Lauren McGaughy. Lauren is an investigative reporter based in Austin where she focuses on government accountability, criminal justice and LGBTQ issues. Before joining the investigative team, she covered Texas politics for *The News* and *Houston Chronicle*, and Louisiana politics for *The New Orleans Times-Picayune*. She loves cats and comic books and cooks a mean steak.

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EXHIBIT 12

No. 20-5923

In The
Supreme Court of the United States

—◆—
CHARLES DON FLORES,

Petitioner,

v.

TEXAS,

Respondent.

—◆—
**On Petition For A Writ Of Certiorari
To The Texas Court Of Criminal Appeals**

—◆—
**BRIEF OF DR. STEVEN D. PENROD AND
27 ADDITIONAL COGNITIVE SCIENTISTS AS
AMICI CURIAE IN SUPPORT OF PETITIONER**

—◆—
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November 5, 2020

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INTEREST OF *AMICI CURIAE*¹

Amici are scientists whose research and scholarship demonstrate that hypnotically elicited recollections are too unreliable for forensic use.

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Amici sign this brief in their individual capacities and not on behalf of their institutions.

**SUMMARY OF ARGUMENT**

At the time this Court decided *Rock v. Arkansas*, 483 U.S. 44 (1987), up through the years surrounding petitioner's 1999 trial, the scientific community was deeply divided over the recoverability of accurate memories through hypnosis and the effectiveness of safeguards to ensure the reliability of hypnotically elicited recollections. Today, by contrast, scientific research overwhelmingly establishes that hypnosis

¹ Pursuant to Supreme Court Rule 37.2(a), counsel for *amici* provided notice to all parties of *amici*'s intention to file this brief and did so at least ten days before its due date. All parties gave their consent. Pursuant to this Court's Rule 37.6, *amici* affirm that no counsel for a party authored this brief in whole or in part, and no person other than *amici* or their counsel made a monetary contribution to its preparation or submission.

poses dangers in the forensic context that are both severe and unpreventable.

The very process of memory retrieval creates opportunities for distortion and gap-filling, and law enforcement's use of hypnosis to fish for information about past events—eliciting details that may never have been observed, much less encoded in an eyewitness's brain as a “stored,” accurate memory—fails as a truth-seeking exercise. To the contrary, it invites inaccuracies, false memories, and the creation of “super” witnesses who are unnaturally confident, often impervious to cross-examination, and therefore disproportionately impactful when they testify. Consequently, hypnosis should not play a role in forensic analysis; at a minimum, prosecutors should be prohibited from using hypnotically elicited testimony to secure criminal convictions.

◆

ARGUMENT

I. AFTER YEARS OF CONFLICTING FINDINGS AND OPINIONS, SCIENTISTS HAVE NOW ESTABLISHED THAT HYPNOTICALLY REFRESHED MEMORIES ARE UNRELIABLE, EVEN IF SUPPOSED SAFEGUARDS ARE APPLIED.

Debate regarding the reliability of hypnotically enhanced memory and the effectiveness of safeguards began in the mid-twentieth century and continued into the early 2000s. While dangers associated with the use of hypnosis were recognized as early as this Court's

decision in *Rock*, 483 U.S. at 59-60, there was no clear consensus at that time on reliability and safeguards. In the years after petitioner's 1999 trial, scientific debate has given way to overwhelming agreement among experts that post-hypnosis memories are unreliable and that currently known safeguards cannot eradicate the risk of introducing misinformation into forensic contexts.

A. The Science Of Hypnosis Was Unsettled During The 1980s And 1990s, Although There Were Suggestions Of Problems.

When this Court addressed the issue of post-hypnotic testimony in *Rock*, there was no consensus "regarding the use of hypnosis as a means to refresh memory." Council on Scientific Affairs, *Scientific Status of Refreshing Recollection by the Use of Hypnosis*, 253 J. AM. MED. ASS'N 1918, 1918 (1985) [hereinafter *Scientific Status*]. While several fundamental problems with hypnosis had been identified, some experts and studies still suggested that it could be a useful tool. This debate would gradually be settled as more research was completed, but there would be disagreement through the 1980s and 1990s.

In the years preceding *Rock*, studies of the effects of hypnosis on memory cut in both directions. Some suggested that hypnosis could be a useful tool to improve memory recall without increasing false memories. See, e.g., Gerald R. Griffin, *Hypnosis:*

Towards a Logical Approach in Using Hypnosis in Law Enforcement Agencies, 8 J. POLICE SCI. & ADMIN. 385, 389 (1980). But other studies identified significant reliability defects in hypnotically “refreshed” memory. See *Scientific Status*, *supra*, at 1922; Michael R. Nash et al., *Accuracy of Recall by Hypnotically Age-Regressed Subjects*, 95 J. ABNORMAL PSYCH. 298, 300 (1986). And the unsettled nature of the science was reflected in the opinions of experts: A survey around the time of *Rock* reported that nearly half of expert psychologists would testify that hypnosis could assist memory retrieval. Saul M. Kassin et al., *The “General Acceptance” of Psychological Research on Eyewitness Testimony: A Survey of the Experts*, 44 AM. PSYCH. 1089, 1091 tbl.1, 1094 tbl.4 (1989).

Even as early as *Rock*, this Court recognized three dangers inherent in the use of hypnotically refreshed memories: suggestion,² confabulation,³ and memory hardening.⁴ But many scientists suggested that

² “Suggestion” occurs when hypnosis subjects affirm leading questions by the hypnotist. See *Rock*, 483 U.S. at 59-60; Bernard L. Diamond, *Inherent Problems in the Use of Pretrial Hypnosis on a Prospective Witness*, 68 CALIF. L. REV. 313, 333-37 (1980).

³ “Confabulation” occurs when hypnotized subjects “fill in details from the imagination in order to make an answer more coherent and complete.” *Rock*, 483 U.S. at 60. Confabulation also gives rise to pseudomemories lacking an actual basis in the subject’s past. See Diamond, *supra*, at 335.

⁴ “Memory hardening” is a sense of false confidence in hypnotically induced memories. See *Rock*, 483 U.S. at 60. Studies showed a strong “tendency of subjects who had undergone hypnotic induction procedures to be more confident of their answers to objective questions than those who had not, despite the fact that they were not more accurate.” Peter W. Sheehan &

procedural safeguards could mitigate these problems. *See, e.g.*, Howard William Timm, *Suggested Guidelines for the Use of Forensic Hypnosis Techniques in Police Investigations*, 29 J. FORENSIC SCIS. 865, 871 (1984); *Scientific Status, supra*, at 1922. Dr. Martin Orne proposed one of the most influential sets of safeguards, cited not only in *Rock*, but also in state-court opinions prescribing admissibility procedures for post-hypnotic testimony. *See* Martin T. Orne, *The Use and Misuse of Hypnosis in Court*, 27 INT'L J. CLINICAL & EXPERIMENTAL HYPNOSIS 311, 335-36 (1979), *cited in Rock*, 483 U.S. at 60, *Zani v. State*, 758 S.W.2d 233, 243-44 (Tex. Crim. App. 1988), and *State v. Hurd*, 432 A.2d 86, 96-97 (N.J. 1981).⁵

The debate over hypnosis as a forensic tool continued throughout the 1990s. Some studies supported reliability concerns,⁶ while others suggested

Jan Tilden, *Effects of Suggestibility and Hypnosis on Accurate and Distorted Retrieval from Memory*, 9 J. EXPERIMENTAL PSYCH.: LEARNING, MEMORY, & COGNITION 283, 292 (1983).

⁵ Even at that time, some experts questioned whether safeguards could effectively ensure the accuracy of post-hypnosis testimony used in prosecutions. *See* ROY UDOLF, FORENSIC HYPNOSIS: PSYCHOLOGICAL AND LEGAL ASPECTS 55-56 (1983) (contending that Orne's safeguards "designed to minimize the cueing and leading of a witness inadvertently or otherwise by the hypnotist" fail to "protect against other major sources of distortion" to memory). Several years after *Hurd's* adoption of Dr. Orne's approach, he repudiated his earlier endorsement of safeguards. Martin T. Orne et al., *Hypnotically Induced Testimony*, in EYEWITNESS TESTIMONY: PSYCHOLOGICAL PERSPECTIVES 171, 210 (Gary L. Wells & Elizabeth F. Loftus eds., 1984).

⁶ *E.g.*, Steven Jay Lynn & Michael R. Nash, *Truth in Memory: Ramifications for Psychotherapy and Hypnotherapy*, 36

concerns were overblown.⁷ A 1994 meta-analysis reported that “the data continue[d] to present contradictions in findings regarding hypnosis effects in forensic settings.” Nancy M. Steblay & Robert K. Bothwell, *Evidence for Hypnotically Refreshed Testimony: The View from the Laboratory*, 18 LAW & HUM. BEHAV. 635, 637 (1994). And while some scientists continued to endorse safeguards, others warned that they would be ineffective. Compare D. CORYDON HAMMOND ET AL., CLINICAL HYPNOSIS AND MEMORY: GUIDELINES FOR CLINICIANS AND FOR FORENSIC HYPNOSIS 39-47 (1994), with Robert A. Karlin, *Illusory Safeguards: Legitimizing Distortion in Recall with Guidelines for Forensic Hypnosis—Two Case Reports*, 45 INT’L J. CLINICAL & EXPERIMENTAL HYPNOSIS 18, 18-20 (1997); see Joseph P. Green et al., *Hypnotic Pseudomemories, Prehypnotic Warnings, and the Malleability of Suggested Memories*, 12 APPLIED COGNITIVE PSYCH. 431, 440 (1998).

AM. J. CLINICAL HYPNOSIS 194, 201 (1994); Emily Carota Orne et al., *Memory Liabilities Associated with Hypnosis: Does Low Hypnotizability Confer Immunity?*, 44 INT’L J. CLINICAL & EXPERIMENTAL HYPNOSIS 354, 365-66 (1996) (finding widespread vulnerability to hypnosis-induced memory distortions among subjects at various hypnotizability levels); David Spiegel, *Hypnosis and Suggestion*, in MEMORY DISTORTION: HOW MINDS, BRAINS, AND SOCIETIES RECONSTRUCT THE PAST 129, 140-43 (Daniel Schacter et al. eds., 1995) (describing studies showing that hypnosis produces “more information, both accurate and inaccurate”).

⁷ See, e.g., Nicholas P. Spanos et al., *Hypnotic Interrogation, Pretrial Preparation, and Witness Testimony During Direct and Cross-Examination*, 15 LAW & HUM. BEHAV. 639, 650-52 (1991) (rejecting the contention that hypnosis immunizes subjects from the effects of cross-examination).

B. Following Petitioner’s 1999 Trial, Evolving Research Showed That Hypnotically Enhanced Memories Are Unreliable And That Safeguards Do Not Work.

In the years following petitioner’s trial, scientific opinion on the reliability of hypnotically enhanced memories and the usefulness of safeguards remained unsettled. The percentage of experts professing confidence in such memories was falling, but it was still as high as 45% in 2001. Saul M. Kassin et al., *On the “General Acceptance” of Eyewitness Testimony Research: A New Survey of the Experts*, 56 AM. PSYCH. 405, 410 (2001). But by 2010, “the conclusion that hypnosis can foster false memories” was “indisputable.” SCOTT O. LILIENFELD ET AL., 50 GREAT MYTHS OF POPULAR PSYCHOLOGY: SHATTERING WIDESPREAD MISCONCEPTIONS ABOUT HUMAN BEHAVIOR 73 (2010). That year, a survey of experts reported that 88% either “mostly disagreed” or “strongly disagreed” with the statement that “[h]ypnosis is useful in helping witnesses accurately recall details of crimes” (the other 12% reported that they “didn’t know”). Daniel J. Simons & Christopher F. Chabris, *What People Believe About How Memory Works: A Representative Survey of the U.S. Population*, PLOS ONE, Aug. 2011, at 1, 3 tbl.2.

Additionally, by 2013, it was clear that potentially false memories are likely to be recalled with undue,

inflated confidence.⁸ Steven Jay Lynn, Anne Malaktaris, Sean Barnes & Abigail Matthews, *Hypnosis and Memory in the Forensic Context*, in WILEY ENCYCLOPEDIA OF FORENSIC SCIENCE (ONLINE) 2, 4 (Allan Jamieson & Andre Moenssens eds., 2013) (noting inflated confidence in more than two-thirds of studies of hypnotically elicited memories that examined confidence);⁹ see also Graham F. Wagstaff et al., *Facilitating Memory with Hypnosis, Focused Meditation, and Eye Closure*, 52 INT'L J. CLINICAL & EXPERIMENTAL HYPNOSIS 434, 446 (2004). The increased findings of overconfidence correlated with new methods for exposing memory hardening in hypnosis subjects. See, e.g., Joseph P. Green & Steven Jay Lynn, *Hypnosis Versus Relaxation: Accuracy and Confidence in Dating International News Events*, 19 APPLIED COGNITIVE PSYCH. 679, 689 (2005) (testing subjects' willingness to change answers when given the opportunity to do so and concluding that previous studies had underestimated the effects of hypnosis on confidence).

⁸ The research landscape on memory hardening began to shift just months after petitioner's trial, with the publication of a seminal study finding that hypnosis subjects "maintained their belief in the reported memories in the face of challenging information." Richard A. Bryant & Amanda J. Barnier, *Eliciting Autobiographical Pseudomemories: The Relevance of Hypnosis, Hypnotizability and Attributions*, 47 INT'L J. CLINICAL & EXPERIMENTAL HYPNOSIS 267, 278 (1999).

⁹ The third of studies that did not find inflated confidence identified other issues: inaccurate or, at a minimum, unimproved recall. Lynn, Malaktaris, Barnes & Matthews, *supra*, at 4.

Evidence now also shows that safeguards intended to make hypnotically enhanced memories reliable do not—and cannot—serve their intended purpose. For example, eliminating suggestive techniques does not ensure accurate recall because, as studies reflect, “the induction of hypnosis itself can engender illusory memories.” Giuliana Mazzoni & Steven Jay Lynn, *Using Hypnosis in Eyewitness Memory: Past and Current Issues*, in 1 HANDBOOK OF EYEWITNESS PSYCHOLOGY: MEMORY FOR EVENTS 321, 324 (Michael P. Toglia et al. eds., 2012). Nor does warning hypnosis subjects about potential memory distortions affect the rate of false memories. Jeffrey S. Neuschatz et al., *Hypnosis and Memory Illusions: An Investigation Using the Deese/Roediger and McDermott Paradigm*, 22 IMAGINATION, COGNITION & PERSONALITY 3, 11 (2003). Indeed, a recent study found that subjects warned of possible false memories accompanying hypnosis had even *less* accurate recall than subjects who did not receive warnings. Michelle N. Dasse et al., *Hypnotizability, Not Suggestion, Influences False Memory Development*, 63 INT’L J. CLINICAL & EXPERIMENTAL HYPNOSIS 110, 116, 125-26 (2015). And other researchers have confirmed that false confidence persists even when hypnotists refrain from suggesting that memory improves following a session. See Wagstaff et al., *supra*, at 446.

Accordingly, in multiple respects, the evidence accumulated today on hypnotically enhanced memories, their unreliability, and the ineffectiveness

of safeguards presents a striking departure from the unsettled state of science that existed before *Rock* and continued after petitioner’s 1999 trial. Scientific findings now clearly show that hypnotically enhanced memories are often unreliable and likely to be held with undue confidence—and safeguards cannot eliminate these problems.

Courts, moreover, have largely tracked evolving scientific research. A majority of States have adopted *per se* inadmissibility rules precluding the prosecution’s use of post-hypnosis testimony. Steven Jay Lynn et al., *Forensic Hypnosis: The State of the Science*, in *PSYCHOLOGICAL SCIENCE IN THE COURTROOM: CONSENSUS AND CONTROVERSY* 80, 80 (Jennifer L. Skeem et al. eds., 2009); *see also State v. Moore*, 902 A.2d 1212, 1227, 1229 (N.J. 2006) (noting that “[t]he theory that hypnosis is a reliable means of improving recall is not generally accepted in the scientific community” and adopting a *per se* inadmissibility standard for hypnotically enhanced testimony).¹⁰ Texas, however, continues to use the outdated safeguard approach, ignoring alarms sounded in a recent Texas Court of Criminal Appeals dissent calling for a *per se* ban on post-hypnosis testimony because “[h]ypnosis has been discredited . . . as a forensic discipline to uncover forgotten

¹⁰ The *Moore* decision, which is typical of the current judicial approach in most States, abrogated *Hurd*, 432 A.2d 86, the 1981 New Jersey case cited by this Court in *Rock*, 483 U.S. at 58 n.16, that shaped States’ early—and now mostly abandoned—safeguard approaches. *See, e.g., Zani*, 758 S.W.2d at 239 n.4, 243-44.

memories of crimes.” *Ex parte Chanthakoummane*, WR-78, 107-02, 2020 WL 5927445, at *1 (Tex. Crim. App. Oct. 7, 2020) (Newell, J., dissenting).

II. MEMORIES DO NOT FORM IN A MANNER THAT ALLOWS RELIABLE RETRIEVAL FOR USE IN A FORENSIC SETTING.

As the current science reflects, hypnosis does not recover memories that are sufficiently reliable for forensic use. To the contrary, hypnosis increases the risk of false, distorted, or even manufactured memories. *See, e.g.*, Brent A. Paterline, *Forensic Hypnosis and the Courts*, 4 J.L. & CRIM. JUST. 1, 6 (2016). And as previously discussed, eyewitnesses who have undergone hypnosis are likely to recall potentially false memories with undue, inflated confidence due to “memory hardening.” These findings are unsurprising in light of the scientific reality of memory formation and retrieval, which explains why confabulation and overconfidence are so likely to result from hypnosis.

Memories do not form like frames in a movie that can be assembled and replayed, revealing objective truths about events in the past. Daniel L. Schacter & Elizabeth F. Loftus, *Memory and Law: What Can Cognitive Neuroscience Contribute?*, 16 NATURE NEUROSCIENCE 119, 120 (2013). Decades of research have dispelled notions of the brain as a hard drive or database containing fixed, incorruptible files that need only be accessed to “see” truths. Instead, memory is

selective and fragile. The human mind does not store all of the stimuli it receives, and what is stored may not be stored perfectly. Thus, it is possible that memories targeted during hypnosis formed inaccurately in the first place or never formed at all. And the processes through which individuals create and retrieve memories, by nature, invite distortion and, in some instances, outright confabulation.

A. Unlike A Fixed Video Of Past Events, Memory Is Malleable And Forms Through A Reconstructive Process.

Though sufficiently reliable for everyday concerns, memory is selective and fragile. It is “not an exact reproduction of past experiences but is instead an imperfect process that is prone to various kinds of errors and distortions.” Daniel L. Schacter et al., *Memory Distortion: An Adaptive Perspective*, 15 *TRENDS COGNITIVE SCIS.* 467, 467 (2011) [hereinafter Schacter et al., *Memory Distortion*].

The notion that hypnosis can assist memory recall rests on the faulty assumption that memories are like video recordings, readily accessible to play back once accessed with proper tools. Steven Jay Lynn et al., *Creating The “Stuff of Experience”: Spontaneous Thoughts, Memory, and Hypnosis in Clinical and Forensic Contexts*, in *CREATIVITY AND THE WANDERING MIND: SPONTANEOUS AND CONTROLLED COGNITION* 159, 170 (David D. Preiss et al. eds., 2020) [hereinafter Lynn et al., *Stuff of Experience*]. While this “video recorder” myth of memory may fuel plot lines in pop culture and

retain some misguided, popular appeal, it bears no resemblance to the scientific reality of how memory actually functions. Schacter & Loftus, *supra*, at 120.

Instead, memory is “an active reconstructive process.” Robert Nitsch & Frank W. Stahnisch, *Neuronal Mechanisms Recording the Stream of Consciousness—A Reappraisal of Wilder Penfield’s (1891-1976) Concept of Experiential Phenomena Elicited by Electrical Stimulation of the Human Cortex*, 28 CEREBRAL CORTEX 3347, 3348 (2018). Cognitive and biological theorists agree that “memories do not preserve a literal representation of the world; memories are constructed from fragments of information that are distributed across different brain regions, and depend on influences operating in the present as well as the past.” Daniel L. Schacter, *Illusory Memories: A Cognitive Neuroscience Analysis*, 93 PROC. NAT’L ACAD. SCI. U.S. 13527, 13527 (1996) [hereinafter Schacter, *Illusory Memories*]. Thus, “it is now widely recognized” that memories are not comprehensive records of human experiences. Schacter et al., *Memory Distortion*, *supra*, at 467. Rather, memory is “an imperfect process that is prone to various kinds of errors and distortions.” *Id.*

Even when memories are partly accurate, they often contain unrelated elements that are reconstructions of past events rather than true recollections. See Henry L. Roediger, III, & Kurt A. DeSoto, *Psychology of Reconstructive Memory*, in 20 INTERNATIONAL ENCYCLOPEDIA OF THE SOCIAL & BEHAVIORAL SCIENCES 50 (James D. Wright ed., 2d ed. 2015). Memory relies on the brain’s capacity to

structurally and chemically adapt, and the brain can translate only a fraction of external stimuli into actual memories. See Dominik Aschauer & Simon Rumpel, *The Sensory Neocortex and Associative Memory*, in 37 CURRENT TOPICS BEHAV. NEUROSCIENCE 177, 178 (Robert E. Clark & Stephen J. Martin eds., 2018). The remainder of an individual memory is then reconstructed through a process where the brain “fill[s] in the gaps” with what it expects to be presented. See Jeffrey S. Neuschatz et al., *Memory Gaps and Memory Errors*, in EMERGING TRENDS IN THE SOCIAL AND BEHAVIORAL SCIENCES 1, 2 (Robert Scott & Stephen Kosslyn eds., 2015). And it is that gap-filling propensity that triggers unreliability. Even when “verbatim” memories are encoded into memory, they fade rapidly and people tend to rely on gist memories that are not literal copies of experienced events. Valerie F. Reyna et al., *How Fuzzy-Trace Theory Predicts True and False Memories for Words, Sentences, and Narratives*, 5 J. APPLIED RSCH. MEMORY & COGNITION 1, 2, 8 (2016).

B. Memory Retention And Retrieval Occurs In Three Stages That Present Numerous Opportunities For Memory Failure Or Corruption.

Memory is the continuous process of information retention and its subsequent retrieval. See Reto Bisaz et al., *The Neurobiological Bases of Memory Formation: From Physiological Conditions to Psychopathology*, 47 PSYCHOPATHOLOGY 347, 347-51 (2014). Memory formation occurs in three primary stages: (1) encoding;

(2) synaptic consolidation and storage; and (3) retrieval. Karim Nader, *Reconsolidation and the Dynamic Nature of Memory*, COLD SPRING HARBOR PERSPS. BIOLOGY, Oct. 2015, at 1, 1. This process is not perfect—rather, each stage is prone to “various kinds of errors and distortions.” Schacter et al., *Memory Distortion*, *supra*, at 467. Consequently, each phase on its own illustrates the selectivity and fragility of memory.

Stage One—Selective Encoding: Memory includes only those aspects of experience that the brain “encodes.” Encoding is the process through which external stimuli are translated into information that the brain can better process. See PETER C. BROWN ET AL., MAKE IT STICK: THE SCIENCE OF SUCCESSFUL LEARNING 72, 100 (2014). During encoding, a stimulus is perceived and retained in short-term memory, and a new “memory trace” is formed. See *id.* at 100; Yadin Dudai & Richard G.M. Morris, *Memorable Trends*, 80 NEURON 742, 742 (2013).

This stage is inherently limited. Only a fraction of all outside stimuli—the things individuals see, hear, feel, or otherwise sense—is encoded. At this point, the new trace is fragile and highly susceptible to “interference” from pharmacological, molecular, or behavioral sources. Bisaz et al., *supra*, at 348. Rather than document an “‘actual’ event,” encodings “reflect an individual’s prior knowledge, focus of attention, interests, motives, comprehension, and so on.” Marcia K. Johnson et al., *The Cognitive Neuroscience of True and False Memories*, in TRUE AND FALSE RECOVERED MEMORIES: TOWARD A RECONCILIATION OF THE DEBATE 15, 18 (Robert F. Belli ed., 2012).

Although individuals can encode minor details if they attempt to do so, it is impossible to encode all the details of an event. See Roberto Cubelli, *A New Taxonomy of Memory and Forgetting*, in FORGETTING 35, 42 (Sergio Della Salla ed., 2010). Thus, individuals may encode only those details of events that stand out as unusual or potentially useful in the future. Daniel L. Schacter & Donna Rose Addis, *The Cognitive Neuroscience of Constructive Memory: Remembering the Past and Imagining the Future*, 362 PHIL. TRANSACTIONS ROYAL SOC'Y 773, 778 (2007).

Stage Two—Consolidation and Storage: After the encoding phase, much of the information received and stored in short-term memory is dumped due to limited capacity, with only the most salient information getting stabilized and “consolidate[d]” with the brain’s “preexisting knowledge networks.” See Björn Rasch & Jan Born, *About Sleep’s Role in Memory*, 93 PHYSIOLOGICAL REV. 681, 683, 693 (2013); Marion Quinn Lewis, *Short-Term Memory Items in Repeated Free Recall*, 10 J. VERBAL LEARNING & VERBAL BEHAV. 190, 190 (1971).

Consolidation prepares a memory for storage through neural processes that “stabiliz[e]” memory traces. Rafaël Roesler & James L. McGaugh, *Memory Consolidation*, in ENCYCLOPEDIA OF BEHAVIORAL NEUROSCIENCE 206, 207-08 (George F. Koob et al. eds., 2010). Consolidation encompasses two processes: (1) synaptic consolidation—the initial changes in synapses and neuronal circuits that occur within hours of encountering a stimulus; and (2) systems

consolidation—the reorganization of the brain’s memory systems over a longer period of time. Larry R. Squire et al., *Memory Consolidation*, COLD SPRING HARBOR PERSPS. BIOLOGY, Aug. 2015, at 1, 2. Synaptic consolidation forms short-term memories; systems consolidation forms long-term memories. *See* Roesler & McGaugh, *supra*, at 209-10. Consolidation is a time-dependent process: Synaptic consolidation may be susceptible to outside influence for several hours after the experience. *See* James L. McGaugh, *Time-Dependent Processes in Memory Storage*, 153 SCIENCE 1351, 1357 (1966). Long-term, systems consolidation, by contrast, continues for several weeks. *See* Yadin Dudai, *The Neurobiology of Consolidations, Or, How Stable is the Engram?*, 55 ANN. REV. PSYCH. 51, 54-55 (2004).

Stage Three—Retrieval and “Updated” Memories: Retrieval is the process of recalling a stored memory. Rasch & Born, *supra*, at 683. Retrieval itself is not as simple as finding the video “tape” in storage; instead, it is a “constructive process.” Schacter, *Illusory Memories*, *supra*, at 13527. Retrieval requires “reactivating” the memory through “neural activity corresponding to information previously learned.” Donna J. Bridge & Ken A. Paller, *Neural Correlates of Reactivation and Retrieval-Induced Distortion*, 32 J. NEUROSCIENCE 12144, 12144 (2012).

When a memory is recalled, it enters a state of temporary “postretrieval fragility,” and reconsolidation can distort the memory. Bisaz et al., *supra*, at 348; Sam McKenzie & Howard Eichenbaum, *Consolidation and Reconsolidation: Two Lives of Memories?*, 71 NEURON 224, 224 (2011) (explaining that reconsolidation subjects a newly consolidated memory “to modification through subsequent reminders and interference”); Bridge & Paller, *supra*, at 12144-51. Researchers used to believe a memory, once consolidated, became fixed in the mind; however, scholarship over the past fifteen years has “shown that a [consolidated] memory . . . can again become labile if it is reactivated.” Bisaz et al., *supra*, at 348.

In other words, the synaptic processes that occur whenever an individual tries to remember events also render those memories susceptible to distortion. The mere act of retrieving a memory “promote[s] encoding and storage of the *retrieval event* itself”—creating opportunities for the mind to blend aspects of the retrieval process with the encoded, consolidated, and stored stimuli from past events. See Bridge & Paller, *supra*, at 12149 (emphasis added); see also Linda A. Henkel, *Erroneous Memories Arising from Repeated Attempts to Remember*, 50 J. MEMORY & LANGUAGE 26, 44 (2004). Retrieval can fundamentally alter a memory, which has led to the conclusion that “memories are not fixed entities but are instead a dynamic process for updating memories.” Jonathan L.C. Lee et al., *An Update on Memory Reconsolidation Updating*, 21 TRENDS COGNITIVE SCIS. 531, 531 (2017).

III. POPULAR MYTHS ABOUT MEMORY, OVERCONFIDENT WITNESSES, AND THE UNRELIABLE AND EFFECTIVELY UNTESTABLE NATURE OF POST-HYPNOTIC RECOLLECTIONS SHOULD PRECLUDE FORENSIC USE OF HYPNOSIS, ESPECIALLY BY LAW ENFORCEMENT.

The fragile and reconstructive reality of memory explodes the myth of a video recorder in the brain, just waiting for someone to push “play” to access a documentary of past events. Yet the video view of memory retains traction among the general public and too often infects criminal investigations and prosecutions in multiple respects.

Expectancies about memory—even if misguided—shape how an eyewitness responds to hypnosis, how that eyewitness testifies about post-hypnosis recollections, and how that testimony is perceived in court. For example, an eyewitness who testifies about hypnotically elicited recollections she believes she “watched” while hypnotized may exude heightened confidence that in turn persuades jurors to trust her testimony. And if jurors expect memory to function like a documentary that the confident witness watched during hypnosis, that testimony’s impact grows. Plus, if opposing counsel is then unable to expose the inaccuracy or falsity of the testimony due to the witness’s memory hardening and overconfidence, the testimony may become all but conclusive—even if it does not reflect the truth. And if law enforcement conducts the underlying hypnosis session, further expectancy distortions ripple throughout the case. The

stakes are too great to allow forensic use of hypnotically elicited memories that are unreliable yet profoundly impactful on a jury.

A. Erroneous Expectancies About Memory And Witness Confidence Skew The Impact Of Post-Hypnosis Testimony That May Be Distorted Or False.

Although the video-recorder theory of memory has been thoroughly discredited in the scientific community, that myth retains popular traction. In a survey published in 2011, 63% of respondents agreed that “[h]uman memory works like a video camera, accurately recording the events we see and hear so that we can review and inspect them later.” Simons & Chabris, *supra*, at 1, 3 tbl.2. Similarly, 66.7% of undergraduate students responding to a 2014 survey agreed that “[m]emory of everything experienced is stored permanently in the brain,” with 44.6% further believing that “[h]ypnosis can accurately retrieve memories that previously were not known to the person.” Lawrence Patihis et al., *Are the “Memory Wars” Over? A Scientist-Practitioner Gap in Beliefs About Repressed Memory*, 25 PSYCH. SCI. 519, 521 tbl.1 (2014).

As a result, eyewitnesses to a crime who do not recall details about the event may, like many people, be under the mistaken impression that hypnosis will uncover objectively truthful images stored safely in the recesses of the mind. And that “expectancy” can have

a dramatic impact on a witness's retrieval efforts. *Cf.* Edward R. Hirt et al., *Expectancy Effects in Reconstructive Memory: When The Past is Just What We Expected*, in *TRUTH IN MEMORY* 62, 83 (Steven Jay Lynn & Kevin M. McConkey eds., 1998) (discussing expectancy effects on memory retrieval generally).

Subjects who view hypnosis as some sort of truth pill develop a more “lax criterion” for recollections reported to the hypnotist, “giving . . . additional details about which [subjects] were previously unsure, resulting in increases in incorrect information.” Graham F. Wagstaff et al., *Reducing and Reversing Pseudomemories with Hypnosis*, 25 *CONTEMP. HYPNOSIS* 178, 179 (2008). Thus, while hypnosis may increase the “quantity of information” a subject reports, that additional information “consists of both new accurate *and inaccurate* material.” Emily Carota Orne et al., *supra* at 355 (emphasis added); *see also* Graham F. Wagstaff, *Hypnotically Induced Testimony*, in *ANALYSING WITNESS TESTIMONY: A GUIDE FOR LEGAL PRACTITIONERS AND OTHER PROFESSIONALS* 162, 166 (Anthony Heaton-Armstrong et al. eds., 1999) (discussing “a fairly overwhelming body of experimental evidence” that hypnosis does not improve subjects’ memory *accuracy*). Moreover, when a subject believes that memory is a video recording and hypnosis is a truth pill, that subject is likely not only to disclose additional, partially—or wholly—

inaccurate details, but also to believe them with heightened confidence. See Lynn et al., *Stuff of Experience, supra*, at 171-72.

Whereas positive expectancies about hypnosis in psychotherapy may yield beneficial outcomes regarding chronic pain, anxiety, or addiction,¹¹ expectancies that hypnosis produces accurate memories pose grave dangers when imported into a forensic setting. See Emily Carota Orne et al., *supra*, at 366 (cautioning against use of hypnosis in contexts where “the truth value of the material is important”). First, a direct correlation exists between the confidence of a testifying witness and a jury’s willingness to accept as true the information described by that witness. Second, traditional cross-examination techniques designed to expose inconsistencies and false aspects of a witness’s testimony can be ineffective when that testimony consists of unnaturally hardened, post-hypnosis memories.

First, juries assign significance to witness confidence. In eyewitness identification cases, a witness’s confidence in her testimony is an important factor in convincing jurors that the witness correctly identified a culprit. See R. C. L. Lindsay et al., *Can People Detect Eyewitness-Identification Accuracy Within and Across Situations?*, 66 J. APPLIED PSYCH. 79, 86-87 (1981). Indeed, a witness’s confidence can lead jurors

¹¹ For an in-depth discussion of medical applications of hypnosis, see generally HANDBOOK OF MEDICAL AND PSYCHOLOGICAL HYPNOSIS: FOUNDATIONS, APPLICATIONS, AND PROFESSIONAL ISSUES (Gary R. Elkins ed., 2017).

into “overbelieving” a witness’s identification of a defendant, even when that witness’s testimony is inaccurate. *See id.*

Studies support this notion. For example, a 2009 study found that 37.1% of the general public agreed with the statement: “In my opinion, the testimony of one confident eyewitness should be enough evidence to convict a defendant of a crime.” *See* Simons & Chabris, *supra*, at 1-3 & tbl.2. All experts, faculty researchers, and graduate students involved in this study disagreed with that statement. *Id.* The upshot is that jurors are likely to believe a witness who testifies confidently—even when the testimony consists of a hypnotically induced, false memory. Moreover, if jurors buy into the myth that memory is a video recording and hypnosis is a truth pill, they are already predisposed to believe that a witness’s inherently unreliable, post-hypnosis recollections offer actual snapshots of objective truth.

Second, cross-examination has proven ineffective at exposing and counteracting overconfidence and popular myths about memory. By the time of trial, a false memory elicited through hypnosis will have “hardened.” Paterline, *supra*, at 6. Hypnosis “generally fixes one particular version of the testimony in the witness’s mind which is then faithfully and reliably reproduced every time.” Martin T. Orne, *The Use and Misuse of Hypnosis in Court*, 3 CRIME & JUST. 61, 94 (1981) [hereinafter Orne, 1981 *Use and Misuse*]; *see also* Paterline, *supra*, at 6.

Even if the witness is someone “whose credibility would easily have been destroyed by cross-examination” prior to hypnosis, that same witness, after hypnosis, may be “impervious to such efforts.” Orne, 1981 *Use and Misuse*, *supra*, at 94; *see also* Paterline, *supra*, at 6. Thus, a witness’s unwarranted confidence in a false version of events may “render[] cross-examination largely ineffective.” *Moore*, 902 A.2d at 1221.

