IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF ARKANSAS

LEDELL LEE,
DC No. 000936
Plaintiff,

v.

LARRY JEGLEY, Prosecuting Attorney for the Sixth Judicial District of Arkansas;

GEOFFREY HERWEG; Chief, Jacksonville Police Department;

WILLIAM J. BRYANT; Director, Arkansas State Police; and

WENDY KELLEY; Director, Arkansas Department of Correction;

Defendants (individuals sued only in their official capacity).

CIVIL CASE NO. 4:17-cv-256-DPM

CAPITAL CASE

This case assigned to District Judge Marshall
and to Magistrate Judge Deere

COMPLAINT FILED PURSUANT TO 42 U.S.C. § 1983

This is a death penalty case.

EXECUTION SCHEDULED FOR 7 P.M. -- APRIL 20, 2017

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Dated: April 20, 2017

COMPLAINT FILED PURSUANT TO 42 U.S.C. § 1983

1. Plaintiff Ledell Lee brings this action for declaratory and injunctive relief against the Defendants (Larry Jegley, Prosecuting Attorney for the Sixth Judicial District of Arkansas; Geoffrey Herweg, Chief of the Jacksonville Police Department; William J. Bryant, Director of the Arkansas State Police; and Wendy Kelley, Director, Arkansas Department of Correction (collectively, "Defendants").[1]

2. Mr. Lee asks this Court for a declaration that Arkansas' DNA testing statute -- Ark. Code Ann. §§ 16-112-201, et seq., of the Arkansas Code of Criminal Procedure, as interpreted by the Arkansas Supreme Court -- is unconstitutional, because it deprives him of his constitutional right to meaningful access to state post-conviction procedures for the purpose of proving his actual innocence. And based on the finding of a constitutional violation, Mr. Lee also seeks injunctive relief compelling the release of the physical evidence in his case for DNA testing. Mr. Lee's co-counsel at the Innocence Project will bear all costs of testing if relief is granted.

3. Additionally, so that this Court may complete the exercise of its jurisdiction over the claims in this action, Mr. Lee seeks an order staying

[1] Individual defendants are sued only in their official capacity. The suit is brought against the individual defendants in an abundance of caution because sovereign immunity and other jurisdictional issues may be an impediment to bringing a cause of action against the state and county agencies which they serve.

Defendants from carrying out his execution, presently scheduled for April 20, 2017, at 7:15 p.m. so that his claims of access to DNA evidence are not rendered moot by his execution before this Court can give them full and fair consideration on the merits. Mr. Lee is entitled to such preliminary injunctive relief because, as set forth below, he is likely to succeed on the merits of his claims, and his unconstitutional death by lethal injection would unquestionably cause irreparable harm if it is carried out before the conclusion of this proceeding. See *Nelson v. Campbell*, 541 U.S. 637, 639 (2004); *Hill v. McDonough*, 547 U.S. 573, 583-84 (2006).

4. This action became ripe only today, when the Arkansas Supreme Court denied relief to Mr. Lee under state law, by denying his motion to stay his execution without permitting him to conduct --or even affording him a hearing on -- his petition for DNA testing under Ark. Code Ann. §§ 16-112-201, *et seq*. *See, e.g., Skinner v. Switzer*, 562 U.S. 521, 531 (2011).

I. SUMMARY OF RELIEF SOUGHT AND GROUNDS FOR RELIEF

5. Mr. Lee seeks an order of this Court permitting him access to physical evidence relied upon by the State to convict him of murder – evidence that has never before been subjected to any form of DNA testing, including advanced methods of DNA analysis that were not available to any party at the time of his 1995 trial. He also seeks an order staying his execution – presently scheduled for

tonight at 7 p.m. -- while this Court considers the merits of his claims, so that he is not executed for a crime of which he is actually innocent before such testing can be ordered.

6. Mr. Lee's constitutional claims that form the basis of this Complaint only became ripe minutes ago, when the Arkansas Supreme Court denied him access to DNA testing under the only statutory vehicle the State makes available for prisoners seeking access to DNA evidence. Because the United States Supreme Court has held that Mr. Lee's constitutional claims necessarily depend on a showing that he tried, but failed, to utilize the limited procedures the State has made available to him to secure exculpatory DNA evidence, this Complaint is timely filed. *See Skinner v. Switzer*, 562 U.S. 521, 531 (2011). The fact that Mr. Lee did not previously have competent counsel to investigate and present his claim for access to DNA evidence further supports the timeliness of this action.

7. More than two decades ago, Mr. Lee was convicted of the murder of Debra Reese, who was found bludgeoned to death in her home in Jacksonville, Arkansas in February 1993. Mr. Lee has maintained his innocence of this brutal murder since the day he was arrested, insisting that he was misidentified by State witnesses as the man they believed they saw near the crime scene. He has also contended that the wholly ineffective lawyer the State appointed to represent him

at trial failed to investigate his alibi, conduct independent forensic testing, or otherwise present his viable defense of actual innocence.

8. In this action, he seeks nothing more than a simple DNA test, of the sort that law enforcement today routinely conducts to investigate and prosecute crimes like the one for which he now stands convicted, *before* the State carries out the ultimate and irreversible punishment of death.

9. There is no question that the DNA testing he seeks was unavailable to him at trial. Nor is there any dispute that such testing can now establish (1) that the rudimentary non-DNA evidence the State used to convict him in 1995 (serology and hair microscopy) were incomplete or inaccurate, and misled the jury into concluding that hair and blood evidence from the scene inculpated him in the murder; and (2) that he is actually innocent of this crime, which he can show not just through favorable results of the testing, but through a search of the national DNA database in order to identify another individual as the real perpetrator of Ms. Reese's murder.

10. Mr. Lee suffers from a profound intellectual disability, which, combined with his indigence and lack of access to competent counsel, has long hampered his ability to seek and obtain the DNA testing that he has maintained would exonerate him. Indeed, the State imposed additional barriers on his ability to challenge his wrongful conviction and death sentence for more than two decades

by repeatedly appointing him inadequate and conflicted post-conviction counsel to present his claims – one of whom was so visibly intoxicated during Mr. Lee's first post-conviction hearing that the *State's* counsel felt compelled to put that fact on the record, and ask the court to order that Mr. Lee's attorney be ordered to take a drug test. Despite these impediments, for more than two decades, Mr. Lee nonetheless diligently attempted to avail himself of any and all means of securing DNA testing and a meaningful investigation into his claims of actual innocence, including writing to national legal organizations for assistance, begging investigators who came to visit other inmates on death row to refer him to competent counsel, and asking the courts to appoint new and competent counsel to assist him. At his insistence, appointed counsel also raised (but in limited and largely incomprehensible fashion) challenges to the forensic evidence used to wrongly convict Mr. Lee.

11. At no time prior to this month, however, did any of his assigned counsel ask the Courts to order a simple DNA test that has the power to prove his actual innocence, and to which Mr. Lee should be statutorily entitled under a DNA testing statute enacted by the Legislature in 2001, and amended in 2005,whose stated purpose was to afford persons such as Mr. Lee access to evidence that could exonerate them.

12. It was just months ago that Mr. Lee finally was granted the appointment of undersigned post-conviction counsel Lee Short, Esq. Mr. Short, despite the substantial number of other meritorious claims and evidence that he needed to review and present to the Courts prior to Mr. Lee's hastily scheduled execution (as well as his numerous other appointments in capital and other serious felony cases), examined and recognized the potential merits of Mr. Lee's claims for access to DNA evidence.

13. New counsel proceeded to secure the *pro bono* assistance of the Innocence Project and other volunteer counsel to assist him in evaluating the viability of Mr. Lee's DNA testing claims. These volunteer attorneys in turn secured the consultation of a qualified DNA expert, in order to examine the potential claims in more detail and provide a supporting affidavit to his State petition for testing.

14. Finally equipped to bring his claim to the courts, earlier this week, Mr. Lee, via his new counsel, filed his first and only petition for DNA testing under Ark. Code Ann. §§ 16-112-201, et seq., of the Arkansas Code of Criminal Procedure. That petition was summarily denied by the Circuit Court of Pulaski County the following day --without an evidentiary hearing, expert testimony, or any proceedings for consideration of the merits, other than brief oral argument by

local counsel (further, the Court would not permit Innocence Project counsel to appear, even by telephone).

15. With Mr. Lee's execution less than twenty-four hours away, it is now time for this Court to issue a stay of execution and ensure that his claim of access to DNA evidence receives a full and fair hearing on the merits – something the Arkansas Courts have failed to do, in violation of Mr. Lee's constitutional rights.