If a witness’s undue confidence renders cross-examination ineffective, that witness’s testimony will seem unassailably authentic—providing just the type of evidence most likely to sway a jury. *See* Paterline, *supra*, at 6; Lindsay et al., *supra*, at 79, 86-87. Accordingly, there is a grave danger that unreliable, post-hypnotic recollections will drive the narrative of a prosecution yet be impervious to techniques that would have exposed flawed testimony but for the unwarranted confidence boost provided by hypnosis.

B. Expectancies May Cause Further Distortions When Hypnosis Involves Law Enforcement.

Conducting hypnosis in a law-enforcement setting heightens the risk of distorted and false memories that already inheres in any hypnosis session. Subjects may feel the need to please the hypnotist and be helpful, *see* Orne, 1981 *Use and Misuse*, *supra*, at 83, especially if their recollections may be key to convicting a defendant or furthering a criminal

investigation. A hypnotist's use of positive reinforcement—for example, interjecting phrases like “Good,” “Fine,” and “You are doing well”—can shape what the subject reports,” *id.* at 83-84, “particularly in a police interrogation situation.” *Id.* at 83. Once the hypnotist stops reassuring the subject, the subject may wonder what went wrong and seek to be helpful again. *See id.* at 83-84. “It requires only a modest decrease in the level of support to alter subjects’ behavior” and cause subjects to try to regain the interrogator’s approval. *See id.* That is a dangerous dynamic when fragile memories—and an accused’s liberty—are both at stake.

“[T]he more an eyewitness is questioned about details, the more details will be obtained—but with a marked decrease in accuracy.” *Id.* at 76-77. This phenomenon occurs even with non-hypnotized eyewitness, *id.* at 77, but hypnosis offers additional opportunities for distortion. And this may even happen inadvertently when the interrogator knows some information about the event in question. *See id.* at 79-80. For example, an interrogator who knows that two shots rang out at a certain time on a certain date might ask whether the witness heard anything—particularly loud noises—at the precise moment shots, in fact, were fired. *Id.* And that question may be enough for the “responsive hypnotized subject to create the desired ‘memories.’” *Id.* Moreover, when a hypnotized subject receives validation for case-specific details she reports, that builds precisely

the type of overconfidence that often renders cross-examination ineffective at trial. *See id.* at 84, 94. In many respects, therefore, law-enforcement involvement may further skew the already unreliable information hypnosis produces.

The results are particularly problematic when the interrogator overtly encourages a subject to embrace the video-recorder fiction. *See id.* at 81-82 (This “objective” viewing approach to hypnosis “maximizes the potential input of the hypnotist about what is wanted, making it even more likely that the subject’s memories will more closely resemble the hypnotist’s prior conceptions.”). In petitioner’s case, for example, the State’s sole eyewitness was told by the law-enforcement officer who conducted the hypnosis session to imagine her “very own special theater” with a remote control she could use to press “play” and see a “documentary” of the “film of the events” that occurred on the day in question. *See* Pet. 8 (quoting Pet. App. C102-04). Those directives to view hypnosis as a private screening of the contents of a witness’s mind flatly contradict scientific reality and decades of research establishing that hypnosis cannot reliably resolve errors or gaps in memory formation and instead invites new distortions that may result from the act of memory retrieval.



CONCLUSION

The petition for a writ of certiorari should be granted.

Respectfully submitted,

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EXHIBIT 13

No. 20-5923

IN THE
Supreme Court of the United States

CHARLES DON FLORES,
Petitioner,

v.

TEXAS,
Respondent.

On Petition for a Writ of Certiorari
To the Texas Court of Criminal Appeals

BRIEF OF THE INNOCENCE PROJECT
AS AMICUS CURIAE
IN SUPPORT OF PETITIONER

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INTERESTS OF AMICUS CURIAE¹

The Innocence Project, Inc. is a nonprofit organization dedicated to providing pro bono legal and related investigative services to indigent prisoners whose actual innocence may be established through post-conviction DNA evidence. The Innocence Project also seeks to prevent future wrongful convictions by researching their causes and pursuing legal, legislative, and administrative reform initiatives designed to enhance the truth-seeking functions of the criminal justice system. To date, the work of the Innocence Project and affiliated organizations has led to the exoneration of 375 individuals by post-conviction DNA testing—21 of whom had been sentenced to death.

The Innocence Project's efforts are particularly critical in the area of eyewitness evidence. Eyewitness misidentification has played a role in 69% of wrongful convictions identified through post-conviction DNA testing nationally—making it the leading contributing cause of these wrongful convictions. *See DNA Exonerations in the United States*, Innocence Project, <https://www.innocenceproject.org/dna-exonerations-in-the-united-states> (last visited Oct. 10, 2020). This

¹ Pursuant to Supreme Court Rule 37.2(a), counsel of record for both parties received notice of *amicus curiae's* intention to file this brief at least 10 days prior to the due date. Counsel of record for petitioner and respondent have consented to the filing of this brief. No party authored this brief in whole or in part, no fee has been paid or will be paid for preparing this brief, and no person or entity other than *amicus curiae* and its counsel made any monetary contribution to the preparation or submission of this brief.

pattern holds true in Texas: of 69 DNA exonerations in the state, 50 involved eyewitness misidentification. *See* Exoneration Detail List, National Registry of Exonerations, <https://www.law.umich.edu/special/exoneration/Pages/detailist.aspx>. Therefore, the Innocence Project has a compelling interest in ensuring that courts considering eyewitness evidence are informed by accurate scientific research, and that criminal trials reach accurate determinations of guilt and promote justice. Its experience with this issue, and the lessons learned from the DNA exoneration cases, can aid the Court in consideration of the question presented here.

SUMMARY OF ARGUMENT

Eyewitness identification evidence is uniquely compelling to a jury but can be highly unreliable. As such, it has played an outsized role in wrongful convictions. Robust scientific research over the last two decades has identified a number of specific factors that erode the reliability of eyewitness evidence. A troubling number of these factors are present in this case, casting grave doubt on Jill Barganier’s eyewitness identification of Charles Flores, which she made for the first and only time in the suggestive courtroom environment, more than a year after the crime. The use of hypnosis—a discredited and highly suggestive method of eliciting identification evidence—compounded these doubts.

First, Barganier’s ability to form a strong memory of what she saw outside her house was necessarily limited by critical factors such as poor lighting, significant

distance—all the way across her house and past the driveway—and the limited time she had to observe the incident. Second, the record establishes that, by the time she testified at trial, Barganier had been exposed to contaminating information—including a photograph of Flores in the newspaper—that discernibly influenced and changed her account of what she had seen. Third, the law enforcement officers investigating this case used a number of highly suggestive identification practices, including hypnosis, that contaminate eyewitness memory. These factors interacted with each other to significantly erode the reliability of Flores' identification—a situation made all the more troubling because Barganier was the sole eyewitness placing Flores near the crime scene.

For all these reasons, this Court should grant certiorari and address the fundamental lack of reliability of hypnotically enhanced eyewitness identifications.

ARGUMENT

THE USE OF HYPNOSIS, A HIGHLY SUGGESTIVE AND DISCREDITED METHOD OF SOLICITING IDENTIFICATION EVIDENCE, COMPOUNDED THE ALREADY-SEVERE RISK OF MISIDENTIFICATION IN THIS CASE.

A. Poor Encoding Conditions

The conditions under which Barganier supposedly observed the incident weakened her ability to make an accurate identification.

The quality and reliability of an eyewitness identification “critically depends on the conditions in which the criminal was observed,” also known as the “encoding” conditions. Marloes de Jong et al., *Familiar Face Recognition as a Function of Distance and Illumination: A Practical Tool for Use in the Courtroom*, 11 *Psychol., Crime & L.* 87, 87 (2005); Ryan J. Fitzgerald et al., *Change Detection Inflates Confidence on a Subsequent Recognition Task*, 19 *Memory* 879, 879-80 (2011). The ability to accurately observe visual details is profoundly affected by encoding conditions, which include lighting, distance, and duration of observation. For that reason, the circumstances under which an eyewitness observes the perpetrator of a crime heavily influences the accuracy of her identifications.

Memory does not function like “a videotape, accurately and thoroughly capturing and reproducing” an image—rather, “[m]emory is . . . a constructive, dynamic” process. *Commonwealth v. Gomes*, 22 N.E.3d 897, 911 (Mass. 2015) (quotation marks omitted). In other words, the fidelity of our memory may be compromised by many factors, including encoding conditions. Without realizing it, we regularly perceive events in a biased manner and subsequently forget, reconstruct, and distort the things we believe to be true. National Research Council, *Identifying the Culprit: Assessing Eyewitness Identification* 60 (2014) (hereinafter “*Identifying the Culprit*”); see also *State v. Henderson*, 27 A.3d 872, 894-95 (N.J. 2011) (“[R]etained memory can be unknowingly contaminated by post-event information.” (quotation marks omitted)).

The encoding conditions during Barganier's purported observation of Flores were particularly poor. Barganier was inside her home before sunrise when she saw two men in her neighbor's driveway on the other side of her house, past a grassy area. There were no streetlights and she had no reason to pay any particular attention to the men. Scientific studies have established "a systematic decrease of [facial] recognition performance" with decreasing illumination. de Jong et al., *Familiar Face Recognition as a Function of Distance and Illumination*, 11 Psychol., Crime & L. at 87. And researchers have found a "steep drop" in facial recognition of *familiar* faces beginning at a distance of forty feet. *Id.* at 95. Indeed, those same researchers concluded that low light and distance were each sufficient to render a recognition unreliable, even for familiar faces. *Id.* Barganier's observation took place in low light, and at a distance that would strain an individual's ability to identify a familiar face—much less an unfamiliar one.

In addition, Barganier's focus was not on the men's faces, further weakening her ability to make an identification. Instead, Barganier's first statement to the police focused heavily on the beer bottle that the driver was holding. Scientific literature confirms that an eyewitness's focus on unusual objects decreases the accuracy of image details falling outside that focus. Because memory is a finite resource, focusing on an unusual car or an object being held by a person results in less accurate memory of visual features of everything else. Gary L. Wells & Deah S. Quinlivan, *Suggestive*

Eyewitness Identification Procedures and the Supreme Court's Reliability Test in Light of Eyewitness Science: 30 Years Later, 33 L. & Hum. Behav. 1, 10-11 (2008); Kerri L. Pickel, *Remembering and Identifying Menacing Perpetrators: Exposure to Violence and the Weapon Focus Effect*, in 2 *The Handbook of Eyewitness Psychology: Memory for People* 339, 353-54 (R.C.L. Lindsay et al. eds., 2007).

The fact that Barganier observed two men—and only for a short time—also limited her ability to form an accurate memory. Memory for an unfamiliar face is severely reduced if it is seen alongside a second person. *See, e.g.*, Ahmed M. Megreya & A. Mike Burton, *Recognising Faces Seen Alone or With Others: When Two Heads Are Worse Than One*, 20 *Applied Cognitive Psychol.* 957 (2006). And observations of short duration—as Barganier's was—also tend to result in less accurate identifications. Brian H. Bornstein et al., *Effects of Exposure Time and Cognitive Operations on Facial Identification Accuracy: A Meta-Analysis of Two Variables Associated with Initial Memory Strength*, 18 *Psychol., Crime & L.* 473 (2012).

In combination, these factors make it highly likely that Barganier's initial encoding was too weak to produce a reliable identification—as was the case in a large majority of the first 250 DNA exonerations that involved eyewitness misidentifications. *See* Brandon L. Garrett, *Convicting the Innocent* 70 (2011).

B. Indications of Memory Contamination by External Information

Poor encoding conditions not only render one's original memory weak, but also have cascading effects through the entire process of storing and retrieving that memory, as they are especially susceptible to contamination.

Over thirteen months passed between when Barganier purportedly saw Flores and when she identified him for the first and only time. The passage of time alone would cast significant doubt on her identification, as memories fade with time and do not improve. *See Henderson*, 27 A.3d at 907; *accord Identifying the Culprit* at 65; *see also* Kenneth A. Deffenbacher et al., *Forgetting the Once-Seen Face: Estimating the Strength of an Eyewitness's Memory Representation*, 14 J. Experimental Psychol.: Applied 139, 148 (2008).

Even more significantly, over the course of those thirteen months, Barganier was exposed to a significant amount of contaminating information. Not only was she subjected to a number of suggestive police practices (described in detail below), she also saw Flores' photograph in the news between her purported observation of him and her identification.

Indeed, there is evidence that Barganier's memory was, in fact, contaminated. For example, her initial description of the passenger did not match Flores—she first said that the passenger was a white male with

longer, darker hair, while Flores was a Latinx male with closely cropped hair. Unsurprisingly, studies have shown that the greater the mismatch between a witness's description and the person they ultimately identify, the greater the likelihood of an inaccurate identification. See Christian A. Meissner et al., *A Theoretical Review and Meta-Analysis of the Description-Identification Relationship in Memory for Faces*, 20 Eur. J. Cognitive Psychol. 414, 431, 435 (2008). A study of 250 DNA-based exonerations showed that over 60% of the cases involving eyewitness misidentifications involved a substantial disparity between the eyewitness's description and the defendant, highlighting the real risk of evolving, potentially contaminated descriptions. Garrett, *Convicting the Innocent* at 68-69.

The contamination of Barganier's memory is also apparent in her evolving description of the perpetrators' car. A few hours after the crime, when her memory was at its freshest, she told the police that the car she saw outside her house was yellow. By the time she testified at trial, she told the jury that it "was like purple and pink and divided by like waves"—echoing the description of the car that had appeared in a police bulletin and the Dallas Morning News. This dramatic shift demonstrates Barganier's incorporation of outside details into her own memory.

C. Suggestive Identification Proceedings, Compounded by a Police-Led Hypnosis Session

Suggestive identification procedures have the power to influence what an eyewitness believes she has seen. And poorly encoded memories are especially susceptible to deterioration and revision under such procedures. *See Identifying the Culprit* at 63; *see also* Thomas D. Albright, *Why Eyewitnesses Fail*, 114 Proc. Nat'l Acad. Sci. 7758, 7761 (2017). A procedure that pressures an eyewitness to make an identification or cues the eyewitness as to the identity of the suspect is likely to influence the outcome of the procedure and therefore produce unreliable evidence. Wells & Quinlivan, *Suggestive Eyewitness Identification Procedures and the Supreme Court's Reliability Test in Light of Eyewitness Science*, 33 L. & Hum. Behav. at 6.

Recognizing the grave risk posted by suggestive identification procedures, state law enforcement systems and courts around the country have embraced scientifically sound approaches to eliciting eyewitness evidence. The Texas Legislature, for example, has required that law enforcement agencies adopt standard identification procedures, including blind administration where practicable, as well as the use of fairly composed photo arrays. *See* Tex. Code Crim. Proc. art. 38.20; Law Enf. Mgmt. Inst. of Tex., Model Policy on Eyewitness Identification, http://www.lemionline.org/resources/documents/ewid_final.pdf (hereinafter "Texas Model Policy"). The identification procedures used in this case deviated sharply from these scientifically supported

protocols, significantly elevating the risk of misidentification. The procedures' major defects are addressed in turn below.

1. Hypnosis

The hypnosis session to which Barganier was subjected just before seeing pictures of Flores created a serious risk of memory contamination and magnified the contaminating impact of the flawed identification procedures that followed. Hypnosis as a memory retrieval tool is deeply prone to suggestion and, therefore, error. Since Flores' trial in 1999, it has been thoroughly discredited by empirical research as a pretrial procedure and abandoned by at least 27 jurisdictions as untrustworthy. Transcript of Record (Vol. 6) at 117, *Ex parte Charles Don Flores* (2017) (Writ No. W98-02133-N).

Critically, attempts to use hypnosis as a memory retrieval tool are based on the misconception that memory works like a video recorder that can be played back. In reality, a hypnotized witness can be led to believe that he or she has accessed a memory that in fact never existed or is contaminated with false details. See Scott Lilienfeld et al., *Myth #12: Hypnosis is Useful for Retrieving Memories of Forgotten Events*, in *50 Great Myths of Popular Psychology: Shattering Widespread Myths and Misconceptions About Human Behavior* 69 (2d ed. 2010); Jeffrey S. Neuschatz et al., *Hypnosis and Memory Illusions: An Investigation Using the Deese/Roediger and McDermott Paradigm*, 22 *Imagination, Cognition, & Personality* 3 (2003); Elisa

Krackow et al., *The Death of Princess Diana: The Effects of Memory Enhancement Procedures on Flashbulb Memories*, 25 *Imagination, Cognition, & Personality* 197 (2006). For example, merely suggesting answers in questions can lead subjects to come to “remember” things that they did not actually see. See, e.g., Elizabeth F. Loftus, *Planting Misinformation in the Human Mind: A 30-Year Investigation of the Malleability of Memory*, 12 *Learning & Memory* 361 (2005). This misunderstanding, combined with the witness’s desire to help the investigation and the pressure created by the proceedings to make an identification, renders post-hypnosis eyewitness testimony highly unreliable. Indeed, such testimony has played a role in a number of wrongful convictions. See, e.g., Frederick Clay, National Registry of Exonerations, <https://www.law.umich.edu/special/exoneration/Pages/casedetail.aspx?caseid=5187>; Lesly Jean, National Registry of Exonerations, <https://www.law.umich.edu/special/exoneration/Pages/casedetail.aspx?caseid=3324>.

Moreover, during hypnosis, the witness is typically asked to imagine things, which in turn increases the risk that the witness will incorporate and believe imagined details to be part of their true memory. This process also artificially inflates the confidence level of the witness, because false memories can be as vivid as real memories, and there is no easy way to distinguish between the two. See Steven J. Lynn et al., *Hypnosis and Memory in the Forensic Context*, Wiley Encyclopedia of Forensic Science (2015); Alan Scoboria et al., *Effects of Misleading Questions and Hypnotic Memory Suggestion on Memory Reports: A Signal Detection*

Analysis, 54 Int'l J. Clinical & Experimental Hypnosis 340 (2006); Alan Scoboria et al., *Immediate and Persistent Effects of Misleading Questions and Hypnosis on Memory Reports*, 8 J. Experimental Psychol. 26 (2002); *Identifying the Culprit* at 63.

The hypnosis session conducted by law enforcement rendered Barganier highly suggestible as a witness. Most concerningly, the police officer who conducted the hypnosis session asked Barganier questions that included details about Flores' appearance that were not part of Barganier's original description of the passenger or her responses to questions during the hypnosis session. For example, the officer asked, "[d]oes [the passenger] have [his hair] neatly cut or is it trimmed?" (like Flores), even after Barganier had already described his hair as "[a] lot like his friend's," "[d]ark, long," and "dirty." In sum, this procedure not only falsely created the impression that hypnosis would enhance Barganier's ability to recall forgotten events, but also supplied her with a critical piece of information that contributed to her evolving memory of the incident and eventually steered her towards Flores.

2. Use of Multiple Proceedings

The suggestibility created by the hypnosis session compounded severe problems with the other identification procedures that were then used and were themselves unduly suggestive.

One such problem was Barganier's repeated exposure to Flores by both law enforcement and other

sources. Research has shown that exposing an eyewitness to the same suspect multiple times over the course of an investigation confuses the witness and adversely affects the reliability of her identification. This is because people often have difficulty discerning the source of their memory. When a witness has viewed a suspect in contexts other than the incident that he or she is trying to remember, the witness may not be able to determine where her familiarity comes from—or, worse, may mistakenly believe that her familiarity comes from the incident, rather than one of the later viewings. *State v. Lawson*, 291 P.3d 673, 686-87 (Or. 2012); *Henderson*, 27 A.3d at 900. Witnesses who have been exposed to an innocent suspect’s mugshot, for example, are likely to misidentify the suspect as the perpetrator. Kenneth A. Deffenbacher et al., *Mugshot Exposure Effects: Retroactive Interference, Mugshot Commitment, Source Confusion, and Unconscious Transference*, 30 L. & Hum. Behav. 287 (2006).

Unsurprisingly, this risk increases when the suspect is the only one who appears in multiple proceedings. *Lawson*, 291 P.3d at 708-09; *Henderson*, 27 A.3d at 900-01; Deffenbacher, *Mugshot Exposure Effects*, 30 L. & Hum. Behav. at 299; see also Nancy K. Steblay & Jennifer E. Dysart, *Repeated Eyewitness Identification Procedures with the Same Suspect*, 5 J. Applied Res. Memory & Cognition 284, 285 (2016).

Multiple identification procedures or exposures to the suspect appear with alarming regularity in the DNA exoneration cases. Garrett, *Convicting the Innocent* at 59. In response to this fact and the research cited above,

the Texas Model Policy on eyewitness identifications discourages the use of “multiple identification procedures in which the same witness views the same suspect more than once.” Texas Model Policy at 4.

Here, Barganier was subjected to multiple photographic identification procedures before trial. In her first procedure, she was unable to identify anyone—but because Texas failed to preserve the record of most of the initial lineups, it is unclear whether she was shown Flores’ “mugshot” at that time. After she was hypnotized, she was shown a photographic lineup that included a recent mugshot of Flores, along with five other Latinx men—even though she had never described the passenger as a Latinx male. Once again, Barganier did not identify anyone in the lineup as the passenger. Nonetheless, that mugshot was distributed to the media and appeared in the Dallas Morning News several times, where Barganier saw it at least once. Thus once Barganier made her first and only identification of Flores in court, she had been exposed to Flores at least twice already and potentially multiple other times, further eroding the reliability of that in-court identification and exacerbating the contaminating influence of the hypnosis procedure.

3. Non-Blind Identification Procedures

It is well established that non-blind administration of identification procedures erodes the reliability of any resulting identifications. Scientific research has consistently shown that test subjects are influenced by the expectations of those who perform the tests, and

that witnesses are susceptible to unspoken, often subconscious cues from law enforcement officers during identification proceedings. See, e.g., Ryann M. Haw & Ronald P. Fisher, *Effects of Administrator-Witness Contact on Eyewitness Identification Accuracy*, 89 J. Applied Psychol. 1106, 1110 (2004). A prominent meta-analysis combined the findings of 345 previous studies on blind administration and concluded that in the absence of a blind administrator, individuals typically tailor their responses to meet the expectations of the administrator and that “[t]he overall probability that there is no such thing as interpersonal expectancy effects is near zero.” Robert Rosenthal & Donald B. Rubin, *Interpersonal Expectancy Effects: The First 345 Studies*, 3 Behav. & Brain Sci. 377, 377 (1978).

Blind administrators are especially important for eyewitness identification procedures, as eyewitnesses’ memories are easily contaminated by outside influences. The most likely source of such influence is an identification procedure administrator who is aware of the suspect’s identity, as they may lead the witness (often unintentionally) to choose a particular suspect or provide post-identification feedback to the witness, thus artificially affecting the witness’s confidence in his or her selection and recollection of the original viewing conditions. See L. Garrioch & C.A. Brimacombe, *Lineup Administrators’ Expectations: Their Impact on Eyewitness Confidence*, 25 L. & Hum. Behav. 299 (2001); Mark R. Phillips et al., *Double-Blind Photoarray Administration as a Safeguard Against Investigator Bias*, 84 J. Applied Psychol. 940 (1999).

Relying on this research, law enforcement agencies across the country have mandated the use of blind administration. The Texas Model Policy, for example, states that, “[b]ecause witnesses may be influenced, however unintentionally, by cues from the person administering the procedure, a blind administrator should be used. This can be achieved through the use of a blind procedure or a blinded photo array procedure.” Texas Model Policy at 3. And Article 38.20 of the Texas Code of Criminal Procedure mandates that law enforcement agencies either adopt the model policy, or develop a policy that requires the use, where practicable, of a blind or blinded administrator in a photographic or live lineup identification procedure. Tex. Code Crim. Proc. Art. 38.20 § (3)(c)(2)(E), (F).

In this case, the officer in charge of the investigation conducted every photographic lineup. For the reasons described above, this created a significant risk that the officer drew Barganier’s focus to Flores during those procedures. This not only made the lineups unduly suggestive, but also compounded the improper influence of the hypnosis session and undermined the reliability of Barganier’s ultimate in-court identification by increasing the likelihood of misidentification.

4. Biased Composition of Photographic Lineup

As researchers and courts around the country have noted, the way a photographic lineup is constructed can significantly affect the reliability of an identification: biased lineups are more likely to produce

misidentifications, whereas a properly constructed lineup will test a witness's actual memory, decrease the chance that a witness is simply guessing, and minimize the risk of contaminating the witness's memory. See *Henderson*, 27 A.3d at 898. As the court in *Henderson* noted, "mistaken identifications are more likely to occur when the suspect stands out from other members of a live or photo lineup." *Id.* at 798-98 (citing Roy S. Malpass et al., *Lineup Construction and Lineup Fairness*, in 2 *The Handbook of Eyewitness Psychology: Memory for People* 155, 156 (R.C.L. Lindsay et al. eds., 2007)). When a suspect's photograph stands out in some way from the rest of the lineup, the procedure is effectively guiding the eyewitness towards that suspect. *Lawson*, 291 P.3d at 706. Unsurprisingly, over 33% of the first 250 DNA exonerations that featured eyewitness testimony involved biased lineup procedures. Garrett, *Convicting the Innocent* at 55.

Here, Flores' mugshot was the only picture out of the six photographs that did not have a white strip covering the bottom portion, making it stand out among the other photographs. Meanwhile, despite the fact that Barganier described the passenger as a white male with long hair, all six photographs were of Latinx individuals with short, cropped hair. *Id.* Both of these flaws in the photographic lineup (conducted after Barganier's hypnosis session at which she was provided with information about the suspect's "neatly cut" or "trimmed" hair) guided her towards the suspect—Flores—that the police already had in mind. Notably, Texas law now requires law enforcement agencies to

develop or adopt procedures ensuring that photographs or participants in identification proceedings “are consistent in appearance with the description of the alleged perpetrator” and “do not make the suspect noticeably stand out.” Tex. Code Crim. Proc. Art. 38.20 § (3)(c)(2)(A).

The fact that Barganier failed to identify Flores despite these suggestive procedures is a powerful indicator of Flores’ innocence. As researchers have explained, “non-identifications are not merely ‘failures’ to identify the suspect, but rather carry important information whose value should not be overlooked.” Steven Clark et al., *Regularities in Eyewitness Identification*, 32 L. & Hum. Behav. 187, 211 (2008). Indeed, non-identifications have been shown to be more probative of innocence than identifications are of guilt. R.C.L. Lindsay & Gary L. Wells, *What Price Justice? Exploring the Relationship of Lineup Fairness to Identification Accuracy*, 4 L. & Hum. Behav. 303 (1980). Simply put, the fact that Barganier failed to identify Flores multiple times, despite undergoing highly suggestive identification procedures, including a hypnosis session, is strong evidence that her in-court identification of Flores was mistaken.

5. Suggestive In-Court Identification Procedure

The first and only identification of Flores as one of two men observed near the crime scene took place at trial. For all the reasons discussed above, this identification was unreliable because it was made in the

aftermath of weak encoding conditions, suggestive identification procedures, and exposure to contaminating information. Even apart from that, however, in-court identifications are patently suggestive and unreliable, particularly where the defendant was never previously identified in a properly administered identification procedure.

In-court identifications are suggestive and unreliable for a number of reasons. First, such identification procedures present the eyewitness with only one obvious choice. Second, memory quality tends to dissipate significantly over time, and an in-court identification typically occurs months, sometimes years, after the witnessed event—during which time the witness may well have been exposed to contaminating information. Third, there is significant pressure for a witness to identify the “right” person—i.e., the defendant—in an in-court identification procedure. The “pressure[] to help solve a heinous crime,” the witness’s “eager[ness] to be of assistance,” and a sense of “duty” all make in-court identifications especially unreliable. *United States v. Greene*, 704 F.3d 298, 306 (4th Cir. 2013) (quoting *Smith v. Paderick*, 519 F.2d 70, 75 (4th Cir. 1975)). And fourth, there is no possibility of blind administration at an in-court identification, and witnesses are likely to “regard the defendant’s prosecution as confirmation that the defendant is the ‘right’ person and, as a result, may develop an artificially inflated level of confidence in their in-court identification.” *Commonwealth v. Collins*, 21 N.E.3d 528, 534 (Mass. 2014).

As the Connecticut Supreme Court has explained, it is difficult to “imagine how there could be a more suggestive identification procedure than placing a witness on the stand in open court, confronting the witness with the person who the state has accused of committing the crime, and then asking the witness if he can identify the person who committed the crime.” *State v. Dickson*, 141 A.3d 810, 822-23 (Conn. 2016), *cert. denied*, 137 S. Ct. 2263 (2017). “If this procedure is not suggestive, then *no* procedure is suggestive.” *Id.*

While it is certainly possible for an in-court identification to stem from an actual memory, in-court identifications are more often a result of an error of familiarity because the suspect’s face has been shown in other contexts, such as media coverage or in previous lineup procedures or “simple deduction on the part of the witness,” because the witness could tell who the defendant is in the courtroom. Steblay & Dysart, *Repeated Eyewitness Identification Procedures with the Same Suspect*, 5 J. Applied Res. Memory & Cognition at 287; *see also* *Commonwealth v. Crayton*, 21 N.E.3d 157, 166-67 (Mass. 2014). Researchers have therefore cautioned that “an attempt by an eyewitness to identify the perpetrator in court based on ‘memory of the crime’ should be viewed with skepticism.” Steblay & Dysart, *Repeated Eyewitness Identification Procedures with the Same Suspect*, 5 J. Applied Res. Memory & Cognition at 287. The risk is real: more than half of the first 250 DNA exoneration cases featured an incorrect in-court identification. The Innocence Project, *Courtroom Identifications: Unreliable and Suggestive* (July 14,

2017), <https://www.innocenceproject.org/courtroom-identifications-unreliable-suggestive>.

The in-court identification in this case was especially unreliable because Barganier had never identified Flores before she did so at trial, thirteen months after she saw two men getting out of a car in pre-dawn lighting. Only in court, with Flores seated at defense counsel's table, was Barganier able to identify Flores.

This latent identification had all the hallmarks of unreliability: From the outset, Barganier's memory of the initial sighting was weak, due to the poor encoding conditions. Not only did her memory then erode with time, it was affirmatively contaminated through hypnosis, outside information about Flores' appearance, and suggestive identification procedures. Even so, she failed to identify Flores in a photographic lineup. With no positive identification of Flores before trial, the inherently suggestive in-court identification procedure has essentially no probative value. That a person could be subject to execution on the basis of such unreliable evidence shocks the conscience.

CONCLUSION

For the foregoing reasons, the Innocence Project urges the Court to grant certiorari in this matter, address the fundamental lack of reliability of hypnotically enhanced eyewitness identifications, and remand petitioner's case for further proceedings in accordance with this Court's guidance.

Respectfully submitted,

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October 20, 2020

EXHIBIT 14

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February 18, 2019

State Senator Juan "Chuy" Hinojosa
PO Box 12068
Capitol Building
Austin, Texas 78711

Re: **SB 130**

Dear Senator Hinojosa:

I write to express my concerns regarding SB 130.

I am an attorney licensed to practice in the State of Texas. My bar card number is 10571980. I have been licensed since 1985.

From 1985 until 2000, I was an Assistant District Attorney for Dallas County, Texas. Most of my work in the District Attorney's Office was devoted to serious felony cases. I participated actively in over twelve (12) capital murder trials. I was the lead prosecutor in the State's case against Charles Don Flores. At trial, I was assisted by another assistant district attorney, Greg Davis.

I have followed for many years now the continuing efforts of Mr. Flores to contest his sentence and conviction.

Mr. Flores has used many, many and varied different lines of argument in his efforts to overturn his conviction and sentence over many years. The latest line of argument centers around his complaints regarding the fact that one witness requested to be hypnotized in order to help her relax and recall as much information as possible.

I would very much like to correct the intentional misstatement of the facts of the case and trial that is now being stated by Mr. Flores and his attorneys and supporters in order to mislead others and support his efforts to overturn his conviction and sentence.

In furtherance of their efforts to have the conviction/sentence overturned, Mr. Flores and his supporters are erroneously stating that the entire case of the prosecution rested solely upon the testimony of only the one witness who had been hypnotized and that after hypnosis the witness changed her story.

The characterization of the case by Flores and his supports above is completely false and intentionally extremely misleading.

The truth of the matter is that the State of Texas had ample evidence independent of the one witness to convict Mr. Flores of capital murder. Further, the witness in question never changed any of her testimony.

The fact that there was ample independent evidence to convict Mr. Flores of capital murder was fully addressed and recited in Judge Hector Garcia's Findings of Fact and Conclusions of Law delivered on October 3, 2018. I AM ENCLOSING A COPY OF THIS DOCUMENT FOR YOUR REVIEW.

Please see the section titled "Evidence Supporting Applicant's Guilt Absent Barganier's Identification that begins on page 60 of the above-referenced Court document.

You don't have to take my word for what actually transpired at the trial- you can read for yourself in the Court's document referenced above that ample independent evidence was presented that would have convicted Mr. Flores for this crime. If anyone reads or knows the true facts of this case, they will see that there is more than ample independent evidence of the guilt of Mr. Flores.

Among the items listed as evidence supporting the guilt of Flores in the above-referenced document:

1. There were 4-5 independent witnesses that placed Flores in the distinctive Volkswagen and with co-defendant Childs up to minutes before the crime. These witnesses described a drug deal involving Flores and the fact that Flores wanted more money that he learned was located at the victim's home;
2. Several more witnesses saw the same distinctive Volkswagen at the crime scene;
3. Several more witnesses saw that two men exited the distinctive Volkswagen at the crime scene. These men were dressed consistent with how several witnesses saw Flores dressed immediately before the murder;
4. **Mr. Flores himself confessed to his armed presence and participation in the robbery and murder scene to multiple witnesses!**
5. After the murder, Flores was witnessed destroying (burning) the distinctive Volkswagen. Flores fled from the witness and shot a gun at the witness!
6. Flores fled from authorities in an effort to avoid apprehension on multiple occasions;
7. Flores fled to Mexico shortly after the murder;
8. While returning from Mexico, Flores had a physical fight with two police officers in Kyle Texas and used a false identification in order to avoid apprehension;
9. Flores led FBI on a dangerous high-speed chase as described in the Court's document referenced above.

For Flores and his supporters to say that the only evidence in the case was one witness is absurd and intentionally false.

The next-door neighbor never changed her testimony. She was merely having difficulty identifying one of the two men she saw that morning. All of her testimony was fully consistent with all of the other witnesses that saw the distinct vehicle with two distinctly dressed men at the murder scene.

The use of hypnosis in law enforcement can be very valuable. It is important to know that the rules for this type of testimony already require many safeguards in order to be admissible by well-established law. One of the main factors is the existence of corroborating evidence. Here, there was overwhelming corroborating evidence.

To throw out the “baby with the bathwater” by excluding all hypnotically-refreshed testimony might very well result in a miscarriage of justice in the future for a victim/victim’s family.

As you can see by the facts of the Flores case, the hypnosis part of the evidence was merely additional to the mountain of evidence – including confessions- that the State already had to convict Mr. Flores.

If you have any questions or comments, please feel free to contact me any time.

Thank you for your time.

Very truly yours,

/s/ Jason January

Jason January

EXHIBIT 15

Tuned Out

CHARLES SIDERIUS | JANUARY 18, 2001 | 4:00AM

Jason January, a Dallas County special prosecutor until he suddenly and inexplicably quit in October, accumulated some impressive photographs during the last couple of years.