16. Earlier today, the Arkansas Supreme Court denied Mr. Lee's motion to stay his execution and order post-conviction DNA, or, in the alternative, to remand the matter for an evidentiary hearing on the merits. Thus, Mr. Lee's execution remains scheduled for this evening, if this Court does not grant a stay.

17. The arbitrariness of the Arkansas Courts' denial of Mr. Lee's petition for DNA testing is underscored by the fact that just yesterday, the Arkansas Supreme Court granted a stay of execution and remand for an evidentiary hearing to another death-sentenced inmate, Stacey Johnson, who was also scheduled to be executed on the same night as Mr. Lee. *See State v. Johnson*, No. CR-17-312 (Order dated April 19, 2017) (attached as Exhibit A). Like Mr. Lee, Johnson was convicted of a 1993 murder, and he also sought previously-unavailable methods of DNA testing under Arkansas' DNA statute days before his execution. Further, like Mr. Lee, Johnson's petition was denied after brief oral argument and without an evidentiary hearing. Unlike in Mr. Lee's case, however, the Arkansas Supreme

Court granted Johnson's motion to stay his execution and remand his DNA testing petition for an evidentiary hearing, yet has allowed Mr. Lee's execution to go forward without a hearing.

18. In refusing to otherwise make the biological evidence available to him for DNA testing under any other provision of law, Defendants have violated Mr. Lee's right to due process of law. Specifically, as set forth below, they have failed to afford him reasonable access to the DNA evidence that can provide a factual basis to bring a meritorious challenge to his conviction and death sentence, and thus, have deprived him of reasonable and effective use of the post-conviction relief procedures that Arkansas has chosen to make available to its convicted citizens under state law. *See, e.g., Dist. Attorney's Office for Third Judicial Dist. v. Osborne,* 557 U.S. 52, 129 S. Ct. 2308 (2009); *see also, e.g., Newton v. City of New York,* 779 F.3d 140 (2nd Cir. 2015) (citing *Osborne* and discussing protected liberty interests in access to DNA evidence as recognized by U.S. Supreme Court).

II. JURISDICTION

19. This Court has jurisdiction under 28 U.S.C. §§ 1331, 1343, 1651, 2201 and 2202, and under 42 U.S.C. § 1983.

20. This Court also has jurisdiction to issue the requested stay of Mr. Lee's execution under the Anti-Injunction Act, 28 U.S.C. §2283 as such is "necessary in aid of its jurisdiction," permitting the Court to thereby issue an

injunction under the All-Writs Act (AWA), 28 U.S.C. § 1651(a) (authorizing the federal courts to "issue all writs necessary or appropriate in aid of their respective jurisdictions and agreeable to the usages and principles of law").

III. VENUE

21. Venue lies in this Court under 28 U.S.C. § 1391 because the (1) Defendant Larry Jegley, the Prosecuting Attorney for the Sixth District of Arkansas, maintains his office in Little Rock. Arkansas, (2) Defendant William J. Bryant, the Director of the Arkansas State Police and the supervisor of the Arkansas State Crime Lab, maintains an office in Little Rock, Arkansas; (4) Defendant Geoffrey Herweg, Chief of the Jacksonville Police Department, maintains his office in Jacksonville, Arkansas, and (4) the events or omissions that gave rise to this action — the decision to deny access to DNA testing — took place in the Eastern District of Arkansas. *See* 28 U.S.C. § 1391(b).

IV. PARTIES

22. Plaintiff Ledell Lee is currently incarcerated, under a sentence of death imposed by the Circuit Court of Pulaski County, Arkansas, at the Cummins Unit of the Arkansas Department of Corrections in Grady, Arkansas.

23. Defendant Larry Jegley is the Prosecuting Attorney for the Sixth Judicial District of Arkansas (which includes Pulaski County). Upon information and belief, Defendant Jegley's official position as Prosecuting Attorney gives him

the authority over the forensic evidence Plaintiff seeks to test, and he has refused to release that evidence for DNA testing. Defendant Jegley is sued in his official capacity only for declaratory and injunctive relief.