There's the one where January's arm is around Peter Jennings' shoulder at Jennings' ABC News office in New York City and one of January on the set of *Good Morning America*. There's January in a golf shirt with sunglasses hanging from his open collar in a hotel lobby in Tokyo. There he is in Salt Lake City wearing a tuxedo and singing with the Mormon Tabernacle Choir. There he is in Atlanta, in front of an enormous U.S. flag and singing with the Atlanta Symphony Orchestra, at San Francisco's Candlestick Park stadium before thousands of football fans, at Lone Star Park, and entertaining at a True Value Hardware convention.

January is a celebrity in certain circles far outside Dallas, and he was well known as a high-profile prosecutor in Dallas before he quit. That's why his departure from the \$93,000-a-year job left many wondering what happened and whether January's "international quartet champions" barbershop quartet had anything to do with it.

Nobody besides January (especially his old boss, Dallas County District Attorney Bill Hill, who did not return telephone calls) would say publicly why January resigned. But those who know of him say the simple fact is that January abruptly quit because he was more popular on the barbershop quartet circuit than he was among his boss and his peers at the courthouse.



Up Next - Sponsored Content - Justin Simmons reacts to being ranked No. 81 on NFL's Top 100 list



January's departure was surprising because he had worked his way up in the prosecutor's office during the last 15 years, earning a spot among the elite stable of what's known as Dallas County's "super" chief prosecutors. He made a name for himself and often appeared in the media for prosecuting high-profile cases such as the notorious Mi-T-Fine Car Wash murders, which he worked in September just before quitting. In about 18 months before he left, he took part in six death-penalty trials. He did not lose a case.

But sources say January, who is now a personal injury lawyer in private practice in Dallas, rubbed the relatively new Hill the wrong way. January wasn't promoting Hill's office policies and morale among the troops the way Hill (who took office two years ago) wanted, they say. It's said that January talked badly of Hill's administration and was considered "subversive," according to one courthouse source (one of several who asked not to be identified for fear of being seen as subversive). Some said January, who was active in politics, also bothered Hill because he had designs on Hill's job.

January himself concedes he had differences with Hill and that the office morale was "at an all-time low." But, January says, he quit because he had come to the end of the line after 15 years of public service.

"No question, I had some mild philosophical differences with the way that things were running down

there but nothing that stopped me from working with him for a year and a half," he said. "September 15 or so I had crossed the line of 15 years and got my little 15-year pin. At that point, I thought it was time to move on."

When asked what specifically the differences were about, January said, "A lot of it wasn't really spoken because I followed his policies. My job was to be an Indian, which I was. I guess I was not as much a cheerleader for his policies as I should have been, but I certainly followed them."

And then there was Acoustix, January's top-name barbershop quartet that has produced albums and appeared on national television and at major sporting events and is wildly popular among devotees.

Barbershop is a niche in the music business, but the group, which usually sing a cappella, has rabid fans and lists impressive credits among barbershop quartet enthusiasts and in the mainstream. The group, which was the "1990 International Quartet Champions," claims to have had 250 appearances in 37 states and appeared in Europe, Asia, and the Middle East. They've appeared on the *Today Show*, and tracks from their latest album *Stars & Stripes* (whose cover depicts the four singers in Navy dress white uniforms) were featured in in-flight programming on American Airlines jets. The Acoustix rendition of the *Star Spangled Banner* greets American troops tuned into the American military television network in the Far East every day.

But letters from fans, on the Acoustix Web site, speak more to the group's popularity and the enthusiasm of its fans than any list of appearances could.



Greg Thomas of Milbank, S.D., wrote: "Still on a high from seeing Acoustix perform in Fargo Saturday night. I've seen three...quartets in the past six weeks and Acoustix still ranks at the top. Thanks for signing my pic. I will treasure that forever."

The pull of the quartet's obligations may not have been the reason January quit, and it may have been an irritating intrusion at January's office, sources say. Records obtained by the *Dallas Observer* show (and courthouse sources confirm) that while January often put in marathon hours with work-weeks exceeding 50 hours, his concert dates with Acoustix appeared to have had at least some effect on his courthouse face time. In the last couple of years, it was not unusual for January to take a long weekend or vacation day that coincided with Acoustix gigs in distant or local venues. January says his time off was not always for Acoustix and that what he does on his vacation time is his personal business anyway.

"It didn't conflict with anything," he says. "It didn't conflict with any trial at all."

Actually, an Acoustix appearance did conflict at least once. In 1999, during a capital murder trial, January took a vacation day on a Wednesday to travel to New York on Acoustix business. He and his group spent most of the night at a party with Jennings and also working on television spots before boarding a plane for Dallas, where January attended the trial early the next morning.

January concedes the trip took place during the trial but says he missed only a "couple hours" of testimony and that he had gotten approval to go long before the trial started.

"That can sound really bad, 'Oh, he left during a capital murder trial, whooo,'" he says. "The real story is I had it approved, I'm sitting there taking notes like anyone in the audience. My job is done. I missed two hours of testimony. That's it."

January says he had accumulated all of the vacation time he took off.

"Having been there 15 years, I got three weeks of vacation a year, and I had plenty of vacation days to take it," he says. And, he says, his association with Acoustix, his "hobby," had nothing to do with his eventual departure from his courthouse post.

"On occasion I would get a question from someone, 'Hey, how do you have time to be in a great quartet and be a great prosecutor having never lost a murder case' and I'd always answer, 'I sing on the weekend and judges don't typically have trial on the weekends,'" he says. "It worked out fine. I just worked a lot of hours."



EXHIBIT 16

1 Involvement in this Case

2 I was retained by counsel for Charles Flores as a consulting expert. I was asked to assess
3 the scientific validity and reliability of trace analysis results reported by the Dallas County crime
4 laboratory, also known as the “Southwestern Institute of Forensic Sciences” (hereinafter
5 “SWIFS,” or “the laboratory”) that were the subject of testimony by Charles Linch on March 24,
6 1999 in the case *State v. Charles Don Flores*. This declaration provides a summary of my
7 conclusions.

8 The materials that I relied upon for my assessment were provided by counsel. *See* Exhibit
9 2. The records I reviewed included the casefile and report generated during trace analysis of a 44
10 revolver performed by Charles A. Linch, a transcript of Mr. Linch’s trial testimony, and
11 numerous documents related to the lengthy (nearly twenty years), and oft-interrupted SWIFS
12 career of Charles Linch.

13 In my review, I also relied on a report prepared by chemist Raul Guajardo dated June 16,
14 2016. My understanding is that, over the State’s objection, Mr. Guajardo was afforded access on
15 June 1, 2016, to the original microscope “slide 75” prepared and analyzed by Charles Linch on
16 March 23, 1999 and about which he testified under oath at Mr. Flores’s trial on March 24, 1999.
17 That slide remained in the custody of SWIFS.

18 My independent assessment of the work performed by Charles Linch in the Flores case is
19 based on relevant records, the status of quality assurance in forensic science in the United States
20 and in SWIFS during the late 1990s, and on generally accepted standards for testing and forensic
21 laboratories and authoritative scientific publications, including:

22 American Society of Crime Laboratory Directors – Laboratory Accreditation Board
23 (ASCLD-LAB) *Manual*, January 1997

24

1 ISO/IEC Guide 25, Third Edition, 1990, *General Requirements for the Competence of*
2 *Testing and Calibration Laboratories.*

3 ISO/IEC 17025:1999(E), ISO/IEC 17025:2005(E) and ISO/IEC 17025:2017(E), *General*
4 *requirements for the competence of testing and calibration laboratories.* These versions
5 superseded ISO Guide 25; the 2005 and 2017 versions are currently the basis for
6 accreditation of forensic laboratories in the United States.

7 National Research Council, *Strengthening Forensic Science: A Path Forward*, 2009
8 President's Council of Advisors on Science and Technology (PCAST), *Forensic Science*
9 *in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods*,
10 September 2016

11 My assessment in this case was based on the materials available for my review. If additional
12 materials exist, and are made available for review, I reserve the right to edit or add to my
13 opinions.

14
15 Background - Quality Assurance, Then and Now

16 In a testing laboratory, a quality system provides a formal, systematic means of
17 identifying, controlling, and monitoring each of the factors that can affect the reliability of test
18 results. The scope and rigor of a laboratory's quality system should be designed and operated to
19 be commensurate with the intended use of the laboratory's results. When test results will be the
20 basis for consequential decisions, the appropriate level of quality control will necessarily be
21 higher.

22 Accreditation is a voluntary process where a third-party agency assesses a laboratory's
23 systems for compliance with a specific set of published standards. The International
24

1 Organization for Standardization (ISO) issues consensus standards that are the basis for
2 accreditation of testing laboratories (in disciplines ranging from environmental to forensics)
3 throughout the United States and worldwide.

4 In the 1990s (and continuing until 2009), only a minor fraction of the forensic
5 laboratories in the United States opted to pursue accreditation. Those who did typically sought
6 accreditation from a program developed and managed by an organization of forensic laboratory
7 managers: American Society of Crime Laboratory Directors – Laboratory Accreditation Board
8 (ASCLD/LAB). This program required partial compliance with internally-developed standards
9 that were substantially less demanding than ISO standards. The requirements documented in the
10 ASCLD/LAB Manual (described as Essential, Desirable, and Important) were far below
11 international standards, but they reflected the beginning of the forensic community’s gradual
12 acceptance of the scientific consensus for a laboratory to demonstrate competency.

13 For decades, accreditation and mandatory adherence to international consensus standards
14 have been *de rigueur* in the laboratory testing industry. In contrast, forensic laboratories have
15 been slow to implement universally accepted quality systems. In the late 1990s, most forensic
16 laboratories in the United States lacked formal quality assurance programs that effectively
17 controlled the analytical process. Even well-funded, high-visibility programs like the FBI
18 laboratory were not accredited and lacked efficacious quality systems (U.S. Department of
19 Justice Office of the Inspector General, *The FBI Laboratory: An Investigation into Laboratory*
20 *Practices and Alleged Misconduct in Explosives-Related and Other Cases, April 1997*).

21 In 1999, at the time Mr. Lynch was performing trace analysis in the Flores case, SWIFS
22 had never been accredited; the laboratory was first accredited to ISO/IEC 17025 in 2003. During
23 the period Lynch was employed by SWIFS, the laboratory lacked an effective quality system. In
24

1 addition to the lack of independent oversight and mandatory proficiency testing, activities were
2 deficient in three important areas that directly and significantly affected the trace analysis testing
3 performed in Mr. Flores's case: validation, impartiality, and recordkeeping.

4 Validation is the formal process through which scientists determine the suitability of an
5 analytical method for providing useful test information. A validation study collects empirical
6 results to evaluate whether or not a specific analytical method is appropriate for its intended use.
7 The performance characteristics (e.g., accuracy and specificity) and error rates of a method are
8 experimentally determined during a validation study. The determination of whether a result from
9 a given method is usable or not depends on specifically what question(s) the test result is
10 expected to answer (The Fitness for Purpose of Analytical Methods, 2nd Edition, Eurachem,
11 2014).

12 Within the scientific community, it is generally accepted that a test method must have
13 been successfully validated prior to its use for analysis of unknowns. Since at least 1990,
14 international consensus standards for testing laboratories (ISO Guide 25, 1990) have mandated
15 the validation of test methods that are used to test unknown samples. The ISO standard in effect
16 at the time of the subject testing (ISO/IEC 17025:1999) specifically states:

17 5.4.5.1 Validation is the confirmation by examination and the provision of objective
18 evidence that the particular requirements for a specific intended use are fulfilled.

19 5.4.5.2 The laboratory shall validate non-standard methods, laboratory-
20 designed/developed methods, standard methods used outside their intended scope, and
21 amplifications and modifications of standard methods to confirm that the methods are fit
22 for the intended use. The validation shall be as extensive as is necessary to meet the
23 needs of the given application or field of application. The laboratory shall record the
24

1 results obtained, the procedure used for the validation, and a statement as to whether the
2 method is fit for the intended use.

3 Even the early version of the ASCLD-LAB forensic accreditation program (Manual,
4 1997) had an Essential Requirement (i.e., 100% compliance was required) for procedures to be
5 thoroughly tested using known samples to demonstrate their efficacy prior to use of the
6 procedure for casework.

7 Since the 1990s, the forensic science community in the United States has steadily been
8 making progress toward validation of traditional analytical methods that rely on instrumental
9 methods of analysis (e.g., methods based on analytical chemistry, such as controlled substance
10 testing). However, validation of feature-comparison methods has been markedly slower; many of
11 these methods have yet to be validated. Rather than using quantitative instrumental
12 measurements, feature-comparison methods rely on an analyst's subjective evaluation of patterns
13 to determine whether an evidentiary sample and a known sample are or could be from a common
14 source.

15 In its report regarding the validity of feature-comparison methods, the President's
16 Council of Advisors on Science and Technology (PCAST, 2016) stated:

17 "Without appropriate estimates of accuracy, an examiner's statement that two samples
18 are similar – or even indistinguishable – is scientifically meaningless: it has no probative
19 value, and considerable potential for prejudicial impact. Nothing – not training, personal
20 experience nor professional practices – can substitute for adequate empirical
21 demonstration of accuracy."

22 It is a foundational premise of the scientific process that methods and results must be
23 reproducible. To be reproducible, scientific methods and results must not only be objective, they
24

1 must also be accurately and completely documented. Contemporaneously generated permanent
2 records provide the information that is essential for an independent scientist to assess the rigor
3 and reliability of the testing process, as well as the information necessary for the subject testing
4 to be repeated under comparable conditions. A laboratory's records and documents should
5 enable an independent party to understand and evaluate the entire analytical process in a given
6 case. The supporting records should provide an auditable trail of the specific actions, conditions,
7 results, and decisions that gave rise to a particular result.

8 ISO/IEC 17025:1999: "The laboratory shall retain records of original observations, ...
9 and sufficient information to establish an audit trail... The records for each test ... shall
10 contain sufficient information to facilitate, if possible, identification of factors affecting
11 the uncertainty and to enable the test... to be repeated under conditions as close as
12 possible to the original."

13 Test methods and results can only be reproducible if the testing process is conducted in
14 an objective manner. To the extent possible this means that scientific methods should not be
15 influenced by factors such as individual perspectives, personal values, innate or learned biases,
16 and personal or institutional interests. The importance of objectivity within the context of a
17 testing laboratory has been formally recognized in consensus standards for decades. For many
18 years, standards have directly addressed the need to prevent conflicts of interest and ensure the
19 impartiality of laboratory activities.

20 ISO Guide 25:1990: "The laboratory shall have arrangements to ensure that its personnel
21 are free from any commercial, financial and other pressures which might adversely affect
22 the quality of their work." "The laboratory shall be organized in such a way that
23 confidence in its independence of judgement and integrity is maintained at all times."
24

1 ISO 17025:1999: "...it should be able to demonstrate that it is impartial and that it and its
2 personnel are free from any undue commercial, financial and other pressures which might
3 influence their technical judgement."

4 Following years in which there were widespread cases of laboratory malfeasance and an
5 increasing body of literature on biases in the sciences, the current edition of ISO/IEC 17025 was
6 published in 2017. It includes a new and significantly expanded section on requirements
7 necessary to ensure the impartiality of laboratory activities.

8 ISO 17025:2017 "The laboratory shall identify risks to its impartiality on an on-going basis. This
9 shall include those risks that arise from its activities, or from its relationships, or from the
10 relationships of its personnel." "If a risk to impartiality is identified, the laboratory shall be able
11 to demonstrate how it eliminates or minimizes such risk."

12 13 Summary of Case Testing and Testimony

14 On March 23, 1999, Charles Linch of SWIFS received a 44 Magnum revolver for trace
15 analysis. In his testimony, Mr. Linch stated that he was asked to "look for any foreign residues
16 that may be on or in the revolver." The "analysis request" field of the evidence submission form
17 for the revolver (item #75) was blank. A record of a phone conversation at 08:25 on March 23,
18 1999 indicated that Jason January, the lead prosecutor in the Flores case, asked Travis Spinder to
19 have the laboratory check the revolver "for potatoes on or inside the barrel." That same day,
20 Linch used a scalpel to remove gray/black powder from grooves inside the barrel. He mounted a
21 xylene suspension of the material on a slide, and analyzed it by polarized light microscopy.
22 Linch's handwritten testing notes (attached as Exhibit 3) consisted of a diagram of three ovals,
23 each with a cross inside, adjacent to an amorphous shape drawn in red ink and labeled as
24

1 “brownish plant material.” The diagram also includes two upright ovals drawn (in red ink) and
2 labeled with characteristic “crossed polars,” and identified as “potatoe (*sic*) starch grains.” The
3 identification as “potatoe starch” was made in red ink, and the “crossed polars” entry was made
4 in blue ink. Linch issued a report dated March 23, 1999 identifying starch grains in the material
5 scraped from the barrel of the revolver.

6 The casefile included six annotated pages (title page and pages 208-212) from The
7 Particle Atlas by C. Walter McCrone and associates from Walter C. McCrone Associates, Inc.
8 On page 209, the entry for arrowroot starch has been manually circled (“This is a sample of West
9 Indian arrowroot starch from *Maranta arundinacea* (St. Vincent, British West Indies”). On page
10 210, under the only photograph of potato starch (#216 “slightly uncrossed polars”), there is a
11 manual notation “fully crossed” along with a drawing of an oval with a clear cross inside.

12 In testimony on March 24, 1999, Mr. Linch described his analytical process and reported
13 “...I saw several particles that are identified as starch grains. They have a very specific
14 appearance under polarized light microscopy.” When asked if he had formed a conclusion as to
15 whether or not the starch grains that he saw from inside the barrel were consistent with potato
16 starch grains, he stated “...in the atlas I referred to, they were most consistent with potato starch
17 grains.”

18 19 Discussion

20 Charles Linch used polarized light microscopy to conclude that starch was present on the
21 evidence from this case. Based on comparison to photomicrographs published in an Atlas, he
22 testified that the starch grains he identified “...were most consistent with potato starch grains.”
23 Microscopy is a well-characterized technique for investigations of trace materials. However,
24

1 there is no evidence that the application of this technique in the analytical method used by Mr.
2 Linch was documented and had been validated for the identification of starch in general, or
3 specifically for potato starch. Through the late 1990s, feature-comparison methods were widely
4 used by forensic laboratories despite the fact that they had never been validated. Linch's records
5 do not include notations for any of the quality control measures necessary in a valid analytical
6 method (e.g., concurrent analysis of known positive and negative controls; replicate tests;
7 correlation of results for different characteristics; participation in proficiency testing). There is
8 no indication that any relevant characteristics (e.g., length of grains, refractive index) were
9 measured, or that a starch indicator stain was used for confirmation of identity.

10 The casefile included copies of atlas pages with annotated micrographs from a variety of
11 starches (attached as Exhibit 4). The limited notations in the record appear to contradict Linch's
12 testimony that the observed grains were "most consistent with potato starch." The entry for
13 Arrowroot Starch has been circled, and the associated photomicrograph ("213C crossed polars")
14 has grains similar to Linch's drawing on the casefile worksheet. On the atlas page for potato
15 starch, there is a photomicrograph of grains titled "216 slightly uncrossed polars." A grain
16 analogous to that on the worksheet and "fully crossed" has been manually entered to the margin.
17 These records indicate that during his analysis, Linch concluded that the evidence sample grains
18 corresponded most closely to Arrowroot starch, and were less consistent with potato starch.

19 Linch's records do not identify the number of starch grains identified, or their location(s)
20 on the slide. In addition to this basic information, his records do not document any of the
21 qualitative identification features that would be expected, including: the number and size range
22 of identified granules; granule surface markings; degree of agglomeration; and the visibility and
23 position of hilum.

24

1 Independent analysis of the #75 slide performed in 2016 revealed a number of significant
2 discrepancies with the work and testimony in 1999. Linch testified that he observed “several”
3 starch grains, including large potato shaped grains, and smaller grains that “could be from other
4 sources, including potato.” Independent analysis of the slide under polarized light by Raul
5 Guajardo revealed only two small starch granules with extinction crosses. No large ovoid starch
6 granules were observed. In addition to this material discrepancy, the independent analysis
7 identified the slide mounting medium as permount (a toluene-based medium), while Linch’s
8 record documented the use of xylene.

9 The analyst’s use of an unvalidated method to generate poorly documented test results
10 that were inconsistent with the analyst’s testimony is particularly troubling in consideration of
11 serious concerns regarding the analyst’s lack of impartiality.

12 At the time he performed the test in Mr. Flores’s case in 1999, Charles Linch was
13 approximately five months from his final departure from the laboratory. His nearly two-decade
14 tenure with the laboratory was fraught with incidents that reflect a difficult and seriously strained
15 relationship between Mr. Linch and the laboratory. Over the years, Linch’s employment status
16 was volatile. He threatened to resign, and withdrew his resignation. On two occasions, Linch
17 was rehired soon after he voluntarily terminated his employment. He complained that he was
18 over-worked and under-paid, and that he was unfairly denied promotion and training
19 opportunities.

20 Throughout 1998 and 1999, the relationship between Charles Linch and laboratory
21 management was strained at best; Linch described it as a hostile work environment. During five
22 months prior to the Flores trial, Linch filed a grievance against his supervisor and was counseled
23 three times about the need to improve relationships and communication. Five days after his
24

1 testimony in the Flores case, Linch prepared a hand-delivered letter requesting appeal of a
2 grievance he had filed alleging unfair treatment by his supervisor, and lack of opportunity for
3 promotion. During the period of the Flores trial, Linch was experiencing considerable stress in
4 his working environment.

5 By his own statements, Linch's personal mental health challenges (severe depression and
6 alcoholism) were exacerbated by his dissatisfaction with the laboratory and his position.

7 Although he felt maligned and ignored by laboratory management, Linch took pride in his work
8 in high profile and capital cases where he had what he described as "a direct role in putting
9 people on death row." Linch valued the positive feedback he received from prosecutors and the
10 media, but he felt ignored, misused, and taken advantage of by laboratory management. This
11 environment posed a significant risk to Linch's impartiality. Cognitive bias influenced Linch's
12 work and his testimony, whether or not he was aware of it (Anal. Chem. 2020, 92, 7998-8004).

13 The specific circumstances that led to Linch's testing and testimony in the Flores case
14 suggest bias and other conditions adverse to obtaining valid and reliable results. The laboratory
15 was contacted by the lead prosecutor on the case during trial. Records reveal that although the
16 requested analysis form for the revolver had been blank when submitted to the laboratory, in a
17 call on March 23, 1999 the prosecutor specifically asked for evidence of potato inside the gun's
18 barrel. The testing was performed and a report was generated that same day, without evidence of
19 review by any other SWIFS employee. See Exhibit 5. The very next day, Linch testified,
20 disclosing only his report, not his underlying notes, which contradict his key finding. Linch's
21 casework was performed under conditions that compromised the objectivity of the entire process.

22
23
24

1 Conclusions

2 The trace analysis performed by Charles Linch on March 23, 1999 used a method that
3 had not been validated for the qualitative identification of potato starch. The testing process was
4 poorly documented on the date of analysis, and subsequent review of the retained evidence
5 revealed significant discrepancies from Linch's recorded observations. In his trial testimony on
6 March 24, 1999, Linch agreed with conclusions proposed by the prosecutor that were not
7 supported by empirical evidence.

8 It is my conclusion that the trace analysis result reported in the Flores case was generated
9 using a subjective and unvalidated method, rendering it unsuitable for forensic use. The
10 inherently subjective nature of the analysis was exacerbated by adverse effects of the
11 laboratory's inefficacious quality system. Trace testing was assigned to an analyst who had not
12 been proficiency tested, and whose testimony was not evaluated to ensure that it did not exceed
13 what could be empirically sustained. Importantly, the testing and testimony were performed by
14 an analyst whose individual perspective and personal interests created serious risks to the
15 objectivity of the process.

16 The trace analysis result reported in 1999 in the Flores case was the product of a
17 laboratory that lacked an efficacious quality system; a subjective and unvalidated test method
18 was performed by a seriously troubled analyst who operated and testified without oversight. The
19 trace analysis work in the Flores case did not come close to complying with consensus standards
20 for testing or forensic laboratories of the period. When reviewed in consideration of
21 contemporary standards for forensic laboratories, including the standard that is the basis for the
22 SWIFS laboratory's current accreditation, the work in this case was severely deficient, rendering
23 both the results and the testimony unreliable.

24

EXHIBIT 1

Janine S. Arvizu, CQA

7301 Prairie Rd NE
Albuquerque, NM 87109

janine.arvizu@gmail.com
(505) 250-7422

EXPERIENCE SUMMARY

Janine Arvizu is a chemist, auditor, and quality professional with more than 35 years of technical, program management, and training experience in laboratory operations and management, quality assurance, and interdisciplinary analytical programs. She has developed and managed organizational and programmatic quality programs, and has extensive experience in the quality assessment of laboratories and analytical data.

EDUCATION

ABD Chemistry (All but Dissertation, Ph.D. candidacy) University of New Mexico
B.S. Biochemistry with honors, California Polytechnic State University at San Luis Obispo

QUALIFICATIONS

American Society for Quality, Senior Member and Certified Quality Auditor (#19856)
Trained ISO Lead Auditor
Member, American Chemical Society
Voting member, ASTM International (in E11 Quality and Statistics, and E30 Forensic Sciences)
Department of Energy Q clearance (inactive)
Continuing Education lecturer

EMPLOYMENT HISTORY

QUALITY CONSULTANT, CERTIFIED QUALITY AUDITOR Independent Contractor	2002-PRESENT
PROGRAM MANAGER/WATER QUALITY LABORATORY Albuquerque Bernalillo County Water Utility Authority	2009-2013
QUALITY MANAGER Public Service Company of New Mexico	1999-2009
SENIOR TECHNICAL CONSULTANT Consolidated Technical Services, Inc.	1991-2001
SCIENTIFIC SPECIALIST; UNIT MANAGER; SENIOR SCIENTIST; SCIENTIST EG&G Idaho, Inc., Idaho National Engineering Laboratory	1981-1991

AREAS OF EXPERTISE

Theoretical and practical applications of laboratory quality assurance; laboratory and data audits; quality standards for laboratory operations (ISO 17025); laboratory accreditation and proficiency testing programs; production laboratory operations, management, and assessment; method validation; field quality control; interdisciplinary programs; and independent oversight of testing programs.

PROFESSIONAL EXPERIENCE

- Developed and authored the Quality standard for testing laboratory support to U.S. Navy's Installation Restoration Program. Served as Program Manager for the Quality Assurance Program. Managed the independent evaluation of ~70 testing laboratories nationwide, using on-site audits, reviews of quality documentation, and blind proficiency testing. Made final recommendations for laboratory approval.
- Personally planned and served as Lead Auditor for quality system audits and technical audits of dozens of testing laboratories (commercial and federal); included reviews of analytical chemistry, bioassay, radioanalytical, and research laboratories. Evaluated compliance with laboratory quality standards.
- For large federal projects involving millions of dollars of analytical work, evaluated the technical and production capabilities of proposed laboratories in relation to project-specific technical and quality objectives. Evaluated the technical acceptability of proposed sample preparation and determinative procedures, and assessed the adequacy of the laboratory's method validation.
- Conducted independent quality assessments of results reported by government and commercial forensic laboratories; areas reviewed include: sampling, toxicology, controlled substances, trace evidence, serology, DNA, blood alcohol, ballistics, latent prints, and gunshot residue. Under court order, observed forensic testing. Provided sworn testimony in depositions, hearings and trials in state, federal, and international courts.
- Developed, documented, and implemented a complete laboratory quality management system (including document control, personnel competence, corrective action, internal audit, record management, measurement traceability, reference materials, and assuring the quality of test results), and successfully achieved and maintained A2LA accreditation to ISO 17025.
- For the Department of Energy, established and managed one of the first full service analytical testing laboratories that handled radiologically contaminated samples. Responsible for overall laboratory management, including production, quality, safety, environmental and radiological controls; acquisition, maintenance, and management of staff, instrumentation, and new and renovated laboratory facilities; method development and validation, and preparation, review, approval, and implementation of quality and operating procedures.
- Coordinated the collection of split referee samples during the investigation of criminal environmental practices at the Rocky Flats Plant.
- Provided technical reviews of Quality Assurance Project Plans and Sampling and Analysis Plans for characterization programs at federal sites nationwide; evaluated compliance with applicable quality requirements.
- During the course of on-site audits, identified evidence of fraudulent practices and misrepresentation by analytical laboratories. Provided technical support to a federal investigation of fraudulent laboratory practices.
- Planned and conducted unannounced on-site audits in response to serious data quality concerns or project-specific requirements.

- For the Department of Energy, chaired an independent Advisory Panel for the high level tank waste characterization program at Hanford; coordinated interdisciplinary Panel reviews of management, programmatic, quality, sampling, and laboratory issues; coordinated Panel activities with the National Academy of Sciences subcommittee reviewing the tank program, and with Defense Nuclear Facilities Safety Board findings.
- Conducted and directed technical reviews and data quality assessments for large data sets (thousands of samples for dozens of parameters) from large measurement programs. Data subject to review included routine (trace level organics and inorganics, classical testing) analytical measurements, as well as radiochemistry, fuels, alkyltins, high explosives, and other unusual parameters. Identified serious data quality problems, including false positives and false negatives.
- Co-chaired (as DOE's representative) an annual interagency (DOE/DOD/EPA) analytical quality assurance conference.
- Provided or managed independent reviews of remediation project planning and reporting documents for federal sites nationwide. Assessed project data quality requirements to determine whether they were acceptable and achievable. Evaluated proposed analytical strategies to determine whether they would satisfy project objectives. Reviewed proposed analytical methods and specified QC criteria. Identified and reported deficiencies, omissions, and opportunities for improvement. Identified flawed sampling strategies and technically inappropriate sampling or analytical procedures.
- Planned and directed the initial development of a DOE-wide sampling, analysis, and quality assurance plan for characterization of transuranic wastes destined for emplacement in the Waste Isolation Pilot Plant (WIPP).
- Designed and implemented a concise, electronically generated data reporting format to streamline technical reviews of large quantities of laboratory quality control data, and to allow effective integration and interpretation of instrument and method performance data with field data collected under related spatial or temporal conditions.
- Chaired analytical subcommittee supporting the Department of Energy in the identification and prioritization of environmental problems at DOE sites across the country.
- Chaired the Department of Energy's Future Analytical Support Team chartered with developing a strategy to ensure adequate capacity of high quality analytical services; identified and assessed critical analytical and quality issues impacting analytical support.
- Developed sampling and analysis plans for characterization of chemical and radiological contaminants in airborne discharges, waste sites, process effluents, groundwater, and surface soils
- Developed and presented quality assurance courses, lectures, and workshops to provide continuing education and training for laboratory technicians, engineers, scientists, lawyers, and judges. Subjects include: laboratory quality assurance; quality control practices; contamination control; data quality assessment; laboratory audits; process management and assessment; quality tools; root cause analysis; characterization strategies; and field quality control practices.

EXHIBIT 2

Materials Reviewed and Relied On
Janine Arvizu, Certified Quality Auditor
Ex parte Charles Don Flores

- (1) Trial testimony of Charles Linch in guilt-phase of State v. Flores on March 24, 1999
- (2) SWIFS case file for State v. Flores, including Charles Linch's trial report dated March 23, 1999 regarding analysis of .44 magnum (Exhibit 5 to Arvizu Report)
- (3) SWIFS 2016 report regarding status of physical evidence from Flores 1999 death-penalty trial
- (4) Report by chemist Raul Guajardo regarding analysis of SWIFS Slide 75 (created by Linch), June 17, 2016
- (5) Charles Linch's personnel file from SWIFS

EXHIBIT 3

SOUTHWESTERN INSTITUTE OF FORENSIC SCIENCES
Dallas, Texas

FL # 98P0282

Results of Examination:

75: 44 mg - very clean outside
oil
white cotton in SW area
blue cotton
carbon particles
maltese cross

Grey/white material in lands

↓
scraped out on
steril scalpel blade
↓
xylene sub.
mount

grey/black
powder



potatoe
starch
grains
crossed
polars

#11 thin sterile scalpel blade
Powder free latex free
Xylene sub. - clean glass slide
clean cover slip

$$25 \text{ obj} / (10 \times \text{obj}) = 250 \text{ mag}$$

76: 45 cal L lana - no foreign / outside or inside

Examiner CL

Date 3-23-99

EXHIBIT 4

98 P0282

Walter C. McCrone, Ph. D.
Ronald G. Draftz
John Gustav Delly
Walter C. McCrone Associates, Inc.
Chicago, Illinois 60616

DALLAS CITY - COUNTY CRIMINAL
INVESTIGATION LABORATORY
Parland Memorial Hospital
5201 Harry Hines Blvd.
Dallas 35, Texas

The PARTICLE ATLAS

*a photomicrographic reference for the microscopical
identification of particulate substances*



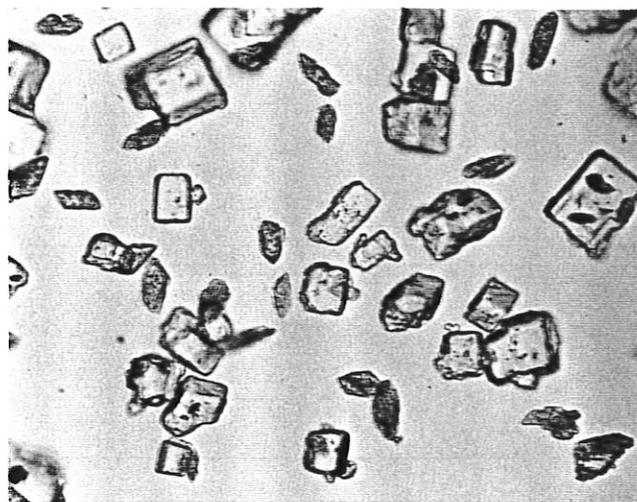
ann arbor science publishers inc.
P.O. BOX 1425, ANN ARBOR, MICHIGAN 48106

211 SALT DUST

0:000000

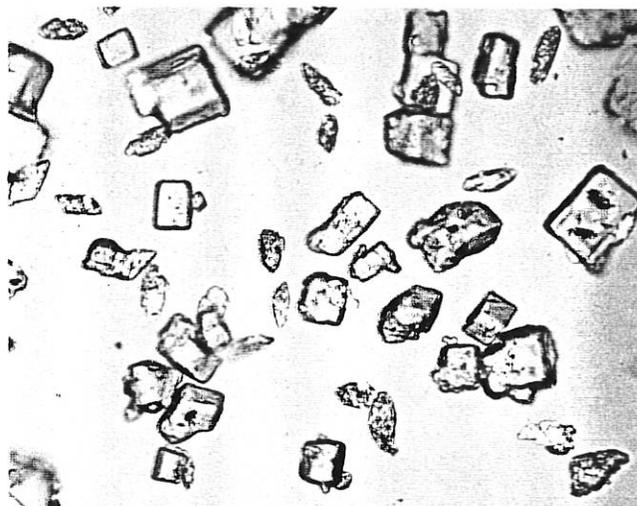
Pure salt fragments are whole and broken, transparent, colorless, isotropic cubes of sodium chloride ($n = 1.544$). This is table salt, distinguished from pure, reagent grade sodium chloride by the presence of other components. The birefringent rhombs are calcium sulfate, *gypsum* (88), a natural impurity commonly associated with salt when it is mined. The gypsum crystals have dehydrated during heating of the Aroclor preparation and are now anhydrite or *plaster of paris* (349), pseudomorphs of gypsum. Their yellowish color is due to light scattering by the optical discontinuities within the particle. These effects are best shown with two figures: (211A), with plane polarized light, shows the yellowish pseudomorphs; (211B), with slightly uncrossed polars, shows the polycrystalline nature of the pseudomorphs.

Manufacturers may add small amounts of *sodium carbonate* (209) or *trisodium phosphate* (173) to combine with hygroscopic impurities such as calcium and magnesium chloride. Other compounds sometimes added are sodium silico-aluminate and, in the case of "iodized" table salt, potassium iodide.



211A Plane polarized light

100X



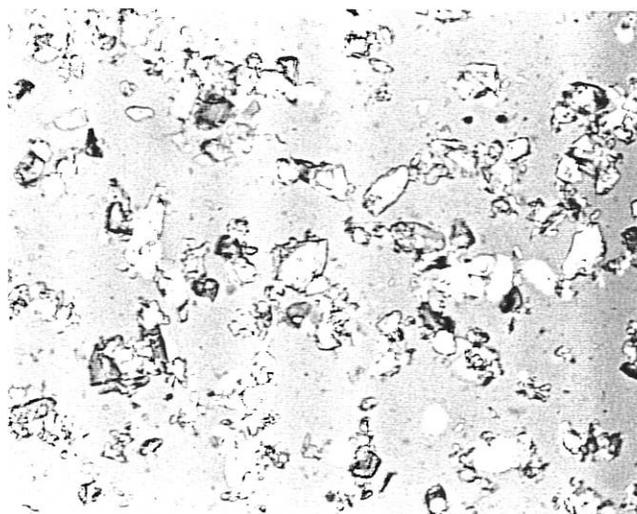
211B Slightly uncrossed polars

100X

212 SUCROSE (cane sugar), $C_{12}H_{22}O_{11}$

8:001000 10:001010

Sucrose is highly soluble in water, slightly soluble in methanol, very slightly soluble in ethanol and insoluble in ether or chloroform. It is monoclinic and crystallizes from water as colorless, transparent, birefringent, thick tablets. Some cleavage is evident but the ground crystals are conchoidally fractured. The crystals, which may be equant (001000) or flakelike (001010), have a specific gravity of 1.588. Sucrose melts with decomposition at 160-190°C, depending on the heating rate. The refractive indices are 1.540 (α), 1.567 (β), 1.572 (γ); (+) 0.028.



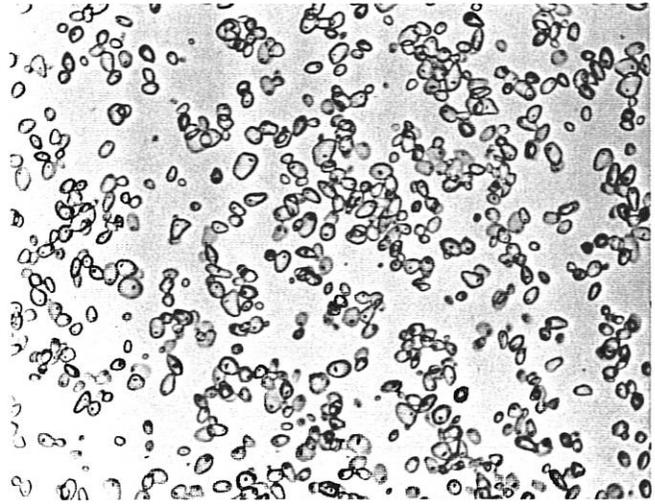
212 Slightly uncrossed polars

100X

213 . ARROWROOT STARCH

8:001000

These are transparent, colorless, ovoid to ellipsoid bodies with one or more small tuberosities on the surface of each. The grains are 7-75 μ long, but the average length is more commonly 30-45 μ . The usual internal air bubble is present as a cleft, often resembling the wings of a bat in flight, at the broader end of the grain (213A and B). Very faint striations may be apparent on the surfaces. Under crossed polars each grain appears gray with a well-marked black cross. These highly characteristic features of starch are shown best in Figure 213C but can also be seen with slightly uncrossed polars (214, 216, 218, 219A). The refractive index of starch is about 1.53. Arrowroot starch grains do not usually form agglomerates but when they do, the agglomerates are simple. This is a sample of West Indian arrowroot starch from *Maranta arundinacea* (St. Vincent, British West Indies).



213A Plane polarized light

100X



213B Plane polarized light

500X



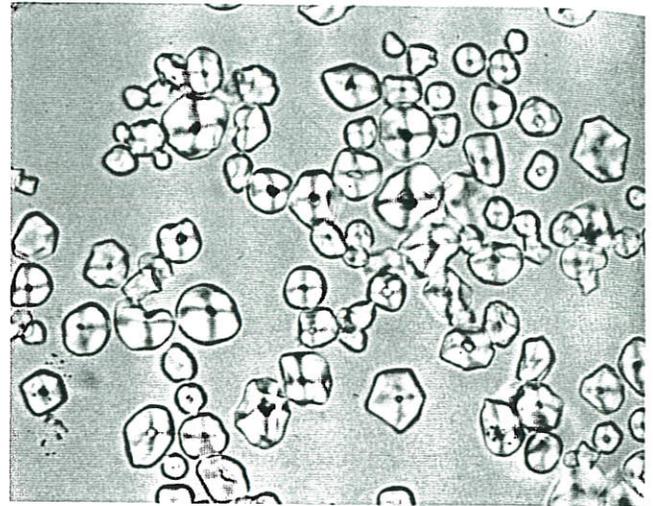
213C Crossed polars

500X

214 CORNSTARCH (maize)

8:001000

These transparent, colorless, polyhedral or subspherical grains are $5\text{-}15\mu$ in diameter (though they may be as wide as 25μ). An air bubble is usually observed in each starch grain as a central triangular or two- to five-pointed split. The surface is smooth. There is usually no agglomeration, but some simple agglomerates may be found in commercial cornstarch. Under crossed polars, the grains appear gray with well-marked black crosses. Cornstarch is obtained from *Zea mays*. The refractive index is about 1.53.



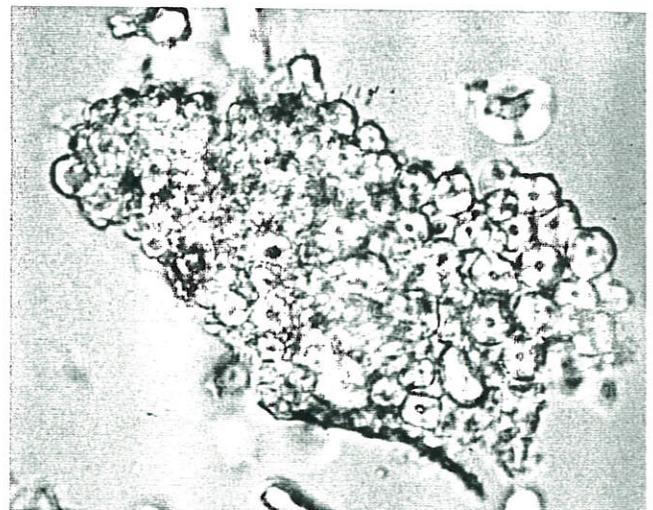
214 Slightly uncrossed polars

500X

215 TORTILLA FLOUR

8:001000

These are transparent, colorless particles of *cornstarch* (214). Tortilla flour differs from ordinary cornstarch in the presence of agglomerates. In this sample, the transparent to translucent clumps average 90μ across ($20\text{-}200\mu$); they are colorless to milk-white in reflected light. The sample is essentially *corn meal* (230).



215 Slightly uncrossed polars

500X

216 POTATO STARCH

8:001000

These transparent, colorless grains look like potatoes—ovoid, irregularly ovoid or subspherical and somewhat flattened. They average 25μ in length ($15\text{-}65\mu$) although ovoid grains may be $30\text{-}100\mu$ long; rounded grains are $10\text{-}35\mu$ across. A dark, triangular air bubble usually appears at one end of the grain, generally one-third to one-fourth eccentric. Striations on the smooth surface, when seen, are concentric and well-marked; some rings are darker than others. Under crossed polars, the grain is gray to white with a well-marked black cross. There is little tendency to agglomeration; when it does occur, each group has only two to three components. The refractive index is about 1.53.



216 Slightly uncrossed polars

500X

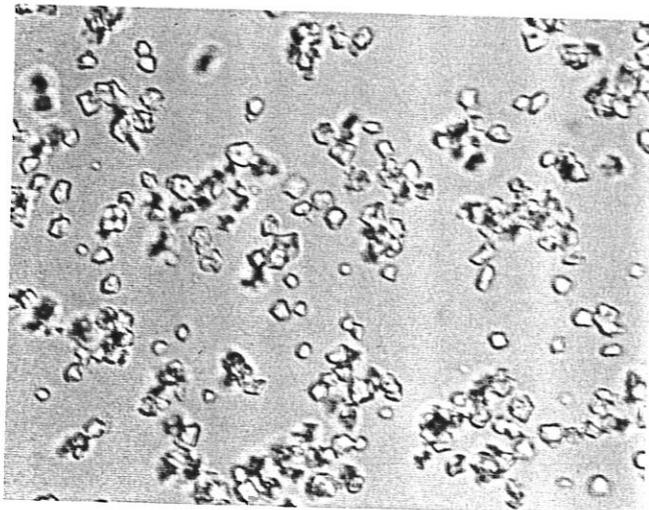
fully crossed



217 RICE STARCH

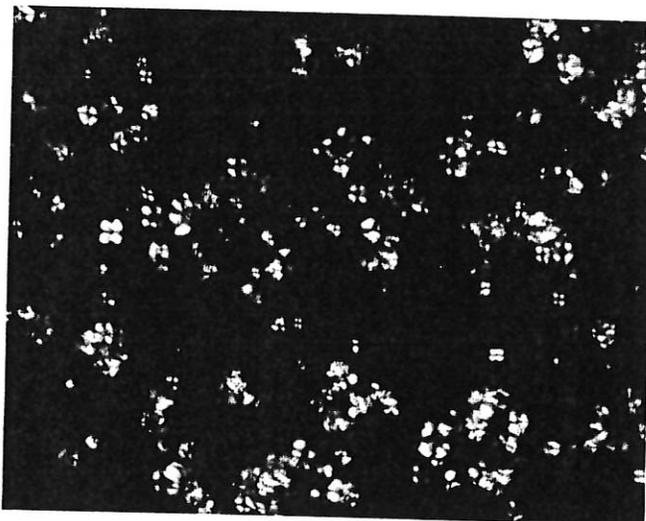
8:001000

These smooth, transparent, colorless, polyhedral grains are 3-12 μ in diameter, though the most common size range is 5-8 μ . A very tiny air bubble appears in most of the grains. The starch grains tend to form ovate, compound agglomerates of 2 to more than 150 components; these groups are 7-20 x 12-30 μ . Rice starch is obtained from the plant *Oryza sativa*. The refractive index is about 1.53. Under crossed polars the grains appear gray with a well-marked black cross (217B). The cross is not so easily seen with slightly uncrossed polars (217A) but the polyhedral aspect is then more readily observed. In actual practice, of course, one changes from plane polarized light to crossed polars frequently or one may scan the preparation with slightly uncrossed polars.



217A Slightly uncrossed polars

500X



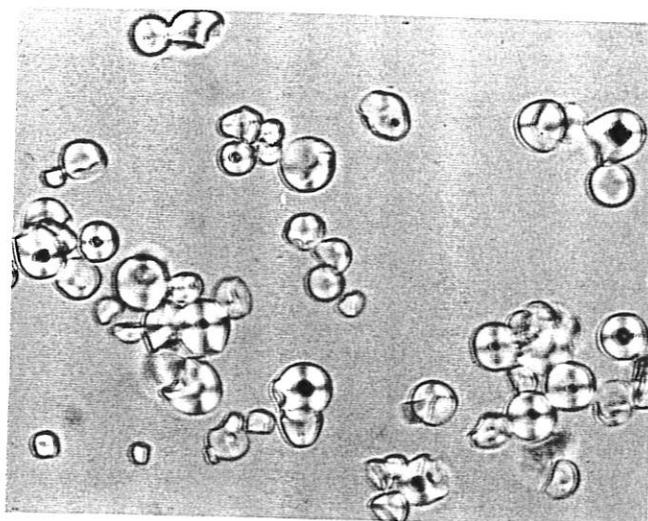
217B Crossed polars

500X

218 TAPIOCA STARCH

8:001000

The transparent, colorless, subspherical grains of tapioca starch are usually nearly spherical but sometimes resemble mullers or pestles and round-bottomed cups or kettles. Agglomerates of 2 to 8 components are common. The air bubble characteristic of starch grains is round, stellate or linear, and either centered or as much as one-half eccentric. Striations on the smooth surface, if seen, are concentric. These grains fall into two size groups: large, 25 to 35 μ ; small, 5 to 12 μ (or even to 25 μ). Under crossed polars, the grain appears gray with a well-marked black cross. The refractive index is about 1.53.



218 Slightly uncrossed polars

500X

219 WHEAT STARCH (flour)

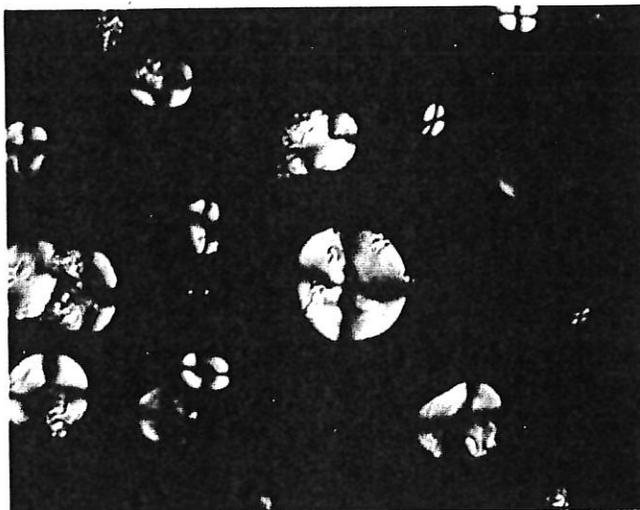
8:001000

Wheat starch grains are transparent, colorless and lenticular; they are oval, circular or subreniform in outline. The grains in this sample average 10μ in length ($3-25\mu$) but larger grains may be as long as 50μ . The grains tend to form agglomerates averaging 40μ across ($25-100\mu$). The air bubble characteristic of most starch grains is a central point which looks like a line when the grain is on its edge. When striations can be seen on the smooth surface, they are faintly concentric. Under crossed polars the grain appears gray with a faint black cross; grains on edge show a cross shaped like two Y's joined in line at the tails, a phenomenon peculiar to wheat starch. The refractive index is about 1.53. In wheat flour small agglomerates, as well as bits of tissue which originally held the starch grains in place, are common. These wall segments resemble, of all things, *perlite* (350).



219A Slightly uncrossed polars

500X



219B Crossed polars

500X

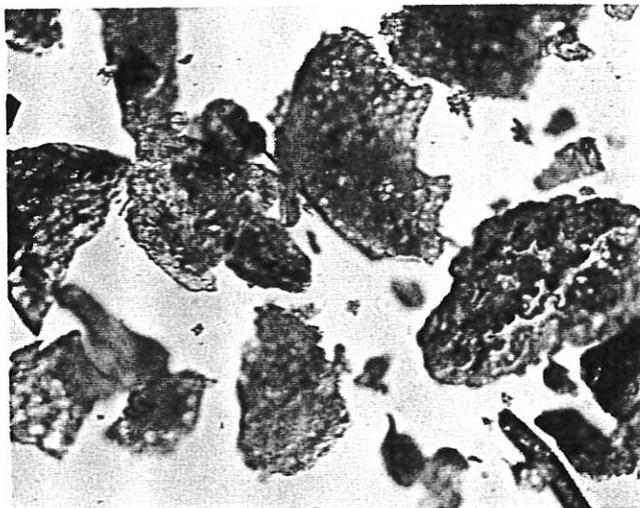
220 CAYENNE PEPPER (*Capsicum minimum*)

8:001000 10:001010 24:011000

Several kinds of tissue characterize cayenne pepper; all have low birefringence, with indices around 1.53. *Calcium oxalate* crystals (326) (001000) are scattered throughout the tissues; indices are 1.49 (α) to 1.65 (γ). The cells and tissues include:

1) Subrectangular cells, usually in rows of six. The translucent, yellow to red-orange cells are about $15 \times 25 \times 60\mu$ and have thick walls (011000).

2) Parenchyma. These translucent, yellowish to red-orange, rounded cells have low birefringence, are $30-85\mu$ long, $15-20\mu$ wide and $15-20\mu$ thick. These cells contain "sandy" calcium oxalate (001000), oil droplets and yellow-red pigment bodies (011000).



220A Top lighting

40X

Additional Photomicrograph on next page

EXHIBIT 5



**SOUTHWESTERN
INSTITUTE OF FORENSIC SCIENCES
AT DALLAS**

5230 Medical Center Drive
Dallas, Texas 75235-7710

**TELEPHONE 920-5982
AREA CODE 214**

**REPLY TO:
P.O. BOX 35728
DALLAS, TEXAS
75235-0728**

Criminal Investigation Laboratory

March 23, 1999

Asst. D.A. Jason January
Office of the District Attorney
133 North Industrial Blvd
Lockbox 19
Dallas, Texas 75207

FL# 98P0282
DPD# 7691501
DCME# 0365-98
Elizabeth Black-Complainant
Homicide

EVIDENCE:

Received from Jim Rizy on March 19, 1999:

- 75: Revolver, 44 Magnum, Smith and Wesson, Model 29,
serial "# M97433", N497433
- 76: Pistol, .45 caliber, Ilama, serial # B89651

RESULTS:

A sterile surgical blade and powder free latex gloves were used to remove gray/black granular material from the grooves of the item 75 revolver barrel interior. This material was examined by polarized light microscopy and found to consist of starch grains, white and blue cotton fibers, and amorphous apparent carbonaceous particles. No foreign material was recovered from the 76 pistol.

Charles Linch
Trace Evidence Analyst
Direct Line (214) 920-5987
Fax Number (214) 920-5908

CL/arc

cc: DCME# 0365-98

SOUTHWESTERN INSTITUTE OF FORENSIC SCIENCES
Dallas, Texas

FL # 98P0282

Results of Examination:

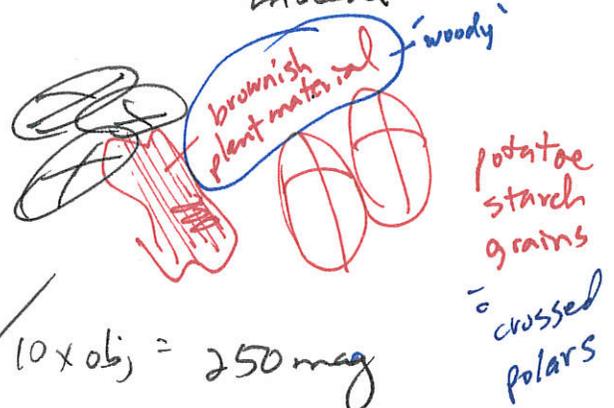
75: 44 mg - very clean outside
oil
white cotton in SW area
blue cotton
carbon particles
maltese cross

Grey/white material in lands

↓
scraped out on
steril scalpel blade

grey/black
powder

↓
xylene sub.
mount



#11 thin sterile scalpel blade
Powder free latex free
Xylene sub. - clean glass slide
clean cover slip

$$25 \text{ obj} / (10 \times \text{obj}) = 250 \text{ mag}$$

76: 45 cal L lana - no foreign / outside or inside

Examiner CL

Date 3-23-99



cleaned

Weapon is clean oil in

75 - Inside barrel scrapings - grey SN area
stone super blade - fine metal powder

44 mag - SLW

N 497433

mod. 29-4

SOUTHWESTERN INSTITUTE OF FORENSIC SCIENCES
Dallas, Texas

TELECON

FL# 98P0282

Agency: Dallas DA

Complainant: Elizabeth Black

Call made by/ received by: Travis Spinder

Conversation with: Jason January

Date and time of conversation: March 23, 1999, 0825

Synopsis of conversation: Jackie informed me that there was going to be someone comming out here to get the evidence for court. I called Jason to see if there was something needed to be done on the 44Mag revolver before we released it. He informed me that all he wanted was to have it checked for Potatoes on or inside the barrel. I told him that I would take it to the Trace Section to see if they could check for that. He said that he would resubmit the 45 pistol after the trial to have it put into the Drugfire database.

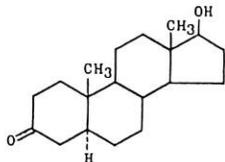
Call transferred to: NA

Examiner: Travis Spinder

Date: March 23, 1999

Page: 1 Of 1

Chim. Acta 20, 1557 (1937); Ruzicka *et al.*, *ibid.* 24, 1151 (1941); from 3,17-androstandione: Oliveto, Hershburg, U.S. pat. 2,927,921 (1960 to Schering).

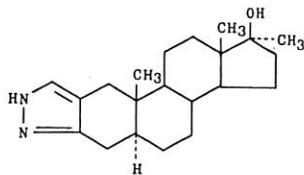


Crystals from ethyl acetate + hexane. Sublimes_{0.01} 135°. mp 181°. $[\alpha]_D^{20} +32.4^\circ$ (alcohol). Infrared absorption data: *J. Am. Chem. Soc.* 75, 903 (1953). Sol in acetone, ether, alcohol, ethyl acetate. Practically insol in water.

17-Valerate, $C_{24}H_{38}O_3$, *Apeton*.

THERAP CAT: Androgen.

8574. Stanozolol. 17-Methyl-2H-5 α -androst-2-en-3,20-dione-17 β -ol; 1,2,3,3a,3b,4,5,5a,6,8,10,10a,10b,11,12,12a-hexadecahydro-1,10a,12a-trimethylcyclopenta[7,8]-phenanthro[2,3-c]pyrazol-1-ol; 17 β -hydroxy-17 α -methyl-androstanof[3,2-c]pyrazole; androstanazole; stanzol; Winstrol; Stromba; Stanozol; Tevabolin. $C_{21}H_{32}N_2O$; mol wt 328.48. C 76.78%, H 9.82%, N 8.53%, O 4.87%. Preparation: Clinton *et al.*, *J. Am. Chem. Soc.* 81, 1513 (1959); 83, 1478 (1961); Manson, U.S. pat. 3,030,358 (1962 to Sterling Drug).



Crystals from alc, mp 229.8-242.0°. $[\alpha]_D +35.7^\circ$ (chloroform); $[\alpha]_D +48.6^\circ$ (methanol). uv max 223 nm (ϵ 4740).

THERAP CAT: Anabolic steroid.

THERAP CAT (VET): Anabolic steroid.

8575. Staphisagria. Stavesacre. Ripe seed of *Delphinium staphisagria* L., *Ranunculaceae*. *Habit.* Mediterranean basin; cultivated in France, Italy. *Constit.* Delphinine, delphinoidine, delphisine, staphisagrine, staphisagrine, malic acid, fixed oil.

THERAP CAT: Parasiticide (external).

8576. Star Anise. Chinese anise. Fruit of *Illicium verum* Hook. f., *Magnoliaceae*. *Habit.* Southeastern Asia and subtropical countries; commercial supply chiefly from China. *Constit.* About 5% volatile and fixed oils; anisic acid, tannin, resin, pectin.

Note: Japanese star anise is *Illicium anisatum* L. (*I. religiosum* Sieb. & Zucc.; *I. japonicum* Sieb.) and contains a toxic lactone called anisatin. Chinese star anise does not contain this toxic principle. Shikimic acid has been found in both.

USE: Manufacture of liqueurs and the volatile oil. The fruit as source of oil of anise.

THERAP CAT: Hemostatic.

8577. Starch. Amylum. $(C_6H_{10}O_5)_n$. Stored by plants; analogous to storage of fats by animals. Consists of granules separated from the mature grain of corn, *Zea mays* Linné, *Gramineae* or of wheat, *Triticum aestivum* Linné, *Gramineae* or from tubers of potato, *Solanum tuberosum* Linné, *Solanaceae* or rice, *Oryza sativa* Linné, *Gramineae*. Actually starch is a cryst polymeric compound consisting of about 27% linear polymer (amylose) and 73% branched polymer (amylopectin), with these two polymers so associated in the crystal lattice that they are practically insol in cold water or alcohol. Starch is sol in boiling water giving a colloidal soln which may form a jelly on cooling.

Although hydrolysis will not take place in cold water, and starch is comparatively resistant to naturally occurring

enzymes, the reaction may be brought about by the use of acids or enzymes (α -amylase, β -amylase, amyloglucosidase). The hydrolysis reaction follows a different path depending on whether acids or enzymes are used. While acid hydrolysis produces a mixture of saccharides, the enzymes give more specific products. β -Amylase, for example, breaks off mostly maltose units, and amyloglucosidase yields mainly D-glucose.

USE: Starching and sizing fabrics, etc.; paste; manuf tablets of medicinal substances; as indicator in iodometric analyses. In the food industry. Dietetic grades of corn starch are marketed as *Maizena*; *Mondamin*.

THERAP CAT: Dusting powder; pharmaceutical aid (tablet disintegrant, filler, binder); antidote (iodine poisoning).

THERAP CAT (VET): Internally: demulcent, mild astringent, in diarrhea, as an antidote for iodine poisoning. Externally: absorbent, emollient, in dusting powders and in ointments.

8578. Starch from Arrowroot. Maranta. From rhizome of *Maranta arundinacea* L., *Marantaceae*. *Habit.* West Indies; also cultivated in U.S.A., East Indies, Ceylon, and Southern Africa.

White, odorless, tasteless, floury lumps. Solubility as of the preceding.

THERAP CAT: See Starch.

8579. Starch, Iodized. Starch iodide. Contains about 2% iodine.

Bluish-black powder. Insoluble in cold water; sol in hot water with transitory, or on prolonged boiling, with permanent decolorization.

8580. Starch, Soluble. Amylodextrin; amylogen.

White, odorless, tasteless powder. Soluble in water.

USE: For determination of diastatic power of malt, etc.; as indicator in iodometric analyses.

8581. Statolon. An antiviral substance which appears to be a macromolecular polyanionic polysaccharide composed of galacturonic acid, galactose, galactosamine, glucose, arabinose, xylose, and rhamnose. Produced by submerged culture fermentation, using *Penicillium stoloniferum* var. ATCC 14586: Stark *et al.*, U.S. pat. 3,108,047 (1963 to Lilly).

Prophylactically active against a wide range of viruses, including those causing canine distemper, lymphomatosis in fowl, shipping fever in cattle, transmissible gastroenteritis in swine, and coryza and other upper respiratory illnesses, as well as against ECHO viruses, enteroviruses in monkeys, MM neurotropic virus, Semliki Forest virus, and NEF 1 poliomyelitis virus. Antitumor activity demonstrated in experimental leukemia and sarcoma.

THERAP CAT: Antiviral.

8582. Stearic Acid. Octadecanoic acid. $C_{18}H_{36}O_2$; mol wt 284.47. C 75.99%, H 12.76%, O 11.25%. $CH_3(CH_2)_{16}COOH$. Occurs as a glyceride in tallow and other animal fats and oils, as well as in some vegetable oils; also prep'd synthetically by hydrogenation of cottonseed and other vegetable oils.

White leaflets. d^{20}_4 0.847; mp 69-70°; bp 383°; n^{20}_D 1.4299. Slowly volatilizes at 90-100°. Very slightly sol in water. One gram dissolves in 21 ml alcohol, 5 ml benzene, 2 ml chloroform, 26 ml acetone, 6 ml carbon tetrachloride, 3.4 ml carbon disulfide; also sol in amyl acetate, toluene.

U.S.P. stearic acid consists chiefly of a mixture of stearic and palmitic acids. It is in the form of white or slightly yellow, crystal masses, or a white to slightly yellow powder; slight tallow-like odor. Does not congeal below 54°.

Typical specifications for commercial triple-pressed stearic acid are: Titer: 54.5-55.0°; color 5 1/4" Lovibond red: 0.1-0.5; 5 1/4" Lovibond yellow: 1.0-2.0; saponification value 207-210; acid value 206-209; iodine value 3.5-4.5. Typical specifications for commercial double-pressed stearic acid are: Titer: 53.9-54.3°; color 5 1/4" Lovibond red: 0.5-1.0; 5 1/4" Lovibond yellow: 2.0-3.0; saponification value 207-210; acid value 206-209; iodine value 5.5-7.0.

USE: For suppositories, coating enteric pills, ointments, and for coating bitter remedies. Manuf stearates of aluminum, zinc, and other metals, stearin soap for opodeldoc, candles, phonograph records, insulators, modeling compds;

18P0282
#75
JDF
03.19.99
CL
3-23-99

99PO282
#76
JDH
03.19.99

POLICE DEPARTMENT
PROPERTY SHEET

FOUND: EST. NUMBER:	(1) PHONE NUMBER: 4010	(2) SAFEGUARDING: CV 3-23-99	(3) SERVICE NUMBER: * 852 trigger mell
ADDRESS:	DATE AND TIME OBTAINED: 4-16-99	(1) BIN NUMBER: Pachmayr	(2) ADDRESS PROPERTY OBTAINED: 01010213
PHONE NUMBER:			

22

EVIDENCE

Case No. 76915-01 Inventory # 22432A 7

Type of offense HOMICIDE

Description of evidence SEW
44 MAGNUM

Suspect _____

Victim ELIZABETH BLACIC

Date and time of recovery
1-31-98 1:41

Location of recovery TOP SHELF IN
HALLWAY LEADING TO DEN

Recovered by C. GREEN JR

CHAIN OF POSSESSION

Received from _____

By _____

Date _____ Time _____ AM PM

Received from _____

By _____

Date _____ Time _____ AM PM

Received from _____

By _____

Date _____ Time _____ AM PM

Empty brown
paper bag.

CL
3-23-99

98 P0282

Walter C. McCrone, Ph. D.
Ronald G. Draftz
John Gustav Delly
Walter C. McCrone Associates, Inc.
Chicago, Illinois 60616

DALLAS CITY - COUNTY CRIMINAL
INVESTIGATION LABORATORY
Parland Memorial Hospital
5201 Harry Hines Blvd.
Dallas 35, Texas

The PARTICLE ATLAS

*a photomicrographic reference for the microscopical
identification of particulate substances*



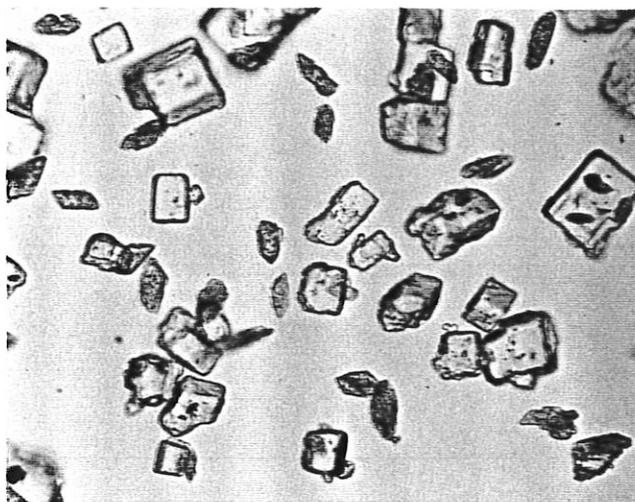
ann arbor science publishers inc.
P.O. BOX 1425, ANN ARBOR, MICHIGAN 48106

211 SALT DUST

0:000000

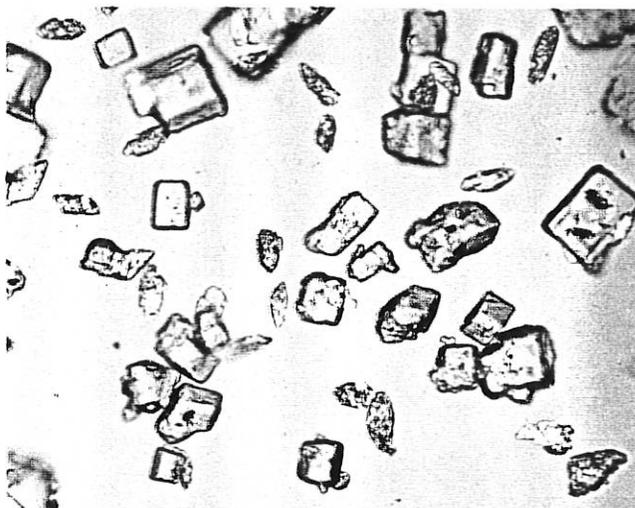
Pure salt fragments are whole and broken, transparent, colorless, isotropic cubes of sodium chloride ($n = 1.544$). This is table salt, distinguished from pure, reagent grade sodium chloride by the presence of other components. The birefringent rhombs are calcium sulfate, *gypsum* (88), a natural impurity commonly associated with salt when it is mined. The gypsum crystals have dehydrated during heating of the Aroclor preparation and are now anhydrite or *plaster of paris* (349), pseudomorphs of gypsum. Their yellowish color is due to light scattering by the optical discontinuities within the particle. These effects are best shown with two figures: (211A), with plane polarized light, shows the yellowish pseudomorphs; (211B), with slightly uncrossed polars, shows the polycrystalline nature of the pseudomorphs.

Manufacturers may add small amounts of *sodium carbonate* (209) or *trisodium phosphate* (173) to combine with hygroscopic impurities such as calcium and magnesium chloride. Other compounds sometimes added are sodium silico-aluminate and, in the case of "iodized" table salt, potassium iodide.



211A Plane polarized light

100X



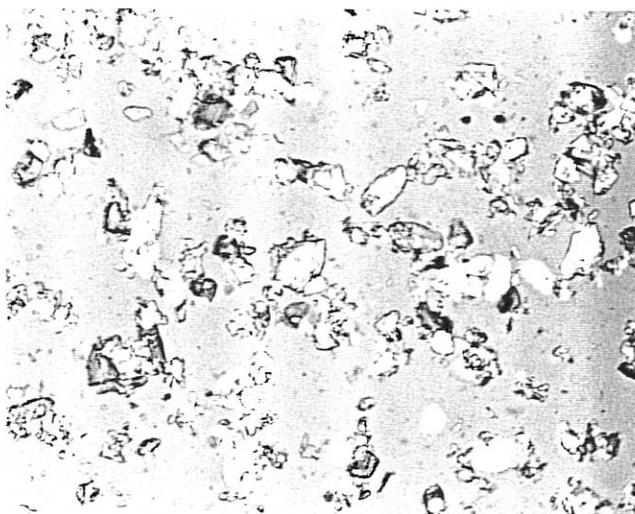
211B Slightly uncrossed polars

100X

212 SUCROSE (cane sugar), $C_{12}H_{22}O_{11}$

8:001000 10:001010

Sucrose is highly soluble in water, slightly soluble in methanol, very slightly soluble in ethanol and insoluble in ether or chloroform. It is monoclinic and crystallizes from water as colorless, transparent, birefringent, thick tablets. Some cleavage is evident but the ground crystals are conchoidally fractured. The crystals, which may be equant (001000) or flakelike (001010), have a specific gravity of 1.588. Sucrose melts with decomposition at 160-190°C, depending on the heating rate. The refractive indices are 1.540 (α), 1.567 (β), 1.572 (γ); (+) 0.028.