24. Defendant Geoffrey Herweg is the Chief of the Jacksonville Police Department. He maintains an office in Jacksonville, Arkansas. Upon information and belief, the Defendant has custody of some or all of the physical evidence used to prosecute Mr. Lee and investigate Ms. Reese's murder, including the DNA evidence that is the subject of this action. Defendant Herweg is sued in his official capacity only for declaratory and injunctive relief.

25. Defendant William J. Bryant is the Director of the Arkansas State Police. He maintains an office in Little Rock, Arkansas. Defendant Bryant is the ultimate supervisor of the Arkansas State Crime Lab, which, upon information and belief, has custody of some of the evidence that is the subject of this action. Defendant Bryant is sued in his official capacity only for declaratory and injunctive relief.

26. Defendant Wendy Kelley is the Director of the Arkansas Department of Correction. She maintains an office in Pine Bluff, Arkansas. Upon information and belief, Defendant Kelley is charged with responsibility for carrying out Mr. Lee's execution on April 20, 2017. She is sued in her official capacity only for declaratory and injunctive relief.

V. FACTUAL BACKGROUND

27. In May, 1993, Plaintiff Ledell Lee ("Mr. Lee") was charged by information in Pulaski County, Arkansas, Circuit Court with capital murder under Ark. Code Ann. § 5-10(101)(a)(5) (1987) for the murder of Debra Reese. Ms. Reese was found murdered in her home in Jacksonville, having been strangled and beaten with a tool belonging to her that resembled a baseball bat. Witnesses in the neighborhood reported seeing a lone African American male approach the victim's door and, later, exit the scene and leave the area on the day she was murdered.

28. Mr. Lee was tried twice for the crime, both times pleading not guilty and offering a misidentification defense. So weak was the State's largely circumstantial case against Mr. Lee that despite the horrific nature of the crime and highly sympathetic victim, Mr. Lee's first trial resulted in a hung jury. In closing, the State referred to Mr. Lee, an African American defendant charged with the murder of a white woman, as a "hunter" whose "prey were the people of Jacksonville." Defense counsel did not object. Mr. Lee's second trial in October 1995 resulted in conviction and a sentence of death.

29. At the time of his arrest, at his trials, and to this day, Mr. Lee has denied involvement in the murder of Debra Reese. At trial, the State introduced no confession or admission that tied Mr. Lee to the murder of Ms. Reese; nor did the State identify any biological material at the scene as Mr. Lee's. None of the lifted

prints from the crime scene matched the defendant; indeed, several prints foreign to Mr. Lee, and from an unidentified source, were found at the scene.

30. Instead, the State convicted Mr. Lee largely on the inconsistent and unreliable testimony of three eyewitnesses, who testified that Mr. Lee was the man they saw exiting the victim's home or merely in the general vicinity of her home on the day of the murder. Yet several other eyewitnesses interviewed by police did not identify Mr. Lee as the perpetrator; and those few who did testify for the State gave often-inconsistent and contradictory accounts.[2] The State also offered evidence purporting to show that several hours after the murder, Mr. Lee presented a local store with a $100 bill that bore a serial number in the same series of bills as monies possessed by the victim and her husband; however, the defense argued that the State had not established that Mr. Lee (who, by his own admission, had used and purchased illegal drugs in the neighborhood) had obtained this bill from Ms. Reese's home, as opposed to after the fact.[3]

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[2] For example, one eyewitness, Mr. McCullough, said the person he identified as Mr. Lee came to his house to borrow tools. They talked for 10-15 minutes, face-to-face. He is positive that this person was not wearing a jacket, positive that he had no ball cap on, and says he believed he was wearing a short-sleeved shirt. Mr. Gomez, on the other hand, said the man he saw entering and leaving Ms. Reese's house was wearing a ball cap and dark jacket. But, Mr. Gomez admits he was taking Vicodin for pain at this time. Still another witness, Ms. Pruitt, who did not claim to have seen Mr. Lee at or near the victim's home, but only in the general area where the crime occurred, at trial said she wasn't sure about the clothing but, at another hearing testified she believed he had on a red plaid shirt. She admittedly was a daily marijuana user, and initially reported seeing Mr. Lee at 11am –*before* the murder even occurred.