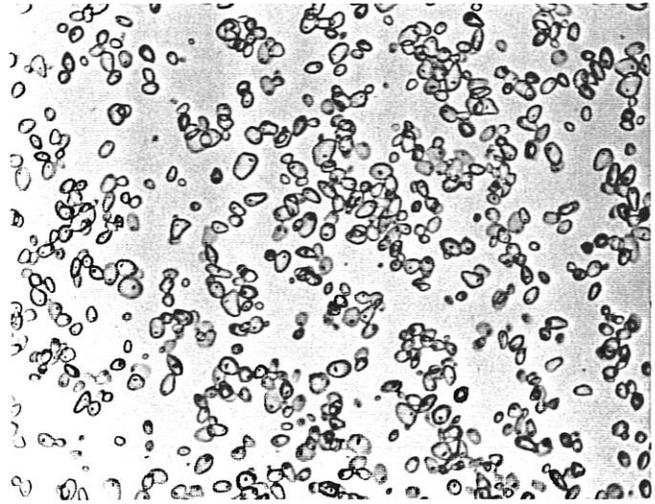
212 Slightly uncrossed polars

100X

213 . ARROWROOT STARCH

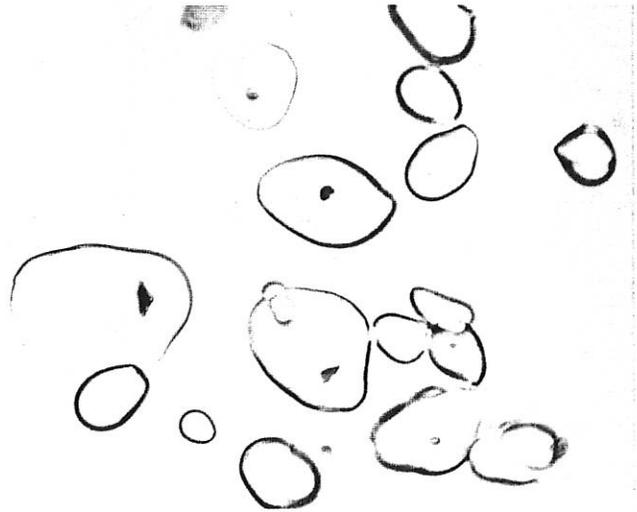
8:001000

These are transparent, colorless, ovoid to ellipsoid bodies with one or more small tuberosities on the surface of each. The grains are 7-75 μ long, but the average length is more commonly 30-45 μ . The usual internal air bubble is present as a cleft, often resembling the wings of a bat in flight, at the broader end of the grain (213A and B). Very faint striations may be apparent on the surfaces. Under crossed polars each grain appears gray with a well-marked black cross. These highly characteristic features of starch are shown best in Figure 213C but can also be seen with slightly uncrossed polars (214, 216, 218, 219A). The refractive index of starch is about 1.53. Arrowroot starch grains do not usually form agglomerates but when they do, the agglomerates are simple. This is a sample of West Indian arrowroot starch from *Maranta arundinacea* (St. Vincent, British West Indies).



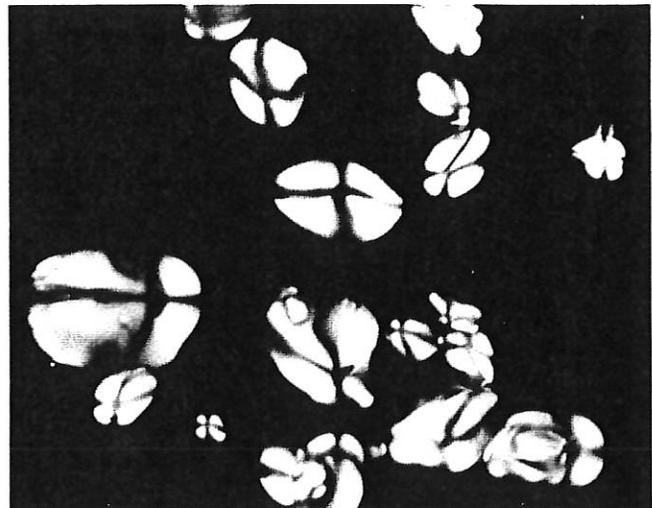
213A Plane polarized light

100X



213B Plane polarized light

500X



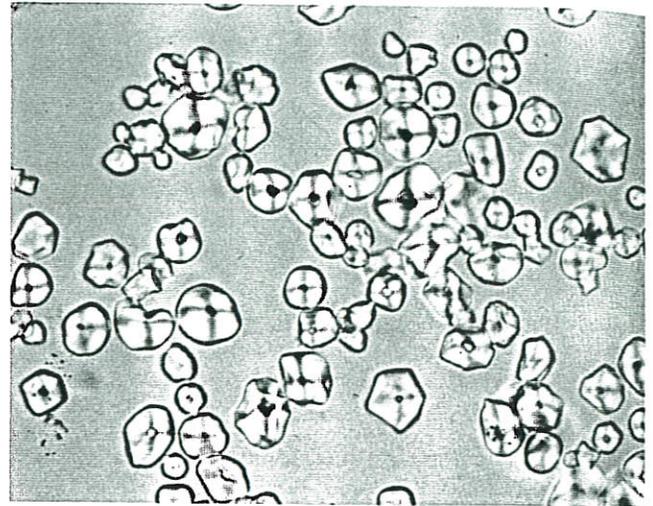
213C Crossed polars

500X

214 CORNSTARCH (maize)

8:001000

These transparent, colorless, polyhedral or subspherical grains are $5\text{-}15\mu$ in diameter (though they may be as wide as 25μ). An air bubble is usually observed in each starch grain as a central triangular or two- to five-pointed split. The surface is smooth. There is usually no agglomeration, but some simple agglomerates may be found in commercial cornstarch. Under crossed polars, the grains appear gray with well-marked black crosses. Cornstarch is obtained from *Zea mays*. The refractive index is about 1.53.



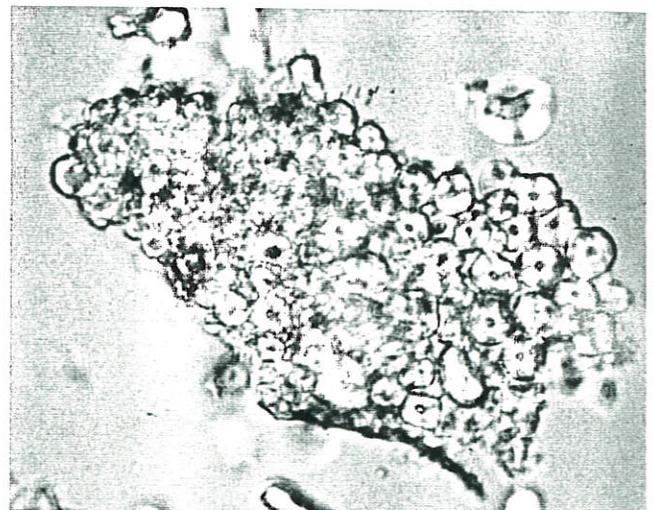
214 Slightly uncrossed polars

500X

215 TORTILLA FLOUR

8:001000

These are transparent, colorless particles of *cornstarch* (214). Tortilla flour differs from ordinary cornstarch in the presence of agglomerates. In this sample, the transparent to translucent clumps average 90μ across ($20\text{-}200\mu$); they are colorless to milk-white in reflected light. The sample is essentially *corn meal* (230).



215 Slightly uncrossed polars

500X

216 POTATO STARCH

8:001000

These transparent, colorless grains look like potatoes—ovoid, irregularly ovoid or subspherical and somewhat flattened. They average 25μ in length ($15\text{-}65\mu$) although ovoid grains may be $30\text{-}100\mu$ long; rounded grains are $10\text{-}35\mu$ across. A dark, triangular air bubble usually appears at one end of the grain, generally one-third to one-fourth eccentric. Striations on the smooth surface, when seen, are concentric and well-marked; some rings are darker than others. Under crossed polars, the grain is gray to white with a well-marked black cross. There is little tendency to agglomeration; when it does occur, each group has only two to three components. The refractive index is about 1.53.



216 Slightly uncrossed polars

500X

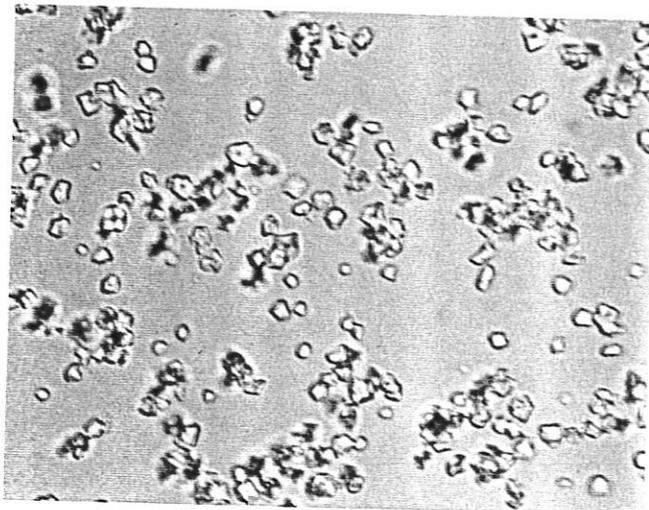
fully crossed



217 RICE STARCH

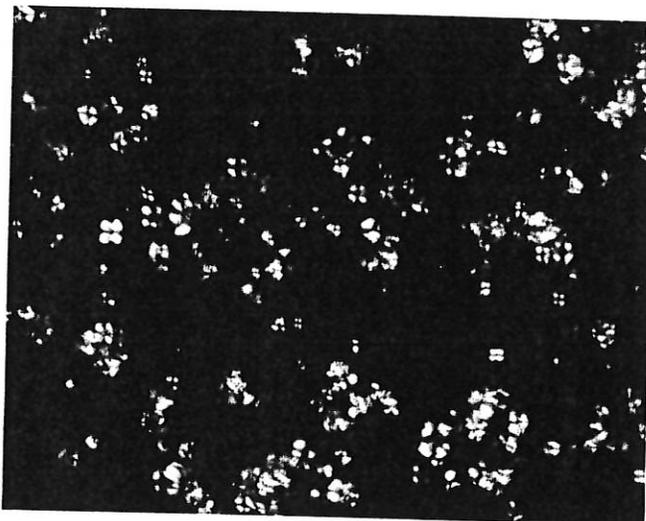
8:001000

These smooth, transparent, colorless, polyhedral grains are 3-12 μ in diameter, though the most common size range is 5-8 μ . A very tiny air bubble appears in most of the grains. The starch grains tend to form ovate, compound agglomerates of 2 to more than 150 components; these groups are 7-20 x 12-30 μ . Rice starch is obtained from the plant *Oryza sativa*. The refractive index is about 1.53. Under crossed polars the grains appear gray with a well-marked black cross (217B). The cross is not so easily seen with slightly uncrossed polars (217A) but the polyhedral aspect is then more readily observed. In actual practice, of course, one changes from plane polarized light to crossed polars frequently or one may scan the preparation with slightly uncrossed polars.



217A Slightly uncrossed polars

500X



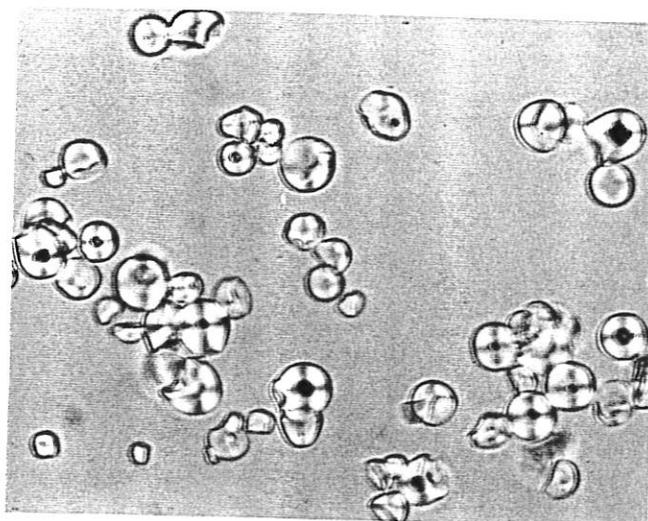
217B Crossed polars

500X

218 TAPIOCA STARCH

8:001000

The transparent, colorless, subspherical grains of tapioca starch are usually nearly spherical but sometimes resemble mullers or pestles and round-bottomed cups or kettles. Agglomerates of 2 to 8 components are common. The air bubble characteristic of starch grains is round, stellate or linear, and either centered or as much as one-half eccentric. Striations on the smooth surface, if seen, are concentric. These grains fall into two size groups: large, 25 to 35 μ ; small, 5 to 12 μ (or even to 25 μ). Under crossed polars, the grain appears gray with a well-marked black cross. The refractive index is about 1.53.



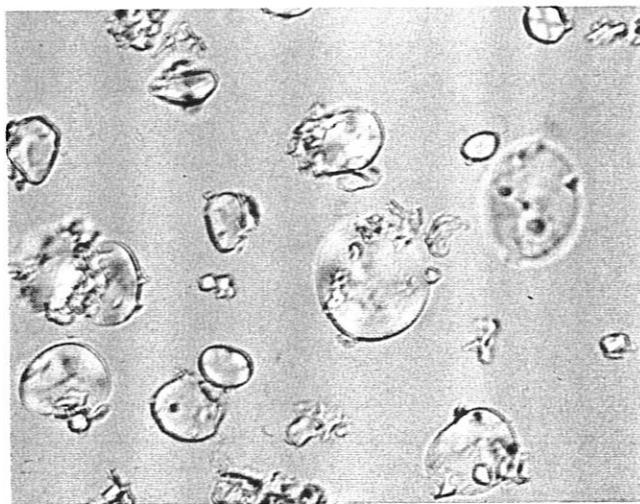
218 Slightly uncrossed polars

500X

219 WHEAT STARCH (flour)

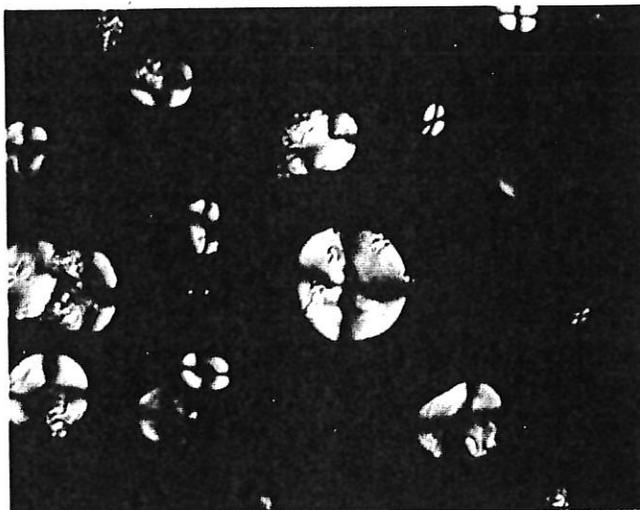
8:001000

Wheat starch grains are transparent, colorless and lenticular; they are oval, circular or subreniform in outline. The grains in this sample average 10μ in length ($3-25\mu$) but larger grains may be as long as 50μ . The grains tend to form agglomerates averaging 40μ across ($25-100\mu$). The air bubble characteristic of most starch grains is a central point which looks like a line when the grain is on its edge. When striations can be seen on the smooth surface, they are faintly concentric. Under crossed polars the grain appears gray with a faint black cross; grains on edge show a cross shaped like two Y's joined in line at the tails, a phenomenon peculiar to wheat starch. The refractive index is about 1.53. In wheat flour small agglomerates, as well as bits of tissue which originally held the starch grains in place, are common. These wall segments resemble, of all things, *perlite* (350).



219A Slightly uncrossed polars

500X



219B Crossed polars

500X

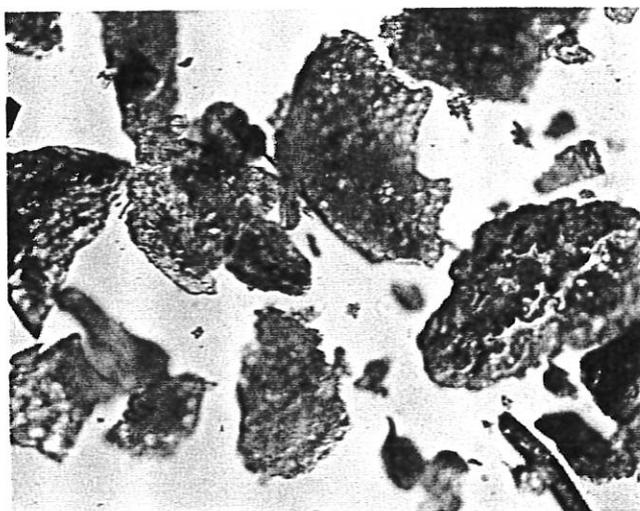
220 CAYENNE PEPPER (*Capsicum minimum*)

8:001000 10:001010 24:011000

Several kinds of tissue characterize cayenne pepper; all have low birefringence, with indices around 1.53. *Calcium oxalate* crystals (326) (001000) are scattered throughout the tissues; indices are 1.49 (α) to 1.65 (γ). The cells and tissues include:

1) Subrectangular cells, usually in rows of six. The translucent, yellow to red-orange cells are about $15 \times 25 \times 60\mu$ and have thick walls (011000).

2) Parenchyma. These translucent, yellowish to red-orange, rounded cells have low birefringence, are $30-85\mu$ long, $15-20\mu$ wide and $15-20\mu$ thick. These cells contain "sandy" calcium oxalate (001000), oil droplets and yellow-red pigment bodies (011000).



220A Top lighting

40X

Additional Photomicrograph on next page

EXHIBIT 17

Test a Witness's Memory of a Suspect Only Once

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Abstract

Eyewitness misidentifications are almost always made with high confidence in the courtroom. The courtroom is where eyewitnesses make their *last* identification of defendants suspected of (and charged with) committing a crime. But what did those same eyewitnesses do on the *first* identification test, conducted early in a police investigation? Despite testifying with high confidence in court, many eyewitnesses also testified that they had initially identified the suspect with low confidence or failed to identify the suspect at all. Presenting a lineup leaves the eyewitness with a memory trace of the faces in the lineup, including that of the suspect. As a result, the memory signal generated by the face of that suspect will be stronger on a later test involving the same witness, even if the suspect is innocent. In that sense, testing memory contaminates memory. These considerations underscore the importance of a newly proposed recommendation for conducting eyewitness identifications: *Avoid repeated identification procedures with the same witness and suspect*. This recommendation applies not only to additional tests conducted by police investigators but also to the final test conducted in the courtroom, in front of the judge and jury.

Keywords

eyewitness identification, wrongful convictions, malleability of memory

No man ever steps in the same river twice, for it's
not the same river and he's not the same man.

—Heraclitus

In a court of law, a credible eyewitness who confidently identifies a defendant as the culprit of a crime is often thought to provide direct and powerful evidence of guilt. Indeed, judges have traditionally characterized a courtroom identification as having an “independent” and direct “source” in the witness’s memory. Although underappreciated in the legal system, despite being almost universally understood by experimental psychologists, an eyewitness identification in court does *not* provide direct evidence of guilt. Nor is it independently sourced in the witness’s memory. Instead, by the time of trial, an eyewitness’s memory has almost invariably been contaminated by a variety of factors and is therefore highly error prone. As of today, 375 prisoners

have been exonerated by DNA testing, 21 of whom were on death row, and it is now widely understood that eyewitness misidentifications contributed to about 70% of these wrongful convictions (Innocence Project, 2020).

Eyewitness misidentifications typically first occur during early stages of a police investigation (e.g., when a lineup is administered), long before trial. Decades of research have therefore focused on proper methods for conducting lineups so as to minimize initial misidentifications. As the relevant research has accumulated over the years, consensus science-based recommendations about proper eyewitness identification procedures have evolved accordingly. The set of guidelines set forth by

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Wells et al. (2020) include a new recommendation that is the focus of this article. Specifically, Recommendation 8 is as follows: “Avoid repeated identification procedures with the same witness and suspect.” In other words, test a witness’s memory for a suspect only once.

Under the right conditions, the first eyewitness identification test can provide reliable information. According to a review of the literature, on an *initial* lineup identification test of *uncontaminated* memory conducted in accordance with current recommendations (i.e., when a pristine procedure is used), confidence can be a reliable indicator of accuracy (Wixted & Wells, 2017). That is, a high-confidence identification implies high accuracy, whereas a low-confidence identification implies low accuracy (the veritable definition of eyewitness reliability). How often pristine conditions prevail in the real world is unknown, but it is known that on the *first* test, eyewitness identification evidence is potentially reliable.

No later test provides more reliable information than the first test because memory is malleable (Davis & Loftus, 2018). That is, like other forms of forensic evidence, memory can be contaminated. Critically, the best chance to test uncontaminated memory is the first test because the very act of testing memory can contaminate it (Steblay & Dysart, 2016). The importance of testing a witness’s memory for a suspect only once is hard to overemphasize because the failure to abide by that simple rule might account for a large proportion of the wrongful convictions overturned by DNA evidence (Garrett, 2011). Later, we detail specific research findings and representative real-world cases supporting these claims.

Implementing this newly proposed reform should be simple and straightforward because it involves no special training beyond educating police investigators, prosecutors, and judges about its compelling science-based rationale. The purpose of this article is to do just that. We begin by tracing the growing awareness of the importance of the recommendation to avoid repeated testing by briefly reviewing how consensus science-based guidelines for conducting eyewitness identification procedures have evolved over the years.

The Evolution of Guidelines Pertaining to Eyewitness Identification Procedures

Beginning in 1998, teams of scientists (sometimes working with law enforcement and legal practitioners) have been commissioned to draw up recommendations for conducting eyewitness identification procedures four times. The first guidelines were enumerated in a “white

paper” (Wells et al., 1998) commissioned by the American Psychology-Law Society (APLS). That document provided four recommendations for conducting police lineups. A police lineup consists of one suspect and several physically similar fillers. Nowadays, the police typically use photo lineups instead of the live lineups that were once the norm (Police Executive Research Forum, 2013). The four recommendations in that white paper were as follows: (a) the lineup administrator should be blind to the identity of the suspect, (b) the eyewitnesses should be informed that the culprit may or may not be in the lineup, (c) the suspect should not stand out in the lineup (i.e., the lineup should be fair), and (d) a confidence statement should be obtained at the time an identification is made and before any feedback from the police. All of these recommendations remain in force today, but in 1998, the importance of testing memory only once was not yet apparent.

One year later, the National Institute of Justice (NIJ) issued another set of science-based guidelines (Technical Working Group for Eyewitness Evidence, 1999). Whereas the 1998 white paper focused on lineups, *per se*, the NIJ guidelines were much broader, providing recommendations for creating mug books and composites, for interviewing eyewitnesses, for conducting showups (which involve only the suspect), and for conducting lineups. The lineup recommendations were similar to those in the 1998 white paper, albeit with added specificity on some issues (e.g., the recommendation that at least five fillers be included in a lineup). Still, no mention was made about the special importance of testing a witness’s memory for a suspect only once.

In 2013, a committee was appointed by the National Academy of Sciences to provide updated recommendations for eyewitness identification tests (National Research Council, 2014). Some of the new recommendations emphasized system-level issues such as training law-enforcement officers in eyewitness identification procedures and conducting pretrial judicial inquiries into the reliability of the eyewitness evidence. With regard to eyewitness identification procedures *per se*, they reiterated some of the earlier recommendations and added others, such as the recommendation that the eyewitness identification procedure be videotaped. Critically, they also added a new recommendation that reflected increased awareness of the importance of the initial identification. Specifically, their Recommendation 7 was as follows: “Make Juries Aware of Prior Identifications.” In justifying this new recommendation, the committee wrote: “In-court confidence statements may also be less reliable than confidence judgments made at the time of an *initial* [emphasis added] out-of-court identification; as memory fails and/or confidence grows

disproportionately” (p. 110). They also noted that “Eyewitness testimony is a type of evidence where (as with forms of forensic trace evidence) contamination may occur pre-trial” (p. 109). Contamination is the crux of the issue.

The next major development occurred when the APLS commissioned Wells et al. (2020) to update the 1998 white paper in light of what has been learned since that time. There are now nine recommendations, including such new recommendations as conducting an interview before the lineup (in part to warn the witnesses against attempting to identify the culprit on social media and elsewhere) and, as noted above, avoiding repeated identifications with the same witness and same suspect. The overarching reason to avoid repeated tests is that memory is malleable. The essential problem is that on a second test, an individual can look familiar because of the exposure during the first test, even when it is not the right person. Next, we consider how the field came to appreciate that fact and how it leads to the conclusion that law enforcement should avoid testing a witness’s memory for a suspect more than one time.

Memory Is Malleable

Concerns about the malleability of memory can be traced back to at least Munsterberg (1908), but a scientific consensus about how easily memories can be modified—or even manufactured outright—did not begin to emerge until the mid-1970s. At that time, Loftus and Palmer (1974) and Loftus et al. (1978) reported the once surprising but now widely accepted finding that something as subtle as the nature of a question posed to an eyewitness can influence what the witness later remembers. Subsequent studies showed that people can even be induced to falsely remember entire events that never happened, such as being lost in a shopping mall as a child (Loftus & Pickrell, 1995) or that they were attacked by a vicious animal (Porter et al., 1999).

The examples summarized above pertain to memory tested by recall (i.e., recollecting details pertaining to a prior event), but eyewitness identification is a *recognition* memory test. As noted earlier, the malleability of memory has proven to be a particularly pernicious force on these tests, considering that many of the DNA exonerations involved eyewitnesses who incorrectly “recognized” the innocent suspect as the culprit. A striking example of memory contamination in the context of recognition memory was reported by Morgan et al. (2013). They conducted a study of military personnel who were confined to a mock prisoner-of-war camp during survival-school training. Each trainee experienced about 30 min of physically confrontational

interrogation while alone in a room with an instructor. After the interrogation, the trainee was left alone in an isolation cell. Later, a member of the research team entered the cell and asked questions about the interrogator (“Did your interrogator give you anything to eat?”) while showing the participant a photograph of a White male (the “foil”), thereby falsely implying that he was the interrogator.

Next, memory for the interrogator was tested using a nine-person, target-absent, simultaneous photo lineup. The photo lineup contained a picture of the foil but not the actual interrogator (i.e., it was a target-absent lineup in which the foil’s face had been differentially familiarized under highly suggestive conditions). Participants who had not been exposed to the foil’s face following interrogation identified the foil as the interrogator 15% of the time. By contrast, participants who had been exposed to the foil’s face identified the foil as the interrogator a remarkable 84% of the time.

As the example presented above clearly indicates, testing memory with suggestive or otherwise improper procedures contaminates memory. A natural assumption might be that testing memory under optimal conditions (i.e., in accordance with current recommendations) would not have a contaminating effect. This may very well be true when the memory test in question consists of interviewing a witness about their recollection of details about the crime (a recall test) using a proper procedure such as the Cognitive Interview (Fisher & Geiselman, 1992). When questioned properly, witnesses tend to recall accurate information. Recalling accurate information does not contaminate memory. Indeed, it can reinforce it by making the retained information more durable than it otherwise would be, a memory-enhancing phenomenon known as “the testing effect” (e.g., Roediger & Karpicke, 2006).

Unfortunately, the same is not true when memory is tested using a recognition procedure such as a lineup. Even when using a pristine lineup procedure that happens to involve an innocent suspect, testing memory generally contaminates memory for that individual, thereby rendering any later recognition test prejudicial. Next, we consider some theoretical concepts derived from years of basic-science research to understand how and why that happens.

A Primer on the Theoretical Understanding of Recognition Memory

Several long-standing and influential theoretical considerations help to make sense of recognition memory: (a) encoding specificity, (b) similarity-based matching, (c) elaborative processing, (d) signal detection theory, and (e) the source-monitoring framework. These are

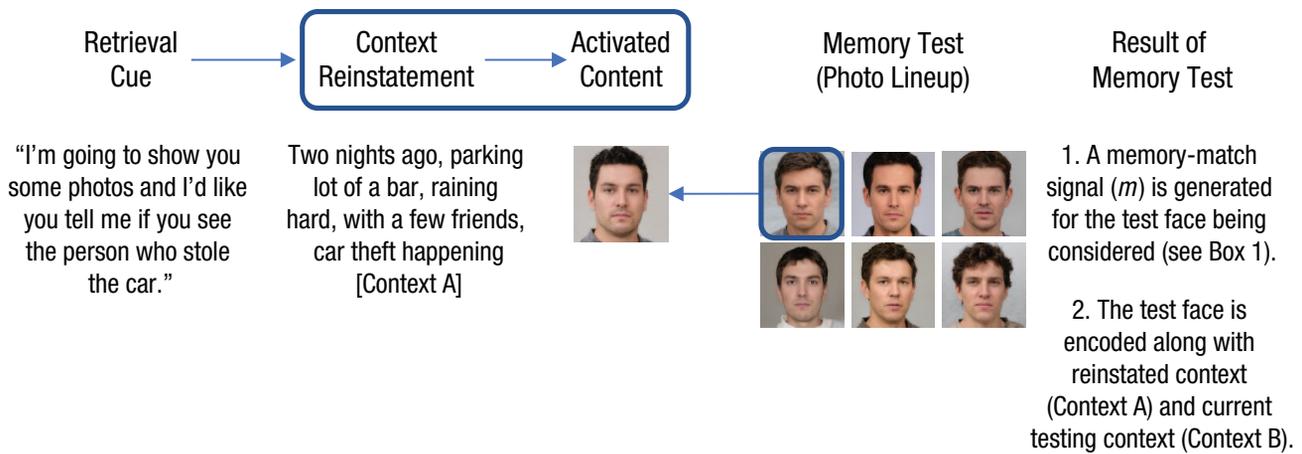


Fig. 1. The specific reference to the witnessed crime by the investigating officer (left column) is a retrieval cue that reinstates the encoding context in the mind of the eyewitness (Context A), which activates the relevant content—the face of the culprit. If multiple culprits were involved, their faces would also be activated, as would faces similar to those of the culprit(s) that might have been seen by the witness in other contexts. We omit those considerations for simplicity. Next, the lineup administrator presents the photo array to the witness, and each photo is compared with the activated content to make an identification decision. This figure illustrates that comparison process taking place for the top-left photo in the lineup. The comparison process yields a memory-match signal associated with the tested face (m) that is conceptualized in terms of signal detection theory (see Box 1). After all the faces in the array have been compared with memory, there will be six memory-match signals, and the face associated with the strongest signal will be a candidate for being identified. Comparing a face to memory involves elaborative processing and so incidentally creates a distinctive memory of the tested face (a process illustrated in Fig. 2), one that is encoded along with aspects of the reinstated context (Context A) and the testing context (Context B).

all standard “textbook” ideas that inform our understanding of the intuitively simple but surprisingly complex act of recognizing a once-seen face. The theoretical issues discussed in the remainder of this section are outlined in Figure 1.

Encoding specificity

Memory is generally understood to be cue-dependent (Tulving, 1983; Tulving & Thomson, 1973), which is to say that what you explicitly remember is determined by a *retrieval cue* that distinguishes the sought-after memory from the multitude of memories stored in one’s brain. When memory is tested using a lineup, the retrieval cue consists of the specific question put to the witness. This is important because memories are differentially activated and thus accessible depending on the cues available at test (e.g., Godden & Baddeley, 1975). The question posed to the witness is not—or should not be—“are any of these faces familiar?” Instead, the more direct question is: “Do you see the person who committed the crime?” That retrieval cue will reinstate the context of the crime and activate the relevant content (i.e., the face of the culprit) in the brain of the eyewitness, as illustrated in the leftmost columns of Figure 1.

Similarity-based matching

In the simplest and perhaps most common case, the activated content consists of only one face (the singular culprit). If, instead, multiple culprits were involved, all their faces would be activated. According to global matching models, beginning with Gillund and Shiffrin (1984), each recognition-test item (e.g., each face in the lineup) is separately and individually compared against the activated faces (McClelland & Chappell, 1998; Shiffrin & Steyvers, 1997). In the case of a single culprit, this process reduces to what one might already intuitively assume to be true: Each face in the lineup is separately compared against the remembered face of the culprit. Figure 1 illustrates the comparison process for one face in the lineup, which yields a memory-match signal (m) for that face. The more similar the face in the lineup is to the witness’s memory of the culprit, the stronger this memory signal will be.

Signal detection theory

The memory-match signal (m) associated with a tested face is usually conceptualized in terms of signal detection theory. According to this theory, the memory signal is not all or none (i.e., match vs. no match) but is

instead continuous because a face in the lineup can have any degree of similarity to the face of the culprit in memory. It seems natural to assume that, in a target-present lineup, the guilty suspect's face will be the most similar (generating the highest value of m), whereas the fillers will be less similar (generating weaker values of m). Likewise, in a fair target-absent lineup, no one will be very similar to the face of the culprit in memory, so they should all generate weak values of m . These assumptions are sensible, but they omit an important consideration. According to signal detection theory, only *on average* is a guilty suspect expected to generate a stronger memory signal than an innocent suspect or a filler. The reason is that memory matching is an inherently noisy process (Box 1). Thus, occasionally (but not usually), a guilty suspect will generate a weak memory signal and an innocent suspect (or a filler) will generate a strong memory signal. A troubling implication is that, even under ideal conditions involving no memory contamination and pristine testing procedures, and even on the initial test, misidentifications will inevitably happen from time to time. Still, high-confidence misidentifications should be rare. However, for reasons explained next, misidentifications would be expected to increase if memory is tested a second time.

Elaborative processing

The comparison process between a particular face in the lineup and the activated content of the culprit's face in memory does more than simply yield a memory-match signal. It also creates a detailed memory record because of the face processing that occurred during the identification procedure. In a typical lineup, the suspect and the fillers will be physically similar to each other. For example, to be included in the lineup, the face would ideally match the description of the perpetrator provided by the eyewitness (e.g., clean-shaven 20-year-old White male with short dark hair). Because of how lineups are designed, it will not suffice to perform a superficial scan of each face to make an identification decision, such as taking notice only of the shared features. Instead, each face in the lineup must be more thoroughly processed by attending to additional dimensions of the face (Fig. 2).

The act of attending to additional facial dimensions means that the witness has processed some of the unique features that, in configuration, define how a face in the lineup differs from other faces in the population. In other words, by necessity, a face in a lineup is *elaboratively processed* to decide whether this is the person who committed the crime. Such elaborative processing

takes place whether the ultimate identification decision is “yes” or “no.” Decades of research have established that the more elaboratively a stimulus is processed, the more likely it is to be later remembered (Craik & Tulving, 1975). Why? Craik (2002) put it this way: “. . . a richly elaborate trace will be more differentiated from other episodic records—this greater *distinctiveness* in turn will support more effective recollection in an analogous way to distinctive objects being more discriminable in the visual field” (pp. 306–307).

Elaborative processing creates a memory *incidentally* (i.e., without intention to form a memory). This is, in fact, the essence of the problem associated with testing a witness's memory for a suspect a second time. On that second test, a newly formed memory of the suspect will be accessible, even if the tested suspect is innocent, and the signal generated by the memory of the suspect's face might now be strong.

Source monitoring

The memory of a previously tested face is defined not only by its strength (i.e., by the magnitude of m) but also by the memory of the context that accompanied the encoding of the face. Assigning context to the memory signal is known as *source attribution*, and it can be an error-prone process (Johnson et al., 1993). That is, the witness might misattribute the strong memory signal to Source A when, in fact, the face was actually encountered in Source B. Testing memory for the first time using a police lineup almost seems tailor-made for inducing a source misattribution when memory is tested a second time.

An elaboratively processed face encoded during the initial test is not stored in a vacuum. Instead, it is encoded along with aspects of both the internal (i.e., reinstated) context and the external (i.e., testing) context (e.g., Cox & Shiffrin, 2017; Nelson & Shiffrin, 2013). These contexts are labeled Context A and Context B, respectively, in Figure 1. Critically, on the first test, only the culprit's face has been associated with the context of the crime (unlike any filler or any innocent suspect). However, on the second test, more faces will have been associated with that context, including the face of an innocent suspect being tested a second time. When Source A is again reinstated at the time of the second test (“Do you see the person who committed the crime?”), the activated content would now include not just the culprit's face but also the faces that were previously tested, including the face of the innocent suspect.

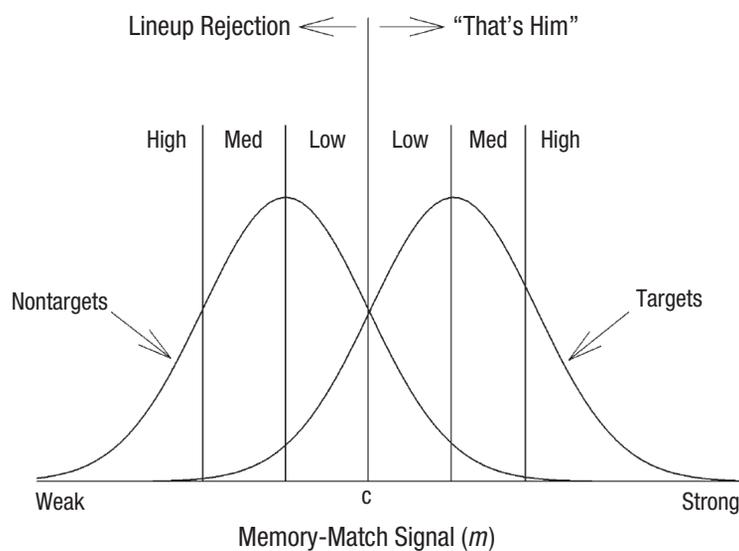
Typically, when the police conduct a second lineup with the same suspect and same witness, they use a

Box 1. Signal Detection Theory

Signal detection theory is a conceptual framework with origins dating back to the dawn of experimental psychology (Fechner, 1860/1966; Green & Swets, 1966; Kellen et al., 2021; Wixted, 2020). As applied to eyewitness identification, signal detection theory conceptualizes the memory-match signal (m) that is generated in the brain of an eyewitness when a face in a lineup (innocent or guilty) is compared with the face of the culprit stored in memory. The more similar the two faces are, the stronger the memory-match signal will be. On average, m will be strong when the face under consideration is the guilty suspect (the *target*) because that face matches the memory of the culprit, but it will not always be strong. This means that we should think of m not as a constant but as a variable that has a range of values across many eyewitnesses who are considering the guilty suspect in a target-present lineup. Its value will be high on average, but it will have variance as well. Thus, in signal detection theory, we represent m for guilty suspects as a *distribution* of values with a relatively high mean.

When the face under consideration is an innocent suspect in a target-absent lineup or a filler in either type of lineup (*nontargets*), m will be weak, on average, because these faces will not usually be particularly similar to the memory of the culprit. However, it will not always be weak (e.g., the innocent suspect might be a lookalike). Thus, once again, across many lineups and eyewitnesses, it is useful to conceptualize m as a variable with a relatively low mean, not as a constant. Thus, there are two distributions (assumed to be Gaussian in form and with equal variance for convenience) with different means, one for guilty suspects and another for both innocent suspects and fillers. For measurement purposes, we can conceptualize the difference between the target and nontarget means in standard deviation units and call that measure d' (a value estimated from data in a particular experiment).

After examining all the faces in the lineup, one face will have the maximum value of m (m_{\max}). If m_{\max} is strong enough—that is, if it exceeds the witness's *decision criterion* (c) for making an ID—that face is identified (Wixted et al., 2018). If so, the stronger m_{\max} is, the higher the witness's confidence in that ID will be (low, medium or high). If even m_{\max} is not strong enough to exceed the witness's decision criterion, the lineup is rejected. The weaker m_{\max} is, the higher the witness's confidence will be that the culprit is not present in the lineup. This model inherently predicts a strong confidence–accuracy relationship (Wixted, 2020), which is often observed in lab studies for suspect IDs (Wixted & Wells, 2017) but is less reliably observed for lineup rejections (e.g., Brewer & Wells, 2006).



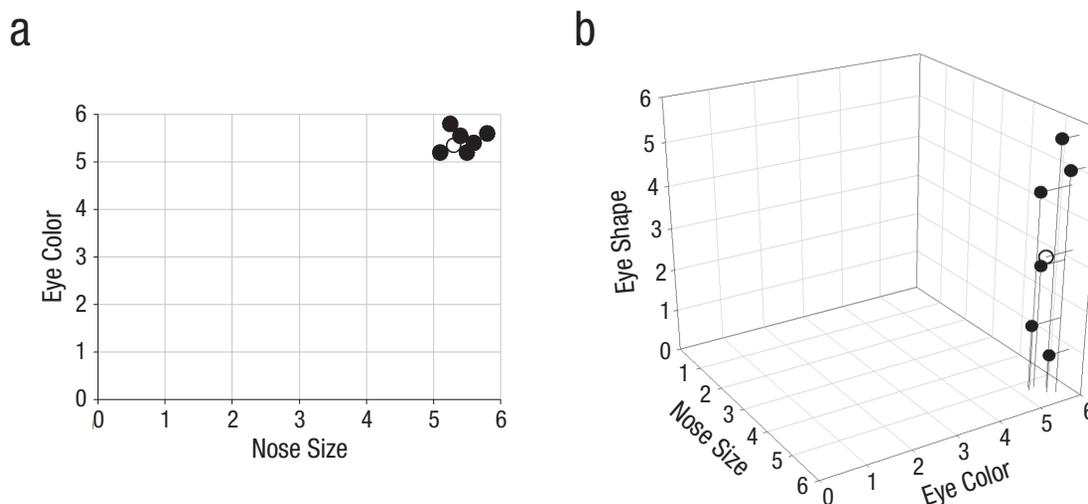


Fig. 2. Multidimensional “face space” (Valentine, 1991; Valentine et al., 2016). Although face perception and memory are widely thought to involve both holistic and feature-based processing (Abudarham et al., 2019; Chua et al., 2015; McKone & Yovel, 2009; Tanaka & Farah, 1993; Tanaka & Simonyi, 2016), low-level perceptual features are used as perceived facial dimensions here for illustrative purposes. The dimensions could just as easily reflect more global properties of any level of abstractness (e.g., masculinity, attractiveness, perceived trustworthiness). The graph in (a) shows perceptual representations of six members of a target-present lineup (filled circles) and the memory representation of the culprit (open circle) along two facial-feature dimensions, nose size and eye color. In this hypothetical example, all values fall between 5 and 6 on both dimensions because the witness described the culprit as having a large nose (0 = *very small* to 6 = *very large*) and dark brown eyes (0 = *very light blue* to 6 = *very dark brown*). The points cluster together because the lineup members were deliberately chosen to match this description of the culprit. When the points cluster together, as they would if only these two features were considered, it is hard for the witness to discriminate the guilty suspect from the fillers. Therefore, additional feature dimensions must be considered. The graph in (b) shows the perceptual and memory representations of the same individuals when a third feature dimension (eye shape) is considered (0 = *round* to 6 = *slanted*). The two-dimensional plot of eye color versus nose size in (a) is now the floor of the three-dimensional plot in (b); the points still cluster together on the floor. The vertical axis represents the new dimension (eye shape). Because this feature was not included in the witness’s description, the lineup members exhibit natural variability, so the points spread out along this dimension. Moreover, because eye shape is a feature of the culprit’s face that the witness stored in memory but did not describe, only the guilty suspect is now close to the memory representation of the culprit, which generates a differentially strong memory-match signal (*m*). The critical point here is that to make an identification decision, the witness has to consider additional feature dimensions beyond those included in the description. Critically, considering additional feature dimensions individuates a face and is an example of elaborative processing. Elaborative processing makes memories incidentally (i.e., without intention to form a memory).

new set of fillers. Therefore, in the typical case, the suspect will generate a *differentially* strong memory-match signal (potentially attributed to the wrong source) because only that face has been tested previously. The differential familiarization of the suspect’s face when memory is tested a second time violates the basic tenets of the “lineups-as-experiments” analogy (Wells & Luus, 1990). The idea is that when police investigators conduct a lineup, they are essentially performing an experiment to test their hypothesis that the suspect is guilty. As experimenters, they should adopt the same protocols that scientists adopt to ensure the integrity of their experiments. One of those protocols is to ensure that participants (witnesses in this analogy) are blind to the hypothesized outcome lest they perform in such a way as to please the experimenter. But if the suspect is the

only person in common between the first and the second identification tests, then it is clear to the witness which person the police suspect of having committed the crime—the person in common to both procedures. Because the witness is no longer blind to the suspect’s identity on the second test, the lineup is inherently biased against the suspect.

Empirical Studies of Testing Memory a Second Time

In light of the foregoing theoretical considerations, the memory signal generated by the innocent suspect’s face will likely be stronger on a second test involving the same witness as a result of the witness having observed the suspect on the first lineup test. The relevant

empirical evidence unambiguously supports this theoretical prediction.

The memory-for-foils paradigm

An illuminating experimental design known as the *memory-for-foils* paradigm provides compelling evidence that testing memory contaminates memory by leaving behind a trace of the tested items (Jacoby et al., 2005). In a typical recognition memory experiment in the basic-science literature, participants are presented with a list of items to study (e.g., a list of words). On a later recognition memory test, those same items (now called “targets”) are randomly intermixed with new items (“foils”), and each item is presented individually for a yes/no decision (i.e., “Did this item appear on the list, yes or no?”). Theoretically, the activated memory content against which each test item is compared consists of the items from the study list (Cox & Shiffrin, 2017). In a test like this, the targets are analogous to a guilty suspect because they were seen on the list, and the foils are analogous to innocent suspects and fillers because they were not seen on the list.

After completing the recognition test, the participants are then unexpectedly asked to complete a second recognition memory test consisting of the foils from the first test randomly intermixed with a new set of foils. This time, they are instructed to say “yes” to the foils that appeared on the first test (those items are now the targets) and to say “no” to the new foils. Theoretically, the activated memory set against which test items are compared consists of the items from the just-completed recognition memory test (including the foils). Therefore, the foils, when tested on the surprise memory test, will generate a relatively strong memory-match signal.

Indeed, participants perform very well on that second unexpected test even though, when they first saw the foils (now targets), they were merely attempting to decide whether or not those items had appeared on a previous list, not attempting to memorize them. The foils were elaboratively processed to answer the recognition memory question and were encoded incidentally.

This phenomenon is not limited to lists of words but occurs for faces tested in a lineup as well. In a study reported by Charman and Cahill (2012), participants first viewed a mock-crime video and were later tested using a standard six-person simultaneous photo lineup. Still later, the participants were given a surprise memory test for the five fillers in the lineup. This final test was a list memory test consisting of 10 faces (the five fillers plus five new faces), and each face was presented individually for a yes/no decision about whether it had been seen previously in the lineup. Keep in mind that

during the lineup test, the participants were not attempting to memorize the faces; instead, they made only an identification decision about each face. On the final test, the results were striking: The hit rate (percentage of previously seen fillers correctly recognized as such) was 76%, whereas the false alarm rate (percentage of new faces incorrectly recognized as having been previously seen) was only 19%.¹

It is worth briefly considering how these results are interpreted in terms of the standard signal detection model discussed earlier (Box 1) because it illustrates a key point about how memory contamination caused by testing memory should be conceptualized. The model holds that previously seen faces will generate a stronger memory signal, on average, than new faces. On the unexpected test, the memory signals generated by the new (previously unseen) fillers are conceptualized as having been drawn from a Gaussian distribution with a low mean (Fig. 3a). Because these memory signals are weak, on average, only a small percentage (19%) of them exceed the witness’s decision criterion by chance. The memory signal generated by the previously seen fillers (i.e., fillers that became targets) are conceptualized as having been drawn from a Gaussian distribution with a high mean (Fig. 3b). Because these memory signals are strong, on average, a much higher percentage (76%) of them exceed the witness’s decision criterion.

For these data, $d' = 1.58$ (Box 1), which means that the participants could easily discriminate previously seen fillers from new fillers. Of most relevance to the issue under consideration here is that this standard theoretical framework conceptualizes the memory distribution of the tested fillers (i.e., fillers that are now targets) as having been shifted upward relative to the fillers that had not yet been tested. In other words, it was not only the 76% of correctly recognized fillers that are now targets that had their memory signals strengthened by the initial test; the remaining 24% were strengthened (i.e., “contaminated”) as well but not enough to exceed the decision criterion. Thus, the face was rejected on a second test, but perhaps with less confidence than would otherwise have been the case. The take-home message is that, in theory, testing memory contaminated memory for *all* the tested fillers.

Viewing mug shots

Brown et al. (1977) had participants observe two separate groups of five strangers (“criminals” hereafter). Ninety minutes later, they viewed 15 mug shots, including five people who were criminals and others who were being seen for the first time. A week later, the

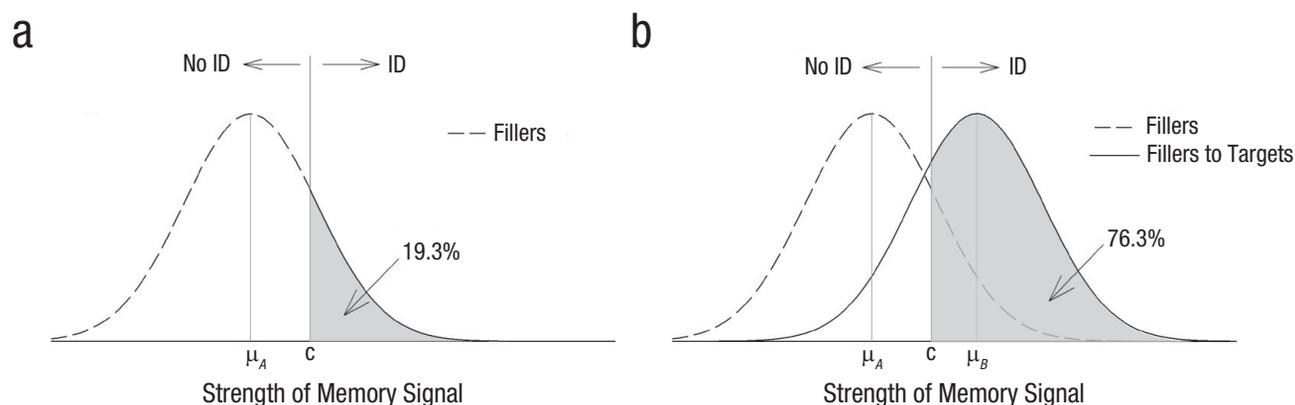


Fig. 3. Signal detection interpretation of findings reported by Charman and Cahill (2012). The graph in (a) represents the standard signal detection interpretation of a false alarm rate of 19.3%. The memory signals generated by new fillers have a mean of μ_A , and the decision criterion (c) is placed well above that. The graph in (b) shows the fillers-to-target distribution with mean μ_B superimposed on the information from (a), showing the standard signal detection interpretation of a hit rate of 76.3%. Note that, relative to new foils, all the fillers that are now targets (i.e., fillers to targets) have had their memory strengths boosted.

participants were presented with lineups (a second memory test) and asked to identify the criminals from the initial in-person encounter. The experience of viewing the mug shots had a clear effect on memory. For lineup members who had never been seen before, the rate of mistaken identification was 8%. However, if a lineup member's mug shot had been seen at the 90-min mark (but not during the original experience), the chances of being falsely identified as a criminal rose to 20%. Thus, the strong memory signals associated with the misidentified mug-shot-only faces were misattributed to the original experience involving the criminals (an example of source misattribution).

The findings reported by Brown et al. (1977) were reinforced by a study reported by Goodsell et al. (2015). Participants watched a short video clip of someone entering an office, after which they were randomly assigned to the mug-shot condition or to the no-mug-shot control condition. Those assigned to the mug-shot condition viewed 50 mug shots of people matched to the description of the culprit from the video, and they were asked to search for the perpetrator. All participants returned after a 48-hr delay and viewed either a target-present lineup or a target-absent lineup.

If a previously seen mug-shot photo in a lineup was one that the participant had previously picked, then that photo was (a) identified as the perpetrator from target-present lineups much more often than a photo of the actual perpetrator (.70 vs. .08) and (b) identified from target-absent lineups with a very high probability (.81). If the previously seen mug-shot photo was *not* the one that the participant had picked, then that photo was (a) *still* identified as the perpetrator from target-present lineups more often than a photo of the actual

perpetrator (.28 vs. .18) and (b) identified from target-absent lineups with a probability of .38 (more than double the false-suspect ID rate from the control condition). Thus, memory was contaminated by the initial mug-shot test whether or not the mug-shot face appearing in the later lineup had been previously identified (see related findings reported by Memon et al., 2002).

Testing a suspect a second time

Conceptually similar effects are observed when the initial test consists of viewing a lineup rather than mug shots. In Steblay et al. (2013), participants viewed a video of a simulated crime and then attempted to identify the culprit from two six-person lineups separated by a 2-week retention interval. The suspect (guilty or innocent) was common to both lineups. In the absence of contamination from the first test, the expectation would be that the guilty-suspect ID rate would decline substantially after 2 weeks (because of forgetting) and the false ID rate would remain largely unchanged or increase slightly. For example, with similar retention intervals using a between-subjects design, Palmer et al. (2013) found the correct-ID rate dropped from .60 to .51 (immediate to delayed), $p = .052$, whereas a slight increase in the false-ID rate did not approach significance. By contrast, Steblay et al. (2013) found that when witnesses were tested both immediately and after a delay, the guilty-suspect ID rate *increased* on the delayed test, albeit nonsignificantly (instead of exhibiting the decrease expected as a result of forgetting), and the false-ID rate increased substantially from .21 to .31, $p = .03$. Thus, having seen the suspect in an earlier lineup contaminated memory, placing both innocent

and guilty suspects at greater risk of being identified on a second test than would otherwise be the case.

Testing a witness's memory for a suspect a second time might not be problematic if, on the second test, not only was the same suspect included in the lineup but also the same fillers. In that case, everyone's face would generate an elevated memory signal compared with the first test, and no one would stand out. Lin et al. (2019) conducted this very experiment and found that, even then, nothing was gained by conducting the second test. Instead, witnesses simply became more willing to choose but without improving accuracy.

This Issue Is Specific to Forensic Memory Evidence

In the forensic context, the problem associated with repeated testing is specific to *memory* evidence. For example, repeatedly comparing latent fingerprints lifted from a crime scene to the known fingerprints of a suspect is not problematic and can even serve the cause of justice (e.g., fingerprint examiners can double-check their work) because the test itself does not change the evidence. By contrast, repeated tests of memory are unlikely to serve the cause of justice because testing changes memory (Wells et al., 2020). If comparing latent prints and known prints from a suspect altered the latent prints in such a way as to more closely resemble the fingerprints of the suspect, it seems reasonable to suppose that any fingerprint test after the first would be viewed with suspicion and perhaps excluded from consideration. Although this kind of contamination does not occur with fingerprints, it does occur with "face prints" (the memory of the culprit in the brain of the eyewitness).

Of course, as noted earlier, such contamination can occur even before the first official memory test conducted by the police, so it makes sense to take steps to prevent that from happening. In this regard, Recommendation 1 from Wells et al. (2020) is relevant. The recommendation is to conduct, before the lineup, an interview in which the witness is instructed to avoid attempting to identify the culprit on his or her own. If the witness has already done so and has encountered the suspect's photo (e.g., on social media), thereby contaminating memory before the first official test, it is also important to document that fact.

Memory Contamination Is Not the Only Problem

By focusing on memory contamination resulting from the initial test of memory, we do not mean to imply that it is the only problem associated with testing memory more than once—far from it. For example, as much

prior research has shown, the risk to an innocent suspect associated with multiple testing is greatly compounded when suggestive procedures are used and/or when feedback to the witness is provided (Wells & Bradfield, 1998). If, for example, the witness misidentifies the innocent suspect with low confidence from a fair lineup, subsequent feedback from the police can quickly convert it to high confidence (e.g., if the police say "good job, we were pretty sure it was him"). In addition, other memory-contaminating events, such as seeing the face of the suspect again in pretrial hearings or in news stories will further strengthen the memory signal generated by the defendant's face at trial. In addition, if the witness discusses independent evidence against the suspect with prosecutors, it will help to cement the source misattribution according to which the strong memory signal reflects having originally seen the suspect commit the crime.

All of this would be avoided by testing memory only once, thereby strengthening the rationale for the new test-memory-once recommendation in Wells et al. (2020). The new point we are emphasizing here—one that has not received enough attention in the past—is that the witness's memory is *already contaminated* as a result of having taken the first test, even if pristine procedures were followed and even if none of the just-described additional factors exacerbated the problem (as difficult as that might be to imagine).

On the First Test, Confidence Protects Innocent Suspects

On the first (uncontaminated) test using a proper lineup, confidence is more likely to protect than imperil innocent suspects. As noted earlier (Box 1), signal detection theory predicts that decisions made with high confidence should be accurate most of the time, whereas decisions made with low confidence should more often be inaccurate. Related sequential sampling models (e.g., Pleskac & Busemeyer, 2010; Ratcliff, 1978; Ratcliff & Smith, 2004) make similar predictions about reaction time. That is, decisions made quickly should be accurate, whereas decisions made slowly should be less accurate. Empirically, these predictions have often been confirmed in list-memory studies conducted in the basic-science laboratory (e.g., Ratcliff & Murdock, 1976), in lineup studies conducted in the applied-science laboratory (Brewer et al., 2006), and in lineup studies conducted in the real world (Seale-Carlisle et al., 2019). For example, in a study involving actual eyewitnesses to a crime, Seale-Carlisle et al. (2019) reported that lineup decisions made rapidly (e.g., in 5 or 10 s) and with high confidence were estimated to be highly reliable, whereas decisions made slowly (e.g.,

30 s or more) were much less reliable. This was true even in the rare case of a slow decision made with high confidence.

As unfortunate as a misidentification like this would be, keep in mind that the face of the innocent suspect does not actually correspond to the face stored in memory. Therefore, under optimal conditions, the strength of the memory-match signal, despite being randomly strong in a particular case, is not likely to far exceed the witness's decision criterion. According to standard assumptions of signal detection theory (Box 1), and in accordance with much empirical evidence, under ideal testing conditions, misidentifications of the innocent (and of fillers) are usually made with something other than high confidence (Fig. 4).

Losing sight of the low confidence that might be associated with an initial ID (and losing sight of other red flags, such as initial filler identifications or lineup rejections) wastes an opportunity to protect innocent suspects. Identifications made with low confidence are known to be highly error prone, which means that a low-confidence identification should be regarded as an inconclusive test outcome (Wixted & Wells, 2017). This is why the police record of an identification made with low confidence should never be written as “the witness positively identified the suspect.” Instead, the record should reflect the lack of confidence, and that lack of confidence should be taken to mean that the memory test was inconclusive. The phrase “positively identified” is probably best reserved for cases where the witness is arguably *positive* that the identified individual is the culprit.

How Should Initial Confidence Be Measured?

The best way to determine whether the witness was “positive” is an actively researched issue, and there is no consensus. Fortunately, the available research suggests that the different methods (e.g., a verbal scale, a 5-point numerical scale, a 100-point numerical scale, asking the witness to use their own words) may not matter very much. For example, Tekin and Roediger (2017) tested 4-, 5-, 20-, and 100-point scales and found that the different scales yielded similar (continuous) confidence-accuracy plots. In their words, “the scales seem convertible from one to the other, and choice of scale range probably does not affect research into the relationship between confidence and accuracy” (p. 2).

Dodson and Dobolyi (2015) considered numerical compared with verbal confidence scales and concluded that “confidence is calibrated with accuracy in a nearly

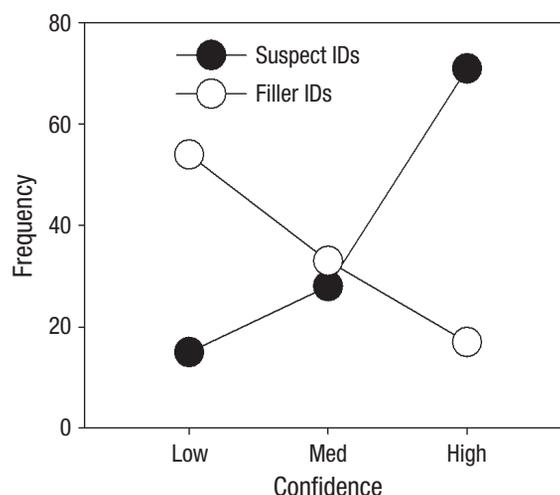


Fig. 4. Number of suspect IDs and filler IDs from 347 photo lineups administered to actual eyewitnesses in the Robbery Division of the Houston Police Department in 2013. The lineups were fair and were administered in double-blind fashion. Of interest here are the IDs made of known innocents (i.e., the fillers), the large majority of which were made with low or medium confidence. Reproduced from Fig. 1b of Wixted, J. T., Mickes, L., Dunn, J. C., Clark, S. E., & Wells, W. (2016). Estimating the reliability of eyewitness identifications from police lineups. *Proceedings of the National Academy of Sciences, USA*, 113, 304–309.

identical manner when confidence is expressed with either a numeric scale or a verbal scale” (p. 267). In agreement with this claim, Tekin et al. (2018) compared 2- and 4-point verbal and numeric scales and found little difference between them. Smalarz et al. (2021) and Mansour (2020) both asked participants to provide confidence in their own words or using a numerical scale. The results indicated that confidence was diagnostic of identification accuracy from a lineup either way, though Mansour (2020) found that verbal statements were more variable.

The upshot of the relevant research is that confidence should be assessed for an initial identification, as has been recommended for many years (Wells et al., 1998). Collecting a confidence statement of some kind appears to be more important than exactly how it is done. Critically, without a confidence statement, it is not possible to know whether the initial ID was made with low confidence, in which case it is highly error prone. Because the initial test is the one that matters, it is essential to collect a confidence statement on that first test. Moreover, the entire identification procedure should be recorded on video (Recommendation 7 of Wells et al., 2020) so that all interested parties—detective, prosecutor, judge, defense counsel, jury, and expert—can see and hear the confidence statement as it was captured in real time.

What if the First Test Involves a Bad Photo of the Suspect?

When a witness fails to identify the suspect or does so with uncertainty on the first test, the police sometimes conclude that the photo of the suspect was not a very good likeness to the face of the suspect. Therefore, they try again, conducting a second test using what they believe to be a better photo. Does a second test endanger an innocent suspect under these conditions?

If the “bad” photo is far from perfect but is nonetheless recognizably the suspect, and if the witness elaboratively processed that bad photo to make a memory-based decision about it (perhaps choosing not to identify that individual), then the witness has processed features that individuate the suspect’s face from other faces. The end product of such elaborative processing is an accessible memory record of that face. On the next memory test involving a better photo, those features will match the features that were encoded during the first test. This will have the effect of elevating the strength of the memory signal relative to what it otherwise would have been, thereby imperiling the innocent suspect. In other words, even a bad photo can contaminate memory if it is a recognizable photo of the suspect.

If the bad photo is instead not recognizable as the suspect, so much so that it might as well be a photo of a different person, then it is hard to see how memory contamination would occur. Therefore, in that case, a second test using a better photo would be reasonable. However, whether the photo is recognizable as the suspect is a judgment call. If no suspect ID is made, even a conscientious police investigator who strongly believes that the suspect is guilty might be inclined to honestly conclude that an imperfect-but-recognizable photo of the suspect was “bad,” thereby justifying a second test. What can be done to protect against this alluring escape route from our main recommendation to test a witness’s memory for a suspect only once?

The best solution would be to preserve the “bad” photo so that others can later judge for themselves whether it is a recognizable photo of the suspect. After all, this is not the only judgment call that an investigating officer has to make. The same officer will have judged the initial photo lineup to be fair, knowing that the photos would be preserved and later judged by others (e.g., by a jury at trial). Preserving the lineup photos incentivizes the investigating officer to exercise caution, ensuring that the lineup is fair. The same principle could be applied to the officer’s judgment call about a photo of the suspect being so bad it might as well be a photo of another person. For example, at a

pretrial hearing, if the court disagrees with that judgment call, then no later test involving the same suspect and eyewitness should be admissible as evidence.

In addition, the issue can be tested empirically. For example, a sample of people can be presented with the first (allegedly “bad”) photo of the suspect and then asked if they can pick that person out from the second lineup. If they cannot do so with greater-than-chance accuracy, then it would be reasonable to conclude that the photo was in fact bad enough that it did not taint the second identification procedure. However, if people can pick the suspect out of the second lineup with greater-than-chance accuracy, then the second lineup should be suppressed.

How Important Was This Issue in the DNA-Exoneration Cases?

Wixted and Wells (2017) argued that on an initial test of *uncontaminated* memory using a *pristine* lineup procedure, high confidence can imply high accuracy, and low confidence can imply low accuracy. Opinions differ as to the reliability of high-confidence IDs in the real world (e.g., Do those tests typically involve uncontaminated memory? Do they typically involve pristine procedures?), but the consensus view is that low-confidence IDs are highly error prone (i.e., at best, they are only weakly probative of guilt). This is true whether or not memory has already been contaminated by the time of the initial test and whether or not pristine procedures are used. Moreover, filler IDs and lineup rejections on the first test are not neutral outcomes but, if anything, are probative of innocence (Wells & Lindsay, 1980).

With that background in mind, consider an analysis reported by Garrett (2011) in his book *Convicting the Innocent*. As noted earlier, data from the Innocence Project show that eyewitness misidentifications contributed to about 70% of more than 375 wrongful convictions later overturned by DNA evidence. Garrett (2011) analyzed the trial records from 161 of those cases in which an eyewitness misidentified an innocent suspect. In the courtroom, at trial, the eyewitness identifications were almost all made with high confidence, which makes sense (otherwise, the prosecutor likely would not have put the witness on the stand). What did these witnesses do at the time of the initial identification? We do not have contemporaneous records, but what these eyewitness and police witnesses described at trial, according to Garrett’s (2011) analysis, yielded some interesting observations.

In 57% of the trial transcripts (92 of 161 cases), the witness who misidentified an innocent suspect with

high confidence at trial recalled having initially done so with low confidence (34 cases); they recalled having identified a filler, another suspect, or no one at all (64 cases); or they reported not having seen the culprit's face (15 cases; some cases had more than one type of issue). We do not know what was said at these initial identifications, apart from what the witnesses later recounted at trial. However, to the extent that their recollections are accurate, these initial identifications were highly problematic, not only because the suspect was not confidently identified but for other reasons as well (many of these lineups also involved highly suggestive procedures). This is a problem because IDs made with low confidence are known to be highly error prone. As Garrett (2011) put it, this can provide "a glaring sign that the identification was not reliable" (p. 64). Low-confidence IDs, as well as nonidentifications, filler identifications, or identifications of other suspects, provide an opportunity to protect an innocent yet ultimately misidentified suspect. Unfortunately, for the DNA-exoneration cases involving an inconclusive outcome (or a contrary outcome) on the initial test, that opportunity was lost because the witness's memory was tested more than once.

How many of the remaining cases—the ones for which no testimony about the initial decision exists (43% of 161 cases)—also involved an initial outcome other than a high-confidence ID of the suspect? There is no way to know, in part because in only four cases was the procedure recorded; at a minimum, the evidence reported by Garrett (2011) is consistent with the idea that a sizable fraction of consequential eyewitness misidentifications began with something other than a conclusive (i.e., high-confidence) identification of the suspect. Indeed, as illustrated earlier in Figure 1, it is also consistent with the findings of a police department field study in which misidentifications of known innocents (fillers) were much more likely to have been made with low or medium confidence than high confidence. We turn now to three cases that illustrate how important this issue is.

Three Illustrative Cases

John Jerome White

On August 11, 1979, a man broke into a house in Manchester, Georgia, and raped a 74-year-old woman asleep on her couch (details about this case are available online: National Registry of Exonerations, 2016; "Understanding eyewitness misidentifications," 2011). On the basis of the description of the culprit provided by the victim, the police created a composite sketch. A Georgia



Fig. 5. Live lineup administered to the victim following an initial photo lineup in which she identified Jerome White. White is in the middle, and the actual rapist (James Parham) is the man on the far right.

Bureau of Investigation agent happened to be investigating a 19-year-old man named Jerome White on another charge, and he thought the sketch resembled White. A week later, the victim picked White out of a photo array, but she was not completely certain (saying she was "almost positive" he was the attacker).

Perhaps because of those initial signs of uncertainty, she was later administered a live lineup (Fig. 5). White was the only person to appear in both the photo lineup and live lineup (none of the fillers were repeated), so his face had been differentially familiarized as a result of the initial photo-lineup test. Given all the theoretical and empirical considerations we have reviewed to this point, it would not be surprising to learn that the victim identified White again from this lineup, and she did. What makes this case remarkable, however, is who one of the fillers in the lineup turned out to be.

The victim originally told the police that her attacker was "well built" and had a "round face," a description that does not apply to Jerome White (Fig. 5). However, it does apply to one of the fillers in the lineup, namely, the man at the far right in Figure 5. He was not a suspect, but he happened to be in jail at the time, so he was selected to fill out the lineup. Incredibly, many years later, DNA evidence indicated that he was the one who actually committed the rape. Yet after seeing White's face in the initial photo lineup, choosing him, and (evidently) making a source misattribution, he was now the face that came to mind when the victim was asked if she saw the man who raped her in the lineup.

At his trial in 1980, the victim conclusively identified White as the man who had raped her ("that's him"). And why not? She had now seen his face on multiple

previous tests, and the strong sense of familiarity was, in her mind, sourced to the initial crime (not to the lineup tests). The police and prosecutors presumably also reinforced her choice, not to intentionally create an injustice, but to reassure her. Unfortunately, such reassurance serves only to inflate confidence (Wells & Bradfield, 1998). Any doubts the witness had at the initial lineup vanished by the time of the trial. White spent more than 22 years in prison before finally being exonerated by DNA evidence in 2007. The same DNA evidence that exonerated White led prosecutors to charge James Parham (the man on the far right in Fig. 5) with the rape. He pleaded guilty and was sentenced to 20 years in prison.

Steven Gary Titus

On October 12, 1980, Port of Seattle police received a report that a man had raped a female hitchhiker—details about this case can be found from *The Seattle Times* (Henderson, 1981), and from a TED Talk (Loftus, 2013). Steve Titus was a restaurant manager in Seattle at the time, and he was on his way home from a restaurant with his fiancé when his car was stopped by a police officer because it resembled the car that was driven by the rapist. Titus also fit the description of the rapist provided by the victim. When later presented with a photo lineup, the victim identified Titus as her attacker, stating “This one is the closest one.” It might very well be the case that Titus provided the closest match to her memory of the culprit (thereby generating the strongest memory signal of the faces in the lineup), but her wording is indicative of low confidence, not high confidence. Yet when Steve Titus was put on trial for rape, the witness’s uncertainty had vanished. When she got on the witness stand, she identified Titus with high confidence. By then, not only did the witness have a memory of Titus based (at a minimum) on the initial lineup test, but she may also have been informed of other reasons why police and prosecutors thought he was guilty (further inflating confidence). Moreover, the courtroom identification test itself is inherently suggestive, inflating confidence still further. Based largely on that confident testimony, Titus was found guilty.

According to an article in *The New York Times* (Goleman, 1995), a few months after Titus was convicted, new evidence suggested that a different suspect was responsible for a series of rapes in the area. When the rape victim saw the photograph of the new suspect, she realized that he was the one who had actually raped her. At that point, she began to cry and said “Oh my God, what have I done to Mr. Titus?” However, the key mistake was made by other actors in the criminal-justice system, not the witness, because they tested memory

for the suspect (Titus) more than once, ignoring her initial low-confidence ID. Instead of relying on the first test only, they unwittingly relied on contaminated memory evidence at trial to win what turned out to be a wrongful conviction.

Fortunately, Titus avoided a long stint in prison, but the story does not otherwise have a happy ending. Embittered by his wrongful conviction and the financial ruin it caused (including large legal fees and the loss of his job), he decided to file a lawsuit against the Port of Seattle police. Sadly, just before that case was to be heard, Titus died of heart failure at the age of 35.

Charles Don Flores

On the morning of January 29, 1998, witness Jill Barganier saw two people get out of a car outside the home of her neighbor, Elizabeth Black, who was murdered shortly thereafter. Details about this case can be found in legal documents posted at Flores’s website (Flores, n.d.). Barganier described both as White males with long, shoulder-length hair. Another neighbor independently described seeing two White males get out of the car and enter Black’s house that morning. When presented with an initial photo lineup containing the main police suspect, a man named Richard Lynn Childs (a White man with long hair down to his shoulders), Barganier immediately identified him with high confidence. Childs owned a handgun of the same caliber used to murder Black, and he owned a conspicuously painted car that multiple eyewitnesses saw parked near Black’s home the morning of the murder. He also eventually signed a confession admitting that he shot Black. This was an initial identification made quickly and with high confidence, and all indications are that it was a reliable ID.

Who was the other man Barganier saw getting out the car that morning? The police suspected Charles Don Flores because he was a known associate of Childs and had been engaged in a drug deal with him in the hours before the murder. Flores was a heavyset Hispanic man with a crew cut and therefore did not match the description of the accomplice provided by the witness. Nevertheless, the police placed his photo in a lineup with other Hispanic men as fillers and presented it to the witness. Quite understandably, the witness did not identify anyone (i.e., she rejected the lineup). This makes sense because it is hard to see why photos of large Hispanic males with short hair would generate a strong memory-match signal compared against the memory of a White male with long hair stored in the witness’s brain. Thus, on the initial test, her failure to identify Flores provides no evidence of guilt and instead provides evidence of innocence.

Nevertheless, at the trial, Jill Bargainer was certain that Flores was the man she saw that morning with Childs. Multiple factors presumably contributed to her high confidence, beginning with the memory-based decision she made about Flores on the first test (from that moment on, she likely had a representation of his face in her memory), perhaps continuing with news stories in which his face was shown, and culminating in the suggestive memory test performed at trial. For all these reasons, the only relevant eyewitness evidence was her rejection of the initial lineup.

In addition to the “direct” courtroom evidence provided by the eyewitness, there is indirect evidence against Flores as well. For example, in the days following the crime, he torched the conspicuous paint job on the car driven by Childs the morning of the murder (presumably to make it harder for the police to find), and he fled to Mexico when he learned that the police were looking for him (i.e., he “acted guilty”). This information, if Bargainer were aware of it, would have also served to bolster her confidence by the time of the trial. Childs did not testify about his accomplice at the time of the trial and has not done so to this day.²

Despite some independent evidence of guilt, by all accounts, it was the testimony of an extremely credible and highly confident eyewitness that led to the conviction of Flores. In Texas, murder is a capital crime, and an accomplice to a murder is as guilty as the triggerman (Childs). Therefore, Flores was sentenced to death. He has been on death row for over 21 years, and his appeal to the U.S. Supreme Court was denied on January 22, 2021. What may be his final appeal was recently filed in the Texas Court of Criminal Appeals.

The most remarkable fact about this case is that the eyewitness evidence that is mainly responsible for sending him to death row (namely, the witness’s confident testimony at trial) is actually probative of innocence when properly understood (i.e., her initial description of the accomplice and her rejection of the initial lineup). In this case, police and prosecutors obviously failed to appreciate that only the first test counts.

A Simple Reform: Test a Witness’s Memory for a Suspect Only Once

Presenting the face of a suspect on an eyewitness identification test contaminates the witness’s memory for that individual. Such contamination is difficult to avoid, and if it occurs, there is no way to undo it (i.e., there is no way to decontaminate memory). If the witness’s memory for that individual suspect is tested again, the suspect’s face will generate a stronger memory signal than it otherwise would. As noted earlier, the fact that memory has been contaminated does not necessarily mean that the

contaminated memory signal will be strong enough to exceed the criterion for making an identification. However, even in that case, memory has been irretrievably contaminated. Because of source misattribution, witnesses are at risk, on any later test, of responding to the elevated memory signal as if it were based on a memory formed at the time of the crime. By the time of trial, a variety of factors over and above the contaminating effects of testing memory more than once (feedback from the police, seeing the suspects face on the news, etc.) will have likely exacerbated the problem.

In contrast to this science-based perspective, judges often have a different legal perspective. As noted by Garrett (2012), they often embrace the catastrophically mistaken idea that, following the initial test, it is possible to conduct an “independent” test of memory, as if testing the match between a suspect’s face and the witness’s memory of the culprit multiple times is like testing the match between a suspect’s fingerprints and the latent fingerprints lifted from a crime scene multiple times. However, as noted earlier, fingerprints do not change from the first test to the second; memories do. Therefore, once it has been tested and contaminated, it is not possible to perform a second independent test of the memory of a stranger’s face that was formed during the commission of the crime.

The only barrier to implementing this recommended reform (testing a witness’s memory for a suspect only once) is a faulty theory in the minds of various actors in the criminal-justice system. It therefore follows that implementing this reform should be much simpler than implementing other reforms that require training officers to administer eyewitness identification tests properly. To implement this newly proposed reform, the only training that is required is for policymakers to change their thinking about how memory works and to understand that testing memory for a suspect carries the high risk of irretrievably contaminating memory of that suspect. Considering how many wrongful convictions based on eyewitness misidentification might have been avoided by understanding this simple idea—and considering how many might be avoided going forward—implementing this reform should be an urgent priority.

A Final Word About Courtroom IDs

Because testing memory for a suspect is likely to contaminate memory for that face, a memory test conducted in the courtroom is likely to be a test of contaminated memory, by which time many additional factors exacerbate the problem. There may be rare exceptions (e.g., when the first test of memory for the defendant occurs from the witness stand, at trial, or when the prior test involved a photo that is not recognizable as the

defendant). However, even in cases like that, despite avoiding the problem of memory contamination, a courtroom ID would still be problematic because of its inherently suggestive nature (Wells & Luus, 1990). It is inherently suggestive because only one person is sitting next to the defense attorney, making it plainly obvious to all that prosecutors believe they have enough evidence to be convinced that this is the person who committed the crime.

When it comes to eyewitness identifications, the courts often have it exactly backward, sometimes excluding earlier tests (including the all-important initial test) while allowing in court IDs based on memory that (unbeknownst to the judge) has likely been contaminated by events that occurred after the crime. As Garrett (2012) put it: “Today courts almost always allow courtroom identifications, but they sometimes bar prior identifications. Instead, courts should per se exclude courtroom identifications if there was a prior identification, but they should sometimes admit out-of-court identifications” (p. 457). Perhaps exceptions could be made for rare circumstances such as those mentioned above, but the point is that it makes sense for courts to exclude forensic evidence that has likely been contaminated in a way that is prejudicial to the defendant instead of making an exception for contaminated eyewitness evidence by routinely allowing it.

In addition to excluding courtroom identifications, except under presumably rare circumstances, the only out-of-court identification that should be admitted is the *first* one. Only the first test should be admitted for the same reason the court might exclude other kinds of forensic evidence that is likely to have been contaminated. Barring unusual circumstances (e.g., the witness did even look at the suspect on the first lineup test, or the photo used in the first lineup test was not even recognizable as the suspect), that first test provides the only relevant memory evidence. Even the first official test may involve contaminated memory (e.g., if the witness found a photo of the suspect on social media before viewing the photo lineup), but the first test unarguably provides the best chance to test uncontaminated memory. This simple reform, had it been implemented long ago, could have prevented many (perhaps most) of the wrongful convictions that occurred not because of eyewitness misidentification but because memory was tested more than once.

Transparency

Editor: Nora S. Newcombe

Declaration of Conflicting Interests

The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

Notes

1. The false alarm rate was not reported by Charman and Cahill (2012) because the focus of their analysis was different from ours, but the authors kindly provided us with the data.
2. In a plea bargain, Childs was sentenced to 30 years in prison and was released after serving 16 years (i.e., he is a free man today).

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EXHIBIT 1:



**JOHN CREUZOT
CRIMINAL DISTRICT ATTORNEY
DALLAS COUNTY, TEXAS**

March 2, 2022

Mr. Charles Don Flores
TDCJ No. 00999299
Polunsky Unit
3872 FM 350 South
Livingston, TX 77351

RE: *State of Texas v. Charles Don Flores; Cause No. F98-02133*

Dear Mr. Flores:

This letter serves as an acknowledgement of receipt of Mr. John Wixted's request for review of your case. Please do not respond to this letter, as it will only delay the review process. Based on the information Mr. Wixted provided in his letter in which we have provided you a copy; the CIU will conduct a preliminary determination as to whether or not your claim of actual innocence or wrongful conviction meets the criteria for an investigation.

Please be patient, as it is impossible for us to predict how long our preliminary review will take because we receive hundreds of letters requesting review each year. However, if your contact information should change before you hear back from the Unit, please let us know so that our decision letter makes it to you.

Additionally, because the CIU is part of the District Attorney's Office, we do not represent you as legal counsel and we are unable to provide you with legal advice. If you desire representation or legal advice, you should consider hiring a private attorney, contact the Public Defender's Office, or seek the assistance of an Innocence Project.

Sincerely,

A handwritten signature in black ink, appearing to read "Cynthia R. Garza".

Cynthia R. Garza
Special Fields Bureau Chief
Conviction Integrity Unit
Dallas County, Texas

January 5, 2022

Conviction Integrity Unit
Dallas County District Attorney's Office
133 N. Riverfront Blvd., LB 19
Dallas, Texas 75207

Dear Conviction Integrity Unit,

I am writing to you about inmate Charles Don Flores (#999299, Polunsky Unit). In 1999, Flores was convicted of being an accomplice to a murder and sentenced to death. On your **Dallas County Conviction Integrity Division** website, it says that a prisoner or a loved one may write a letter to the CIU requesting review of a case. I am not the prisoner, nor am I a loved one, so perhaps I do not have standing to request a review. However, even if I do not, I hope you will consider what I have to say.

I am a professor at the University of California, San Diego, and I specialize in eyewitness identification. I am not activist, having testified for the prosecution about as often as I have testified for the defense (7 times for the prosecution, 9 times for the defense). My only mission is to bring the science of eyewitness memory to the criminal justice system, not to advocate for one side or the other. When the legal system misunderstands how memory works, tragedies can ensue, and those tragedies go both ways: a guilty murderer can be freed, only to kill again, or an innocent person can be wrongfully convicted, spending years in prison for a crime they did not commit.

Charles Don Flores was suspected of being an accomplice to triggerman Rick Childs in the murder of Betty Black, which occurred on January 29, 1998. Childs confessed, agreed to a plea bargain of 30 years in prison, and he served ~15 of those years before being paroled. Flores claimed to be innocent and instead took his chances with a jury trial. He was convicted, in part, based on the seemingly confident testimony of an eyewitness, Jill Bargainer.

Since 1999, when Flores was convicted, a new consensus scientific understanding has emerged about the reliability of eyewitness memory. You no doubt expect me to say that scientists now understand how unreliable eyewitness memory is, but the story I have to tell you is just the opposite. As with other kinds of forensic evidence (e.g., DNA, fingerprints), eyewitness memory is reliable when (1) it is properly tested and (2) it has not yet been contaminated. There is a new scientific consensus that the very act of testing memory with a photo lineup contaminates the witness's memory in a way that is prejudicial to the suspect. Therefore, reliable information from an eyewitness can be obtained from the first test *only*. Jill Bargainer is no exception to that rule. Like any other eyewitness who is telling the truth, what she said on the first memory test provides reliable information. What did she say on that first test, and did it provide evidence of Flores's guilt? Or did it instead provide *compelling evidence of his innocence*? These are important questions that I hope you will carefully consider when deciding whether or not to revisit his case.

On the day of the crime, witness Jill Bargainer initially described the accomplice as a white male with shoulder-length hair. A considerable body of scientific research shows that witness descriptions of basic features like these early in a police investigation are *highly reliable*. Indeed, witnesses are almost never wrong about them. Therefore, even as early as the day of the crime, Bargainer's description provides

strong evidence of Flores's innocence, not guilt--because Flores was not white and had short, shaved hair. Bargainer maintained her original description when she used a computer at the police station to draw a composite sketch of the person she thought she remembered seeing with Rick Childs: a white male with shoulder-length hair (consistent with her original description). Later that same day, after a hypnosis session, she rejected a photo lineup containing a photo of Flores. Witnesses reject lineups when the faces do not match their memory of the perpetrator. Flores did not match Bargainer's memory of the white male with shoulder-length hair who accompanied Rick Childs on the day of the crime. Why, then, did she later identify Flores (at trial) with high confidence?

Here is where the new consensus scientific understanding of eyewitness memory comes into play. Scientists in this field disagree about a lot, but they now expressly agree that testing a witness's memory of a suspect using a photo lineup unavoidably changes the witness's memory, and it does so in a way that is prejudicial to the suspect. Looking at a face of a suspect in a lineup (to decide whether or not he is the one who matches memory of the perpetrator) creates a memory of that face in the mind of the eyewitness. Moreover, once that happens, there is no way to undo the damage.

This took a long time to appreciate because a lineup only asks the witness to make a decision about the faces in a lineup, not to memorize those faces. However, making a decision about a face, such as looking at the face of Charles Don Flores and deciding he is not the white male accomplice with shoulder-length hair (which is what Bargainer did on her first lineup test), automatically creates a memory of that face in the witness's brain. This is how the face of Charles Don Flores was first implanted into the brain of Jill Bargainer. After that, she was repeatedly exposed to images of his face--in the news and then, eventually, in court. Only then did she claim to "remember" him as the person she had seen 13 months earlier. The upshot is that, to serve the cause of justice, the focus should be placed only on the first test, which actually should exculpate Flores, a fact not put before his jury. All of this is described in a new paper:

Wixted, J. T., Wells, G. L., Loftus, E. F., & Garrett, B. L. (2021). Test a Witness's Memory of a Suspect Only Once. *Psychological Science in the Public Interest*, 22(1_suppl), 1S-18S.

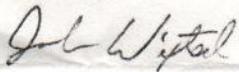
In this paper, we explain in excruciating detail why testing memory unavoidably contaminates memory. We then consider multiple case studies illustrating this point, including the case of Charles Don Flores. If the lineup contains a reasonable, recent photo of the suspect (as the lineup containing a photo of Flores did), our emphatic message to the criminal justice system is this: focus on the results of the first test only. No exceptions. Repeat, no exceptions. It does not matter if the witness later claims to have been nervous on the first test, or if they later claim to have searched their memory more carefully, or if they later claim to have had a revelation about who the perpetrator was. None of that matters because the first test unavoidably implants a memory of the suspect in the brain of the witness, so the suspect's face will seem more familiar on any later test. By the time of trial, the face will have been seen so many times that it will be extremely familiar, and the witness will be 100% sure that the defendant is the perpetrator. Unfortunately, that's what the judge and the jury will hear, and they will misinterpret the witness's high confidence as evidence of guilt. In truth, it is nothing more than evidence that the witness's memory was contaminated.

Have you heard of the many DNA exoneration cases that have been attributed to eyewitness misidentification? As it turns out, all along, it was a mistake to blame the eyewitnesses. It is true that

these witnesses confidently misidentified an innocent defendant at trial (just as Bargainer did), but it is essential to ask the all-important question: what did those same eyewitnesses do on the first test, early in the police investigation? That is, what did they do on the only test that we now know provides reliable information? In every DNA exoneration case for which the relevant information is available (91 cases in all), the witness did something other than confidently misidentify the innocent suspect. Instead, they rejected the lineup (as Bargainer did), or they picked a filler, or they picked the suspect but made it clear how uncertain they were. The surprising implication is that all of these witnesses provided *reliable* information, and the information they provided was essentially this: "the suspect in the lineup does not strongly match my memory of the perpetrator." Had everyone involved in those cases realized that only this test counts (because the test itself implanted a memory of the innocent suspect into the brains of these eyewitnesses), these wrongful convictions may never have happened. Critically, the key mistake in these cases was made by the criminal justice system, not by the eyewitness, because in every case, the witness's memory for the suspect was tested more than once. The same mistake was made in the Flores case.

There is one more important fact that you need to know. On that critical first test of a witness's memory, a suspect ID made quickly and with high confidence is highly reliable (not unreliable, as scientists mistakenly claimed for decades). In other words, it provides compelling evidence of guilt. A lineup rejection, by contrast, provides *evidence of innocence*. It is not a neutral outcome. This means that there are two separate outcomes that, according to the available scientific research, both point in the direction of innocence: (1) Bargainer's initial description of the accomplice as a white male with long hair and (2) Bargainer's rejection of the lineup containing a photo of Flores (who did not resemble her initial descriptions to police). That's it. You are all done testing memory in a way that fair to the suspect. Without realizing that (because it had not yet been appreciated by scientists), the judge and jury took Bargainer at her word at the trial in 1999 and mistakenly interpreted it as evidence of guilt. In truth, the eyewitness evidence in the Flores case (properly understood) is *reliable* and provides compelling evidence of actual *innocence*, not guilt. Therefore, if I have standing to do so, I request that the Dallas County Conviction Integrity Unit review the case of Charles Don Flores. I would be happy to confer with you about the research I have done into the appropriate testing of eyewitness memory and about its significance for revisiting the Flores case.

Sincerely,



John Wixted, Ph.D.

858-705-3115

jwixted@ucsd.edu

Home address:

10645 Falcon Rim Point

San Diego, CA 92131

EXHIBIT 19

DECLARATION OF JOHN WIXTED, Ph.D.

I, John Wixted, am over the age of twenty-one and competent to make this declaration. My date of birth is March 8, 1958. My address is Department of Psychology, University of California, San Diego, La Jolla, CA 92093. I declare as follows:

Qualifications and Experience

1. I am a Distinguished Professor of Psychology at the University of California–San Diego (UCSD). My current research is concerned with the understanding of episodic memory. I investigate the cognitive mechanisms that underlie recognition memory, often using signal detection theory as a guide. A related line of research involves investigating how episodic memory is represented in the human hippocampus, work that is based mainly on single-unit recording studies performed with epilepsy patients. In recent years, my research has also focused on the applied implications of signal detection-based models of recognition memory. The main focus of this line of research is on the reliability of eyewitness memory utilized in forensic contexts.
2. I received my Ph.D. in clinical psychology from Emory University in 1987. Despite my clinical training, my research focus has always been on memory (including my dissertation research). Professionally, I served as editor-in-chief of *Psychonomic Bulletin & Review* (1998-2002), and I have served as an associate editor of multiple journals over the years, including serving as an associate editor of what is widely regarded as the premier journal in the field of experimental psychology (*Psychological Review*). I also served as chair of the Department of Psychology at UCSD for 10 years (2003-2013), and in 2011, I was the recipient of the Howard Crosby Warren Medal for outstanding achievement in experimental psychology. In 2019, I was elected to the American Academy of Arts & Sciences.
3. I have published more than 150 peer-reviewed articles and have also edited authoritative texts in the field of memory, including:
 - Wixted, J. T. (2018). *Stevens' Handbook of Experimental Psychology and Cognitive Neuroscience*, 4th Edition (Editor in Chief). With volume editors Elizabeth Phelps & Lila Davachi (Learning & Memory); John Serences (Sensation, Perception & Attention); Sharon

Thompson-Schill (Language & Thought); Simona Ghetti (Developmental & Social Psychology); E. J. Wagenmakers (Methodology). New York: Wiley.

- Wixted, J. T. (2017). Cognitive psychology of memory. Vol. 2 of Learning and memory: A comprehensive reference, 2nd edition (J. Byrne, Ed.). Oxford: Elsevier.
 - Wixted, J. T. & Wells, G. L. (2017). The Relationship between Eyewitness Confidence and Identification Accuracy: A New Synthesis. *Psychological Science in the Public Interest*, 18, 10-65.
 - Wixted, J. T., Squire, L. R., Jang, Y., Papesh, M. H., Goldinger, S. D., Kuhn, J. R., Smith, K. A., Treiman, D. M. & Steinmetz, P. N. (2014). Sparse and distributed coding of episodic memory in neurons of the human hippocampus. *Proceedings of the National Academy of Sciences*, 111, 9621-9626.
 - Ingram, K. M., Mickes, L. & Wixted, J. T. (2012). Recollection can be weak and familiarity can be strong. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 38, 325-339.
 - Wixted, J. T. (2004). Methodology. Vol. 4 of Stevens' Handbook of Experimental Psychology, 3rd edition (H. Pashler, Ed.). New York: Wiley.
4. This year (2020), the following research articles and book chapters have been published or are forthcoming:
- Schurgin, M. W., Wixted, J. T., & Brady, T.F. (2020). Psychophysical scaling reveals a unified theory of visual memory strength. *Nature Human Behaviour*, <https://doi.org/10.1038/s41562-020-00938-0>.
 - Mickes, L. & Wixted, J. T. (in press). Eyewitness memory. In M. J. Kahana & A. D. Wagner (Eds.) *Oxford Handbook of Human Memory*. Oxford University Press.
 - Urgolites, Z. J., Wixted, J. T., Goldinger, S. D., Papesh, M. H., Treiman, D. M., Squire, L. R., & Steinmetz, P. N. (2020). Spiking

activity in the human hippocampus prior to encoding predicts subsequent memory. *Proceedings of the National Academy of Sciences*, 117, 13767-13770.

- Wixted, J. T. (2020). The forgotten history of signal detection theory. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 46, 201-233.
 - Finley, J. R., Wixted, J. T., & Roediger, H. L. (2020). Identifying the guilty word: Simultaneous versus sequential lineups for DRM word lists. *Memory & Cognition*, 48, 903-919.
 - Wilson, B. M., Harris, C. R., & Wixted, J. T. (2020). Science is not a signal detection problem. *Proceedings of the National Academy of Sciences*, 117, 5559-5567.
 - Wells, G. L., Kovera, M. B., Douglass, A. B., Brewer, N., Meissner, C. A., & Wixted, J. T. (2020). Policy and procedure recommendations for the collection and preservation of eyewitness identification evidence. *Law and Human Behavior*, 44, 3-36.2019.
 - Colloff, M. F. & Wixted, J. T. (2020). Why are lineups better than showups? A test of the filler siphoning and enhanced discriminability accounts. *Journal of Experimental Psychology: Applied*, 26, 124-143.
5. I have testified as an expert witness in California, New York, Washington D.C., and Ohio about issues pertaining to the reliability of eyewitness identification. Overall, I have testified in 15 criminal cases (7 times for the prosecution and 8 times for the defense) and in 7 civil cases (for the government each time).
6. A true and correct copy of my current *curriculum vita* is attached here as Exhibit 1.

Involvement in this Case

7. I was retained by counsel for Charles Flores as a consulting expert. I was asked to review case-specific documents related to an identification about which a witness testified during the 1999 trial *State v. Charles Don Flores*. I also reviewed the 1999 and 2017 testimony of this witness and expert assessments and testimony about the context of this identification. A complete list of materials that I reviewed and relied on is attached as Exhibit 2.
8. I was asked to explain the state of the generally accepted scientific understanding regarding the reliability of eyewitness identifications at the time of Mr. Flores's 1999 trial and the state of that scientific understanding today—particularly as it has developed since May of 2016 when he challenged the science used to justify the use of hypnosis on the witness who subsequently claimed to be able to identify Mr. Flores as one of two men she had observed getting out of a car in the driveway next door to her home the morning her neighbor was shot and killed.

Analytical Methodology

9. I first carefully reviewed the materials listed in Exhibit 2, focusing on information pertaining to memory tests on Jill Barganier with respect to Mr. Flores. The first test occurred early in the police investigation, on or about February 4, 1998. At that time, Ms. Barganier was presented with a six-person photo lineup containing a photo of Mr. Flores, and Ms. Barganier could not identify anyone. The last memory test occurred at trial in the courtroom, in March of 1999. At that time, Ms. Barganier identified Flores as the person she had seen getting out of the passenger side of a car with Childs the morning Ms. Black was murdered.
10. Although I offer conclusions based on the assumption that Ms. Barganier's first known exposure to Mr. Flores's image was part of a properly conducted ("pristine") lineup test, the facts do not support that assumption. Thus, I also consider the implications of the improper photo lineup procedure used with Mrs. Barganier. The improper ("non-pristine") aspects of the lineup procedure involved (1) Ms. Barganier's interactions with law enforcement before she was first presented with a photo lineup containing Mr. Flores's image, and (2) the photo lineup itself. Both of these issues raised concerns that the lineup procedure was biased against Mr. Flores. However, my main goal is to focus my analysis on what a recent sea change in scientific understanding of eyewitness identification teaches regarding Ms. Barganier's ultimate representation that she was able to identify Mr. Flores.

11. I next reviewed recent changes in the scientific understanding of eyewitness identification. These changes occurred in 2017 and were therefore not discoverable even with due diligence prior to that time. I explain below that a change in scientific thinking becomes apparent when leaders in the field publish a consensus statement. I trace such consensus statements pertaining to eyewitness identification, beginning in 1998 and occurring again in 1999, 2014, 2017, and most recently in 2020. I document the fact that the consensus statement published in 2017 was the first time the field came to accept that eyewitness identification is reliable on a properly conducted lineup test the first time memory is tested but not on later tests because later tests are likely to test memory that has been contaminated by post-identification events. The idea that eyewitness memory was highly reliable under any circumstances had never before been accepted by the field. This dramatic change in thinking in 2017 made it clear that there was something very special about the first time a witness's memory of a suspect previously unknown to the witness is tested. In the 2020 consensus statement, this new understanding was updated by indicating that the first memory test itself unavoidably contaminates memory. Therefore, the first test is the only uncontaminated test of memory. All later tests, including the one that occurs at trial, involve tests of contaminated forensic memory evidence.
12. Finally, given that only the *first* memory test can provide uncontaminated evidence relevant to the guilt or innocence of Mr. Flores, I then consider what the results of that first test imply. I do so first under the assumption that the lineup test was pristine and then under the more realistic assumption that the lineup test was biased against Mr. Flores.

The Factual Context of Ms. Barganier's First Known Exposure to Mr. Flores's Photo

13. The facts regarding Ms. Barganier's first known exposure to Mr. Flores's photo were developed during an evidentiary hearing in 2017. At that hearing, two major concerns were raised about the lineup procedure. The first was the lack of standard instructions to the witness prior to the administration of the photo lineup. One criterion for a pristine lineup procedure is that the witness be informed that "the perpetrator may or may not be in the lineup" [Wixted, J. T. & Wells, G. L. (2017). The relationship between eyewitness confidence and identification accuracy: A new synthesis. *Psychological Science in the Public Interest*, 18, 10-65; Wells, G. L., Kovera, M. B., Douglass, A. B., Brewer, N., Meissner, C. A., & Wixted, J. T. (2020). Policy and procedure

recommendations for the collection and preservation of eyewitness identification evidence. *Law and Human Behavior*, 44, 3-36]. Absent such instructions, the concern is that a witness may assume that the perpetrator is in the lineup and may therefore feel compelled to make an identification that would not otherwise be made. A second criterion for a pristine lineup procedure is that the suspect not stand out. The concern is that if the suspect's photo does stand out, an identification will be made on that basis alone. At the evidentiary hearing, it was noted that the photo array that Ms. Barganier was shown with Flores's picture in it was itself suggestive because his photo, in the center, was the only one without a white strip covering up part of the image and with a distinctive background and colorful clothing.

The New Scientific Understanding of Eyewitness Identifications

14. The science of eyewitness identification has changed rather dramatically in recent years (beginning in 2017) and in a way that is directly relevant to the Charles Don Flores case. The trigger for the change was a paper I co-authored with Professor Gary Wells of Iowa State University. Gary Wells has been recognized as one of the foremost experts in the field of eyewitness identification dating back to the 1970s. Since my lab turned its attention to eyewitness identification in 2012, Wells and I have clashed vigorously and frequently, with each of us publishing multiple papers arguing strongly against the views of the other. Between 2012 and 2017, it was easily the most high-profile debate in the field. In 2017, the editor of *Psychological Science in Public Interest* invited us to write a paper together summarizing where we agree on the issue of eyewitness identification. After we both flatly refused to even consider the possibility because it seemed like we disagreed about everything, we eventually agreed to give it a try. It turns out that there was some common ground after all. The title of our jointly-authored paper is "The relationship between eyewitness confidence and identification accuracy: A new synthesis." [Wixted, J. T. & Wells, G. L. (2017). The relationship between eyewitness confidence and identification accuracy: A new synthesis. *Psychological Science in the Public Interest*, 18, 10-65.] It was an attention-getting paper not only because scientists in our field were shocked to see our names on the same paper but also because of the altogether novel message we presented to the field.
15. Until 2017, the reliability of eyewitness identification was broadly in doubt, but the new message was that eyewitness identification is actually highly reliable. It is highly reliable in the sense that a high-confidence identification

(“That’s him! I’ll never forget that face!”) implies high accuracy (pointing strongly in the direction of guilt), whereas a low-confidence identification (“It looks like him but I can’t be sure”) implies low accuracy (pointing weakly in the direction of guilt). A lineup rejection or a misidentification of a filler, by contrast, points in the direction of innocence. Critically, however, this is only true *the very first time* the suspect is presented to the witness. This is because many post-identification factors (e.g., seeing a photo of the suspect on the news) can and typically do contaminate memory, thereby making the suspect’s face more familiar than it otherwise would be. It is wrongful convictions resulting from post-identification contamination that had fueled the widespread impression that eyewitness identification is generally unreliable. Very recently, the field has come to further appreciate that even the exposure to the suspect’s face on the first test unavoidably contaminates memory. [Wells, G. L., Kovera, M. B., Douglass, A. B., Brewer, N., Meissner, C. A., & Wixted, J. T. (2020). Policy and procedure recommendations for the collection and preservation of eyewitness identification evidence. *Law and Human Behavior*, 44, 3-36]

16. As I detail below, this further point was included in a consensus statement (for the first time) that I co-authored with Gary Wells and other leading experts in 2020. [Wells, G. L., Kovera, M. B., Douglass, A. B., Brewer, N., Meissner, C. A., & Wixted, J. T. (2020). Policy and procedure recommendations for the collection and preservation of eyewitness identification evidence. *Law and Human Behavior*, 44, 3-36]. Critically, there is no way to *decontaminate* memory (i.e., it is not possible to later conduct an independent test of uncontaminated memory at some later point in time). Therefore, when it comes to face recognition, there are no second chances to test uncontaminated memory (i.e., there are no “do overs”). Only the first test can do that. Every test beyond the first, including any identification that occurs at trial, involves a test of *contaminated* forensic memory evidence.
17. Our 2017 paper in *Psychological Science in Public Interest* changed the scientific understanding of eyewitness identification. To appreciate the basis for this claim, it is important to first understand what it means for scientific thinking to change. At any given time, many scientists have recently published papers making data-based claims that contradict what other scientists have claimed in their recently published papers. After some debate, and after each scientist attempts to replicate findings that an opposing scientist has reported, and after face-to-face discussion and argumentation at scientific conferences, some progress is often made. This is the normal give-and-take of science. In

other words, the normal give-and-take involves an initial period of disagreement and often heated debate, with multiple contrasting perspectives represented in the scientific literature simultaneously. At some point, after laboratory studies and empirical analysis, the evidence becomes clear enough that leaders in the field come to a consensus about which of the competing perspectives is correct. When a consensus statement is published, it signals to the field that a change in scientific thinking has occurred. This is precisely what happened with our paper on the importance of focusing only on the initial eyewitness identification test and ignoring all later tests.

18. Multiple lines of evidence led to this new understanding, but one line of evidence is especially compelling. Therefore, I briefly summarize it here. Data from the Innocence Project shows that eyewitness misidentifications contributed to 69% of more than 375 wrongful convictions later overturned by DNA evidence. But in DNA exoneration cases for which testimony about the initial identification exists—92 out of 161 cases examined in Brandon Garrett’s 2011 book *Convicting the Innocent*—every witness who misidentified an innocent suspect with high confidence at trial initially did so with low confidence, assuming they picked the suspect at all. Some did not even do that because they picked another face or rejected the lineup. Critically, this means that none of these 92 initial IDs were strongly probative of guilt. In all of these cases, however, the police tested memory again, often multiple times. By the time of trial, in front of a jury, all 92 of the witnesses were absolutely certain that the defendant was the perpetrator they saw commit the crime. From the jury’s uninformed, but understandable perspective, the eyewitness evidence seemed highly probative of guilt. Had the criminal justice system understood that only the first test involves uncontaminated forensic memory evidence, it is possible that none of these wrongful convictions would have occurred. Although Garrett’s book was published in 2011, the importance of the facts I just summarized did not begin to be recognized until I and my colleagues published a paper in 2015 in *American Psychologist* drawing attention to it [Wixted, J. T., Mickes, L., Clark, S. E., Gronlund, S. D. & Roediger, H. L. (2015). Initial eyewitness confidence reliably predicts eyewitness identification accuracy. *American Psychologist*, 70, 515-52]. Before then, it was just a completely overlooked observation presented in one sentence on page 49 (and repeated on page 64) of one 367-page book. In 2017, that finding was considered in relation to various additional lines of research all pointing to the same conclusion: the only relevant test of eyewitness memory is the first test. It was when I came together with Gary Wells and reviewed these multiple lines of evidence

(including the evidence in Garrett's 2011 book), not before then, that the consensus scientific understanding changed.

19. In addition to the findings reported by Garrett concerning DNA exonerations, our 2017 paper also reanalyzed data that had been published in articles dating all the way back to the 1990s. These articles had long been interpreted to mean that eyewitness identification is unreliable even on the first test and even if the lineup procedure was pristine. Moreover, confidence in an identification was thought to be only weakly informative about accuracy in the lab and possibly not at all in the real world. Thus, this prior research was interpreted to mean that eyewitness identification was generally unreliable. However, as we showed, although the empirical studies that had been conducted over the years were fine, the data had been incorrectly analyzed. A very strong relationship between confidence and accuracy—and very high accuracy associated with suspect identification made with high confidence—was evident in every one of these prior studies. However, these facts were unintentionally obscured by the way the data had been analyzed.
20. The proper way to analyze these data was evident to me only because of my training and expertise in signal detection theory, which is a longstanding theoretical framework for understanding recognition memory in the basic science literature. Signal detection theory had not been widely used in the applied field of eyewitness identification to guide data analysis until it was introduced by my lab in 2012 [Mickes, L., Flowe, H. D. & Wixted, J. T. (2012). Receiver operating characteristic analysis of eyewitness memory: Comparing the diagnostic accuracy of simultaneous and sequential lineups. *Journal of Experimental Psychology: Applied*, 18, 361-376.]. By 2017, Gary Wells had come to agree with me that all of the previously reported data bearing on the relationship between confidence and accuracy needed to be re-analyzed. That is precisely what we did in our 2017 paper, and we demonstrated that research that had previously been widely interpreted to mean that eyewitness identification is unreliable is actually highly reliable *on the first test*. It is highly reliable in the sense that a high-confidence suspect identification is very accurate, whereas a low-confidence suspect identification is much less accurate (which makes sense given that an expression of low confidence is how an eyewitness signals the fact that the identification might be in error).
21. For multiple reasons, I am confident that this paper is what sparked a change in thinking. First, consider a memo (dated January 6, 2017) written by then

Deputy Attorney General Sally Yates to all heads of federal law enforcement and all federal prosecutors. The subject of the memo was “Eyewitness Identification: Procedures for Conducting Photo Arrays.” The memo states that:

The Department of Justice last addressed procedures for photo arrays in its 1999 publication, *Eyewitness Evidence: A Guide for Law Enforcement*. Research and practice have both evolved significantly since then. For example, a growing body of research has highlighted the importance of documenting a witness's self-reported confidence at the moment of the initial identification, in part because such confidence is often a more reliable predictor of eyewitness accuracy than a witness's confidence at the time of trial.

This echoes one of the main claims in our 2017 paper: “...our thesis about the diagnosticity of confidence applies only to the initial confidence of the witness at the time of identification, not to later feelings of confidence that might be the product of post-identification contamination.” The Yates memo cites our 2017 paper, which had not yet even been published (i.e., at the time of this memo, our paper was still “in press”). Although not yet published, it was already having an impact. Since then, the impact of our paper has been phenomenal. According to Google Scholar, it has already been cited 253 times (for perspective, a paper with decent impact would have been cited ~30 times). I am not sure how Yates obtained an advance copy of our paper. However, I had sent an advance copy to several federal prosecutors, including one in Washington D. C., which may be the explanation.

22. My 2017 paper with Gary Wells happened because the editor of a scientific journal brought us together to write it. Although not inevitable, the partnership that was forged gave rise to a new scientific consensus. Such “inflection points” can generally be difficult to pinpoint because such changes tend to happen incrementally over a long period of time.
23. Another way that consensus scientific thinking is documented occurs when a scholarly society or a federal organization (e.g., the Department of Justice) brings together leading scholars to make unanimous recommendations to the field. With regard to eyewitness identification, this has happened 4 times over the years, beginning in 1998. In 1998, the American Psychology-Law Society (a prominent scholarly organization) commissioned Gary Wells and other

leading scientists to write a consensus “white paper” on best practices for eyewitness identification. The paper was published in a journal called *Law & Human Behavior* [Wells, G. L., Kovera, M. B., Douglass, A. B., Brewer, N., Meissner, C. A., & Wixted, J. T. (2020). Policy and procedure recommendations for the collection and preservation of eyewitness identification evidence. *Law and Human Behavior*, 44, 3-36.]. It recommended, for example, that there be only one suspect per lineup, that the lineup be administered in double-blind fashion, and that instructions be read to the witness indicating that the perpetrator may or may not be in the lineup. Notably, it did not recommend that repeated testing be avoided on the grounds that only the first test provides a test of uncontaminated memory evidence. One year later, in 1999, the DOJ commissioned a group of 34 scientists, attorneys, and law enforcement officials (the “Technical Working Group for Eyewitness Evidence”) to assist with the document that Sally Yates referred to in her 2017 memo. The DOJ report listed recommendations included in the 1998 white paper and many more, but it said nothing about the uncontaminated nature of the first test only (nor did it recommend against repeated testing).

24. Next, in 2014, the National Academy of Sciences brought together a team of leading scientists, attorneys, and law enforcement officials to make updated science-based recommendations about eyewitness identification. Their recommendations appeared in a document entitled *Identifying the Culprit: Assessing Eyewitness Identification*, and its recommendations were largely similar to those recommended by the DOJ in 1999. However, their Recommendation #7 went further in recommending that juries be made aware of prior identifications. As they put it “The committee recommends that judges take all necessary steps to make juries aware of prior identifications, the manner and time frame in which they were conducted, and the confidence level expressed by the eyewitness at the time” (p. 6). This recommendation was an indication of growing awareness that there might be a reliability concern related to repeated testing.

25. Finally, in 2020, the American Psychology-Law Society again commissioned Gary Wells and other leading scientists to write an updated consensus “white paper” on best practices for eyewitness identification. The paper was again published in *Law & Human Behavior* in March of 2020, and I am one of the authors. For the first time in any publication expressing a scientific consensus, and based in no small part on my 2017 paper with Gary Wells (which strongly emphasized the importance of the very first memory test), the explicit

recommendation was made to avoid repeated tests beyond the first. Our Recommendation #8 is termed the “**Avoid Repeated Identifications Recommendation**” reads as follows: “Repeating an identification procedure with the same suspect and same eyewitness should be avoided regardless of whether the eyewitness identified the suspect in the initial identification procedure” (p. 8). Later in the paper, the justification for this novel recommendation was described as follows:

This recommendation holds no matter how compelling the argument in favor of a second identification might seem (e.g., the original photo of the suspect was not as good as it could have been; the witness was nervous during the first identification test and is calmer now; the initial identification was made from a social media profile, but it would be more desirable to have an identification made using proper police procedures). The importance of focusing on the first identification test cannot be emphasized strongly enough ... eyewitness identification evidence has a unique characteristic that makes it unsuitable for what might be called ‘repeated testing.’ Whether the eyewitness is asked to make an identification with a showup or a lineup, there is only one uncontaminated opportunity for a given eyewitness to make an identification of a particular suspect. *Any subsequent identification test with that same eyewitness and that same suspect is contaminated by the eyewitness’s experience on the initial test*” (p. 25, emphasis added).

26. Again, and as we noted, this point cannot be emphasized strongly enough. The idea that the field might soon come to appreciate the importance of this recommendation was foreshadowed in an earlier paper published in September of 2016, in which the authors said “Based on memory and eyewitness science, we believe that the eyewitness field is poised to make the recommendations that repeated identification procedures using the same suspect should be avoided, and that identifications made from repeated procedures—beyond the first identification attempt—should not be considered reliable eyewitness evidence” (p. 286 of Steblay, N.K., & Dysart, J.E. (2016). Repeated eyewitness identification procedures with the same suspect. *Journal of Applied Research in Memory and Cognition*, 5, 284-289.). As it turns out, the field was poised to make that recommendation, and it did

so 4 years later, as soon as the science to support the new recommendation was established.

27. Another point we made in our 2017 paper happens to be directly relevant to the Flores case, namely, that filler IDs and non-IDs in a lineup test are probative of innocence. That is, if a witness fails to identify the suspect by choosing a filler or rejecting the lineup, it is not the case that it provides no information about the guilt of the suspect (as is usually assumed). Instead, such an outcome points in the direction of innocence. This fact (namely, that outcomes other than a suspect ID are probative of innocence) has long been known and is not a new understanding that has only recently emerged. What is new is the understanding that only the outcome of the first memory test involving a given suspect (e.g., Charles Don Flores) and a given eyewitness (e.g., Jill Bargainer) provides a test of uncontaminated memory.
28. In sum, the recently developed scientific consensus is that, after a witness has failed to identify law enforcement's suspect the first time that witness is given the chance to identify that suspect, any subsequent claim by that witness to be able to identify that same suspect is not reliable. Presumably, because later identifications are unavoidably based on contaminated forensic memory evidence and thus are unreliable, they should not be admissible in a court of law.

Conclusions

29. It is uncontroverted that witness Jill Bargainer did not identify Charles Don Flores when she was first presented with a photo lineup containing a picture of his face. What the field of eyewitness identification has come to recently understand (post 2016) is that this first lineup test provided the *only* potentially uncontaminated test of memory because the test itself contaminated memory (by making the face of the suspect irreversibly more familiar in the mind of the witness). Scientists are now of one mind that this first uncontaminated test is the only memory test that triers of fact should take into consideration for purposes of determining the guilt or innocence of the suspect. In the case of Charles Don Flores, because the outcome of the first test was that witness Jill Bargainer rejected the lineup, the only relevant eyewitness evidence in this case is *probative of innocence*, not guilt. Therefore, if there is other evidence that a trier of fact could find probative of guilt, then Jill Bargainer's failure to identify Charles Flores the first time she had an opportunity to do so should

be construed, not just neutrally, but as countervailing evidence pointing in the direction of innocence.

30. Eyewitness evidence from a first test is probative of guilt under the assumption that a pristine lineup test was used. However, as noted earlier, the lineup procedure used in this case was not pristine, and concerns were raised in a 2017 evidentiary hearing that it was biased against Flores because (1) standard instructions indicated that the perpetrator may or may not be in the lineup were not read to Ms. Bargainer, and (2) the photo of Flores stood out relative to the other photos in the array. Under the assumption that the non-pristine lineup procedure was biased against Flores, the fact that, even then, Ms. Bargainer did not identify him makes the initial evidence, if anything, even more probative of innocence. In other words, on the only uncontaminated test of memory (the first test), it seems clear that Flores did not come close to matching the memory of the passenger she saw exiting the VW vehicle the morning of the crime. Instead, the photo of Flores differed from Ms. Bargainer's memory to such an extent that she did not pick him even with a procedure that seemed biased to encourage her to do so.

31. The facts recounted in this report are true to the best of my personal knowledge. Additionally, I attest that the opinions contained in my report are accurate to a reasonable degree of scientific certainty. If called upon to testify regarding the facts and opinions contained in my report, I would be willing to do so under oath and under penalty of perjury.

Executed on October 16, 2020:
(date)



John Wixted, Ph.D.

EXHIBIT 1

Curriculum Vitae

October 15, 2020

John T. Wixted
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EDUCATION

<i>Degree</i>	<i>Year Conferred</i>	<i>Institution</i>
Ph.D. (Clinical Psychology)	1987	Emory University, Atlanta, GA
M.A. (Clinical Psychology)	1984	Emory University, Atlanta, GA
B.A. (Biology & Psychology)	1981	University of Calif., San Diego

HONORS AND AWARDS

Elected Fellow, American Academy of Arts and Sciences (2019)
Elected member, Memory Disorders Research Society (2018)
American Psychological Association Master Lecturer (2017)
Faculty Research Lecturer Award, UCSD (2014)
Elected Fellow, Association for Psychological Science (2012)
Howard Crosby Warren Medal (2011)
Elected Fellow, Association for Behavior Analysis International (2011)
Elected Fellow, Society of Experimental Psychologists (2004)
George A. Miller Award for Outstanding Article in General Psychology (APA, Division 1, 2000)
Distinguished Teaching Award (UCSD Alumni Association, 1995)
Outstanding Teaching Award (Revelle College, 1992; Warren, 1993, 1996; Muir, 1996)

MAJOR RESEARCH INTERESTS

Episodic memory; consolidation theory and forgetting; signal detection theory and recognition memory; hippocampal mechanisms of memory; eyewitness memory.

PROFESSIONAL EXPERIENCE

Distinguished Professor, University of California, San Diego (7/2013 – present)
Professor, University of California, San Diego (7/98-6/2013, Department Chair, 2003-2013)
Associate Professor, University of California, San Diego (7/94-6/98)
Assistant Professor, University of California, San Diego (7/88-6/94)

EXTERNAL SUPPORT

Current:

- Neural basis of memory in primate medial temporal lobe (NIMH, 12/18 – 11/23, \$1,940,879, PI = Miller, C., Co-PIs = Wixted, J. T & Leutgeb, J. K.)
- Analyzing human single-neuron activity during a continuous recognition memory task (Neurtex Brain Research Institute, \$238,069, 2/2019-01/2021, PI = Wixted, J. T.)
- Testing the Accuracy and Reliability of Eyewitness Identification (Laura and John Arnold Foundation, 1/17 – 11/20, \$322,962, PI = Wixted, J. T)

Past:

- Investigating New Ways to Improve Eyewitness Identifications Using Receiver Operating Characteristic Analysis (Economic and Social Research Council, £252,578, 12/01/15-11/01/18, PI = Mickes, L., Co-Investigator = Wixted, J. T.)
- The Representation of Episodic and Semantic Memory in Single Neurons of the Human Hippocampus (McKnight Foundation, 2/14 – 1/17, \$300,000, Co-PIs = Wixted, J. T. & Squire, L. R.)
- The Role of Diagnostic vs. Non-Diagnostic Facial Features in Eyewitness Identification (NSF, 3/15 – 2/17, \$184,967, PI = Wixted, J. T.)
- Signal-Detection Theory and Eyewitness Memory (NSF, 4/12 – 1/14, \$150,000)
- On the Nature of Recollection (NIH R01, 6/09 – 5/12, \$579,376)
- Signal Detection Theory and Memory for Asymmetric Events (NIH R01, 11/01-7/04, \$339,920)
- Signal Detection Theory and Memory for Asymmetric Events (NIH R01, 9/96-8/99, \$190,759)
- Reinforcement-Based Models of DMTS Performance (NSF, 4/92 - 3/95, \$196,536)
- Serial Memory in Animals (NSF, 8/89 - 7/91, \$90,699)

EDITORIAL EXPERIENCE

Editor-in-Chief:

Stevens' Handbook of Experimental Psychology and Cognitive Neuroscience (2018)
Psychonomic Bulletin & Review (1/98-1/02)

Volume Editor:

Learning and Memory: A Comprehensive Reference (2017, 2nd Edition, Cognitive Psychology Volume). John Byrne (Ed.).

Associate Editor:

Cognitive Research: Principles & Implications (1/2016 – present)
Psychological Review (1/2010 – 1/2015)
Cognitive Psychology (5/02-1/06)
Memory & Cognition (1/97-1/98)

Journal of the Experimental Analysis of Behavior (7/93-8/96)

Board of Editors:

Annual Review of Psychology (2002-2006, 2019-present)

Psychological Review (2003-2010, 2015-present)

JEP: General (2011-present)

Psychonomic Bulletin & Review (1995-1998, 2002-present)

Journal of Applied Research in Memory and Cognition (2014-2019)

Law & Human Behavior (2019-present)

PROFESSIONAL AFFILIATIONS

Psychonomic Society

Association for Psychological Science

Association for Behavior Analysis

Society for Neuroscience

PUBLICATIONS

EDITED VOLUMES

[Wixted, J. T. \(2018\)](#). *Stevens' Handbook of Experimental Psychology and Cognitive Neuroscience, 4th Edition* (Editor in Chief). With volume editors Elizabeth Phelps & Lila Davachi (*Learning & Memory*); John Serences (*Sensation, Perception & Attention*); Sharon Thompson-Schill (*Language & Thought*); Simona Ghetti (*Developmental & Social Psychology*); E. J. Wagenmakers (*Methodology*). New York: Wiley.

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RECENT PRESENTATIONS

Wixted, J. T., Wilson, B., & Harris, C. (2019). Science is not a signal detection problem. Paper presented at the 60th annual meeting of the Psychonomic Society (Montreal).

Wixted, J. T. (2019). The extraordinary capacity of visual long-term memory (including eyewitness memory). Paper presented at the 19th annual meeting of the Vision Sciences Society (St. Pete Beach, Florida).

Wixted, J. T. & Mickes, L. (2018). Recognition memory in the laboratory and in the real world. **Keynote address** presented at the International Meeting of the Psychonomic Society (Amsterdam).

Wixted, J. T. (2018). The relationship between eyewitness confidence and identification accuracy. Invited paper presented at the 30th Annual Meeting of the Association for Psychological Science (San Francisco).

Wixted, J. T. (2018). Eyewitness memory: A new perspective. **Keynote address** presented at the 25th Annual Psychology Student Research Fair (Cal State San Marcos).

- Wixted, J. T., Christenfeld, N. J. S. & Rouder, J. N. (2018). A Bayesian statistical analysis of the DNA contamination scenario. Paper presented at the 2018 meeting of the Society of Experimental Psychologists (Tucson).
- Wixted, J. T., Schurgin, M., & Brady, T. (2018). Guessing in working memory and long-term memory. Paper presented at the 59th annual meeting of the Psychonomic Society (New Orleans).
- Wixted, J. T., Vul, E., Mickes, L. & Wilson, B. (2017). Models of lineup memory. Paper presented at the 58th annual meeting of the Psychonomic Society (Vancouver).
- Wixted, J. T. (2017). Psychology's wrongful conviction of eyewitness memory. **Master Lecture** presented at the 125th meeting of the American Psychological Association (Washington DC).
- Wixted, J. T. (2017). Coding of Episodic Memory in the Human Hippocampus. Paper presented at the 2017 McKnight Conference on Neuroscience (Aspen, Colorado).
- Wixted, J. T. (2017). Models of lineup memory. Paper presented at the annual meeting of the Society of Experimental Psychologists (Nashville).
- Wixted, J. T. (2016). Psychology's wrongful conviction of eyewitness memory. **Keynote address** presented at the 9th bi-annual meeting of the International Association for Metacognition (Boston).
- Wixted, J. T. (2016). Simultaneous Lineups vs. Elimination Lineups: Theoretical (and Applied) Considerations. Paper presented at the 57th annual meeting of the Psychonomic Society (Boston).
- Wixted, J. T. (2016). Stimulus-selective, sparsely coded episodic memory and non-specific novelty detection in single units of the human hippocampus. Talk presented at the 46th annual meeting of the Society for Neuroscience (San Diego).
- Wixted, J. T. (2016). Eyewitness memory is much better than (and also as bad as) you think it is. Invited talk (Division 3) presented at the 124th annual meeting of the American Psychological Association (Denver).
- Wixted, J. T., Mickes, L., Dunn, J., Clark, S. & Wells, W. (2016). A Signal Detection Analysis of Identifications Made by Actual Eyewitnesses. Paper presented at the Annual Meeting of the American Psychology-Law Society (Atlanta).
- Wixted, J. T., Mickes, L., Dunn, J., Clark, S. & Wells, W. (2015). The Relationship Between Confidence and Accuracy for Eyewitness Identifications Made From Simultaneous and Sequential Police Lineups. Paper presented at the 56th Annual Meeting of the Psychonomic Society (Chicago).
- Wixted, J. T. (2015). Making Sense of Memory With and Without Theoretical Guidance. **Keynote address** presented at the 11th Annual Context and Episodic Memory Symposium (Philadelphia).
- Wixted, J. T. & Amendola, K. (2015). Comparing the Diagnostic Accuracy of Suspect Identifications made by Actual Eyewitnesses from Simultaneous and Sequential Lineups in a Randomized Field Trial. Paper presented at the 2015 meeting of the American Psychology-Law Society (San Diego).

- Wixted, J. T. (2014). From the Operant Lab to the Courtroom: ROC Analyses of Memory in Pigeons and People. **Keynote address** presented at the at the Fall Meeting of the Comparative Cognition Society (Long Beach, CA).
- Wixted, J. T. (2014). Exonerating eyewitness memory in wrongful convictions of the innocent. **Keynote address** presented at the Southwest Cognition (ARMADILLO) Conference (Norman, Oklahoma).
- Wixted, J. T. (2014). The division of labor in the MTL is based on the attributes and mechanisms of memory, not on the strength or subjective experience of memory. Paper presented at the Annual Meeting of the Memory Disorders Research Society (Austin).
- Wixted, J. T. (2014). A Cellular and Systems Consolidation Theory of Forgetting. **Keynote address** presented at the International Workshop on Learning and Memory Consolidation (San Sebastian, Spain).
- Wixted, J. T. (2014). Improving Lineup Identification Evidence. Paper presented at the 26th Annual Meeting of the Association for Psychological Science (San Francisco).
- Wixted, J. T. & Mickes, L. (2014). A Diagnostic-Feature Detection Theory of Eyewitness Identification. Paper presented at the 2014 meeting of the American Psychology-Law Society (New Orleans).
- Wixted, J. T. and Mickes, L. (2013). Eyewitness Identification: An Old Theory of Response Bias vs. a New Theory of Discriminability. Paper presented at the 54th Annual Meeting of the Psychonomic Society (Toronto).
- Wixted, J. T., Squire, L. R., Jang, Y., Papesh, M. H., Goldinger, S. D. & Steinmetz, P. N. (2013). A broadly distributed memory signal in neurons of the human hippocampus. Poster presented at the 43rd annual meeting of the Society for Neuroscience (San Diego).
- Wixted, J. T. (2013). A broadly distributed memory signal in neurons of the human hippocampus. Paper presented at the 2013 meeting of the Society of Experimental Psychologists (Providence).

DEPARTMENT SERVICE

Member, Graduate Affairs Committee (2020 – present)

Member, Undergraduate Affairs Committee (2015 – 2018)

Chair Executive Committee (2014-2016)

Chair, Department of Psychology (2003-2013)

Chair, Graduate Affairs Committee & Graduate Advisor (1995-2002)

Chair, Graduate Admissions Committee (1994/95)

Chair, Undergraduate Affairs Committee & Head Undergraduate Advisor (1989-1994)

UNIVERSITY SERVICE

Committee member, Undergraduate Council Program Review: Department of Economics (2016)

Committee on Academic Information Technology (2015 - 2018)

CAPE Advisory Committee (2010 - present)

FISP Postdoctoral Review Committee (2015)

Search Advisory Committee for the AVC for Academic Personnel and Resources (2011)

Chair, Dean of Arts & Humanities Search Committee (2007)

Revelle College Provost Search Committee (2003)

Task Force on the Faculty Review Process (1999/2000)

Committee on Academic Personnel (1997/1998 & 1998/1999)

CEP Subcommittee: Dept. of Linguistics Undergraduate Program Review (1996/1997)

Revelle Executive Committee (1992-1994)

PROFESSIONAL SERVICE

- APS Publications Committee (2014 - 2018)
- Testified before the National Academy of Sciences Committee on the Review of Proposals for Research on Statistical Methodologies for Assessing Variables in Eyewitness Performance (9/28/2015)
- Testified before the National Academy of Sciences Committee on Scientific Approaches to Understanding and Maximizing the Validity and Reliability of Eyewitness Identification in Law Enforcement and the Courts (12/2/2014)
- Recent Journal Editor Search Committees:
 - *Perspectives on Psychological Science* (2014)
 - *Psychological Science in the Public Interest* (2015)
 - *Clinical Psychological Science* (2015)
 - *Psychological Science* (2016, Chair)
 - *Perspectives on Psychological Science* (2017)
- External Review Committees
 - Brigham Young University, Department of Psychology (2009)

- Boston College, Department of Psychology (2011)
- Auburn University, Department of Psychology (2016)
- APA Division 3 (Experimental Psychology) Program Chair (2009)
- Psychonomic Society Publications Committee, 2002-2006 (Chair, 2004-2005)
- Psychonomic Society Governing Board, 2000-2005 (Chair, 2004)
- Society for the Experimental Analysis of Behavior (Board of Directors, 1994-2002)
- 1997 APA Science Advocacy Workshop (Washington D.C.)
- 1997 APS Convention Program Committee and Proposal Reviewer (Cognitive Area)

EXHIBIT 2

Materials Reviewed and Relied On

John Wixted, Ph.D., Distinguished Professor of Psychology at
the University of California–San Diego

Ex parte Charles Don Flores

- (1) Farmers Branch Police Department records related to investigation of the death of Elizabeth Black on January 29, 1998 reflecting interactions with witness Jill Barganier
- (2) Records related to the hypnosis session conducted on Jill Barganier by Farmers Branch police officer Roen Serna
- (3) Articles about the Elizabeth Black murder and Charles Flores published in the local paper (*Dallas Morning News*) that appeared before and during trial, many including recent photographs of Charles Flores
- (4) Trial Testimony of Jill Barganier from March 1999
- (5) Evidentiary Hearing Testimony from October 2017
- (6) Amicus brief filed with the Court of Criminal Appeals in 2018
- (7) Dr. Steven Lynn's May 7, 2016 expert report/affidavit

EXHIBIT 20

Mr. Holden is President of Behavioral Measures & Forensic Services Southwest in Texas and Behavioral Measures Midwest in Wisconsin. He is an Officer & Partner in Behavioural Measures U.K. in England and The Behavioural Measures U.K. Polygraph Training Centre, an American Polygraph Association (APA) Accredited Polygraph Training School housed in the United Kingdom.

Mr. Holden is Past-President of the APA and the Texas Association of Polygraph Examiners (TAPE) and has been a Licensed Polygraph Examiner in Texas and other states since 1973. The Texas State Board of Examiners of Professional Counselors (LPC) has licensed Mr. Holden since 1983. Mr. Holden is a noted instructor in the fields of polygraph testing, interviewing, interrogation, and assessing criminal and sexual behavior. Mr. Holden holds APA Certifications as a Primary Instructor in Polygraph Education and Post-Conviction Sex Offender Testing (PCSOT).

Mr. Holden began his professional career in 1966 as a Psychologist with the Texas Department of Corrections (TDC) and a Psychometrist assigned to the TDC. In 1973 he began his polygraph career and continues his practice and teaching.

Mr. Holden co-chaired the committee in Texas from 1994-1998 that drafted guidelines for PCSOT resulting in the Joint Polygraph Committee on Offender Testing (JPCOT) that today serves as a registry for examiners completing PCSOT training under State Guidelines. He has worked with other states to draft guidelines and standards for PCSOT, and from 2007-2009 chaired the APA PCSOT Committee that drafted the model PCSOT Guidelines in use today.

Mr. Holden is published in the fields of polygraph and criminal behavior and has been the recipient of numerous state and national awards for his contributions to the polygraph profession including the APA President's Award, the Leonarde Keeler Award, the William L. Bennett Memorial Award, and the John E. Reid Memorial Award for "Distinguished Achievements in Polygraph Research, Teaching, and Writing." The American Association of Police Polygraphists (AAPP) presented Mr. Holden the Max Wastl Award for "Significant Contributions to the Polygraph Profession." He was honored by TAPE with the President's Award for "Outstanding Achievements and Long Term Contributions to the Polygraph Profession" and by the Texas Polygraph Examiners Board for his contributions to the development of PCSOT in Texas. Mr. Holden has qualified for Expert Testimony in Federal and State Courts.

EXHIBIT 21

**BEHAVIORAL MEASURES &
FORENSIC SERVICES SOUTHWEST, INC.**
1720 REGAL ROW, SUITE 120, DALLAS, TEXAS 75235

NOVEMBER 22, 2021

**MS. GRETCHEN SIMS SWEEN
ATTORNEY AND COUNSELOR AT LAW
P.O. BOX 5083
AUSTIN, TEXAS 78763**

**RE: POLYGRAPH EXAMINATION OF CHARLES DON FLORES CONDUCTED
NOVEMBER 15, 2021**

PREPARATION & INTERVIEW PHASE

Initial Briefing Information: You advised you represent Charles Don Flores, an inmate incarcerated approximately 22 years on Death Row at the Polunsky Unit of the Texas Department of Criminal Justice – Institutional Division. Mr. Flores was sentenced to death by the Dallas Court in 1999 after a Dallas County Jury found Mr. Flores guilty of participation in the death of Elizabeth Black the night of January 29, 1998. You advised that a witness identified Mr. Flores as one of two men arriving at the Farmer’s Branch home of Elizabeth Black the night of January 29, 1998, reportedly believing that a large quantity of cash was hidden there. You advised that Ms. Black was fatally shot and her body and that of her Doberman Pinscher Santana were discovered several hours later inside her home. You advised that a 2nd man, Ricky Lynn Childs was apprehended and confessed to being the shooter. He was sentenced to 35 years of incarceration and has been released on Parole.

You advised that questions have been raised about the credibility of the eyewitness identification that led to Mr. Flores arrest and conviction and advised that no physical evidence was discovered that tied Mr. Flores to that offense. You advised that Mr. Flores consistently has denied he was present at the Black residence the night of January 29, 1998, or that he had any part in that attempted robbery or killing. You asked for Mr. Flores to be questioned and examined to verify the credibility of his statements when he denies he was present with Ricky Lynn Childs at the Black residence the night of that attempted robbery at the Black residence when Elizabeth Black was murdered.

Pre-Test Interview with Examinee: The testing procedures and requirements for valid testing were explained to Mr. Flores and he expressed a desire for the interview & examination to proceed. The examination was conducted within acceptable accommodations provided by prison officials.

Mr. Flores stated he had known Ricky Childs since 1992 or '93 when Ricky lived across the street from Mr. Flores’ mother. He stated they periodically ‘ran together’ drinking and doing drugs, and after Mr. Flores was released from his prior prison stint and off parole in November 1996 he went back to using drugs and again began associating with Ricky Childs. Mr. Flores stated the night of January 29, 1998, he was with Ricky Childs for a time that began with Mr. Childs being at Mr. Flores’ house while Mr. Flores’ wife Myra was away.

ERIC J. HOLDEN, M.A., L.P.C.
PRESIDENT / CEO
PHONE: (972) 437-4597
FAX: (972) 437-2180
RHOLDEN@BEHAVIORALMEASURES.COM

Mr. Flores stated he and Mr. Childs were seeking drugs but Mr. Flores' connection was out of drugs and Mr. Childs said he knew where they could get Meth. Mr. Flores stated about midnight he and Mr. Childs drove to Jackie Robert's house. Mr. Flores stated that Ms. Roberts was not happy to see him there and he did not like her after one prior meeting that occurred between them. He stated Mr. Childs arranged for the three of them to drive to the Love Field area of Dallas to meet a drug dealer Mr. Childs identified as Mr. Plunk. He stated he, Childs, and Jackie Roberts drove in her vehicle to meet Mr. Plunk at the apartment of Ms. July Haney where Mr. Childs and Mr. Plunk completed a Meth transaction. Mr. Flores stated he, Childs, and Jackie Roberts drove to Irving, Texas where they stopped for Mr. Flores to meet with a friend identified as Waylon and leave Waylon a quantity of Meth. Mr. Flores stated from there he was taken to his home where he remained with his wife Myra the remainder of that night. Mr. Flores stated he did not go to the Black's home and was not there when Ms. Elizabeth Black was killed, a position he stated he has maintained since his arrest and conviction. Mr. Flores stated he was not the person that witness reportedly saw with Ricky Childs arriving at the Black's residence on 29 January 1998 in that multi-colored Volkswagen and stated further that he has never been at or inside the Black's residence.

Mr. Flores acknowledged the important contribution and relevance of that eyewitness identification of him as the person seen arriving at the Black home with Ricky Childs the night Elizabeth Black was killed. In order to best focus Charles Flores' attention to a limited, specific target issue, he was asked two specific questions and instructed to write out, in his hand, the answers. Those two questions and his handwritten answers, signed and dated by Mr. Flores are listed below (copy attached):

Question: **Were you at the Black home in Farmers Branch when Ms. Black was shot?**

Answer: ***"I Charles Don Flores was not at the Black home in Farmers Branch when Mrs. Black was shot."***

Question: **Were you at the Black's home with Ricky Childs when Ms. Black was shot?**

Answer: ***"I was not at the Black home with Ricky Childs in Farmers Branch when Mrs. Black was shot."***

TESTING PHASE

Test Objective: The relevant test questions noted below were designed to determine if Charles Don Flores appears to be truthful or not in the written answers he provided to the above listed test questions.

Test Procedure and Relevant Test Questions: A Computerized Polygraph Examination utilizing a standardized testing format was administered. Noted below are the relevant-issue test questions asked and the examinee's answers:

Relevant Q1: **Did you lie when you wrote today that you were not at the Black home when Elizabeth Black was shot?**

Answer: **No**

Relevant Q2: Did you lie when you wrote today that you were not at the Black home with Ricky Childs when Ms. Black was shot?

Answer: No

EVALUATION PHASE

Test Results: Test results were determined by applying nationally recognized scoring criteria. Additional test data analyses (TDA) by other examiners and/or computer algorithms verified reliability. The conclusion was: **NO DECEPTION INDICATED.**

Professional Opinion: The examinee's answers to the above questions are classified: **TRUTHFUL**

Please advise if we can assist further in this matter.

Sincerely,

A handwritten signature in blue ink, appearing to read "Eric J. Holden". The signature is fluid and cursive, with a large initial "E" and "H".

Eric J. Holden, M.A., L.P.C.
EJH/dcc

Attachment

The answers of Charles Don Flores to Mr. Holden.

- #1. I Charles Don Flores was not at the Black home in Farmers Branch when Mrs. Black was shot.
- #2. I was not at the Black home with Ricky Childs in Farmers Branch when Mrs. Black was shot.

Charles Don Flores.

11.15.21 at 2:45 pm.

Mrs. Black refers to ELIZABETH Black. C.D.F.

EXHIBIT 22

GRETCHEN SIMS SWEEN, PH.D., J.D.
Attorney & Counselor at Law
PO Box 5083
Austin, TX 78763-5083
214.557.5779 (phone) / 512.548.2089 (fax)
gsweenlaw@gmail.com

January 5, 2022

Eric J. Holden
Behavioral Measures & Forensic Services Southwest, Inc.
1720 Regal Row, Suite 120
Dallas, TX 75235

Via Email: *dcrandall@behavioralmeasures.com*

Re: Authorization to discuss result of polygraph examination of Charles Don Flores

Dear Mr. Holden:

As you likely recall, you traveled to the TDCJ Polunsky Unit on November 15, 2021 and conducted a polygraph on my client, Charles Don Flores. Thereafter, you prepared a report summarizing the results of your testing and providing your opinion regarding my client's truthfulness,

With this letter, I am authorizing you to discuss the results of your testing, as well as your methodology, and your opinions about the reliability of the results with the following individuals:

Dallas County District Attorney John Creuzot (or any agents thereof)
Director of the Dallas County Conviction Integrity Unit Cynthia Garza (or any agents thereof)
Michael Ware of The Innocence Project of Texas
Gary Udashen of The Innocence Project of Texas

Yours most sincerely,

/s/

Gretchen Sween, Attorney at Law

Cc: Mike Ware & Gary Udashen, The Innocence Project of Texas

EXHIBIT 23

From: Rebecca Ott <Rebecca.Ott@dallascounty.org>
Sent: Thursday, February 4, 2021 11:05 AM
To: Gretchen Sween
Cc: benjamin.wolff@ocfw.texas.gov; Shelly Yeatts; Jaclyn OConnor; Jennifer Balido
Subject: Flores - Update on Gum

Gretchen,

Farmers Branch PD has located the gum. They have also located buccal swabs for Flores and Childs. I am coordinating with FBPD to have one of our DA investigators transport the evidence to SWIFS next week for testing. I spoke with Kenneth Balagot at SWIFS, and he informed me that they will be able to test the evidence as soon as it is received, using STR technology. If they are able to obtain a DNA profile from the gum, that profile would first be compared to profiles from Mrs. Black, Flores, and Childs. If all three are excluded as contributors to the DNA profile obtained from the gum and the profile meets the CODIS eligibility requirements, the DNA profile would then be uploaded into CODIS.

I will keep you apprised. Let me know if you have any questions or wish to discuss the above.

Regards,

-Rebecca

Rebecca Ott Labardini
Assistant District Attorney, Appellate Division
Dallas County District Attorney's Office
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EXHIBIT 24

VOLUNTARY STATEMENT

My name is Homero Gonzales Garcia. I am thirty years old. I am of sound mind. I make the following statement voluntarily and of my own free will.

In 1998, before the capital murder trial of Charles Flores I was incarcerated in the Dallas County Jail. State's prosecutor, Jason January, called me out of my cell and had me brought to his office. January told me that he had a statement that the F.B.I. had given him. I told January that I had been awake for many days on methamphetamine and did not remember anything about this statement. January then threatened me saying, "If you don't want to sit in jail for the rest of your life then you will testify at Charlie's trial. If you don't come to court I will lock you up and make sure you sit in jail as long as Charlie does."

At this time I did not know about jail and the thought of staying in jail the rest of my life scared me very much. I believed I had no choice in the matter and I agreed to cooperate with January's plans. January told me I was going to testify to what the statement the F.B.I. said. I was scared and in fear for my life, so I went along with this. Jason January put words in my mouth and told me exactly what to say.

I got out of the county jail and when Charles Flores went to trial I tried to hide from January, but he sent his investigator to my family's house and they made me come testify. January again threatened me, telling me I would sit in jail forever if I did not cooperate with him. I was very scared and could see no way out of the situation. So I testified and said what January wanted me to say.

Charles Flores never told me anything about the murder of Betty Black. He never told me, "he shot the dog", and "Rick shot the old lady". Charles Flores told me that he had nothing to do with this crime and he thought Rick Childs was setting him up. A few days after telling me this Charles left town and I did not see him again until 1999 at his trial.

I swear that the above statement is true and correct.

Homero Gonzales Garcia
Homero Gonzales Garcia

April 24, 2003.