[3] Indeed, numerous wrongly convicted defendants who were later exonerated through DNA testing were convicted in part on evidence that they possessed property from the crime –

31. No DNA evidence was presented to the jury; indeed, DNA testing was, at that time, in its relative infancy, and was not sought by either party prior to trial. Instead, to strengthen the weak circumstantial evidence, the State introduced what its trace evidence expert described as "Negroid" hair found in Ms. Reese's home, which prosecutors argued had been left by the perpetrator during the struggle. The State also presented evidence of two extremely "small spot[s]" of human blood found on Mr. Lee's Converse tennis shoes at the time of his arrest. Even though the State's experts admitted that none of the testing they performed could identify the source of the blood or hair, however, the State relied heavily on this limited forensic evidence to ask the jury to find Mr. Lee guilty of murder.

32. With respect to the hair evidence, Donald E. Smith, a criminalist, testified that he had microscopically examined the hair to compare its features to Mr. Lee's – a method of analysis that has long since been discredited and disproven by DNA analysis. Specifically, he analyzed one "intact Negroid head hair" and several Negroid hair fragments. He also indicates the intact hair has a root present ("And I saw some clearing of the pigments because from the root to the shaft there sometimes gets a clearing of this pigmentation. That's not apparent if you don't have roots.") Mr. Smith admitted that "hair is not a science so precise

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yet DNA testing later proved the truth of their claims that the property came into their possession only after the real perpetrator stole it from the scene and either discarded or sold the items. *See* Innocence Project: Robert Clark (https://www.innocenceproject.org/cases/robert-clark/) and Eugene Bibbins (https://www.innocenceproject.org/cases/gene-bibbins/)

that you can define a hair as uniquely coming from an individual, saying that no other individual has hair like another person." After an examination of these hairs, Mr. Smith told the jury that found nothing that was "inconsistent" with Petitioner's hair; the prosecution went on to argue in summation that the hairs were fully "consistent" with Mr. Lee's.

33. With respect to the blood evidence, the State offered the testimony of Kermit Channell, then a serologist with the Arkansas Crime Laboratory. Mr. Channel testified that he found two extremely small spots of blood on the pair of tennis shoes that Mr. Lee was wearing upon his arrest (which occurred approximately three hours after Ms. Reese was killed). He was unable to make any determination as to the source of the blood, other than to confirm that it appeared to be "human blood." And despite the extremely grisly nature of the crime, with blood spattered across Ms. Reese's walls and floors as a result of the beating inflicted by her killer, Mr. Channell found no other traces of blood anywhere on the shoes, shirt, pants, or other items that Mr. Lee was alleged to have worn to commit the murder. Nor was any blood or foreign material detected under Mr. Lee's fingernails, which were swabbed by the State upon his arrest, and later submitted to the Crime Lab for forensic analysis.

34. Despite the limited nature of the serologist's blood testing, and the notable absence of blood elsewhere on the shoes or any other item seized from Mr.

Lee, the prosecution relied heavily on the positive test for human blood on these drops. At summation, the State argued that the detection of this blood on the defendant's tennis shoes in fact "puts the defendant at the scene." Yet the State never explained how Mr. Lee could have possibly committed this close-range, brutal murder, but somehow left the rest of his tennis shoes, clothing, and person wholly untouched with the victim's blood.

VI. PROCEDURAL HISTORY

A. Summary of Post-Conviction Proceedings

35. After conviction by his second jury, Mr. Lee was sentenced to death on October 16, 1995. The Supreme Court of Arkansas affirmed the conviction and sentence on March 24, 1997. *Lee v. State*, 327 Ark. 692, 942 S.W.2d 231 (1997). His petition for post conviction relief was denied, and the Arkansas Supreme Court affirmed. *Lee v. State*, 343 Ark. 702, 38 S.W.3d 334 (2001).

36. Mr. Lee then filed a Petition for Writ of Habeas Corpus in federal court. On April 2, 2003, United States District Judge George Howard, *sua sponte*, noted that Lee's attorney may have been impaired to the point of unavailability on one or more days of the Rule 37 hearing. He ordered the petition stayed and held in abeyance, remanding to the trial court to take appropriate action to allow Lee to present relevant evidence and argument in favor of his Rule 37 petition issues. The Eighth Circuit affirmed the stay. *Lee v. Norris*, 354 F.3d 846 (8th Cir. 2004).

37. On August 30, 2005, Mr. Lee moved the Arkansas Supreme Court to recall its mandate on grounds that his attorney in the postconviction proceedings rendered ineffective assistance of counsel. Mr. Lee maintained, and the Supreme Court later found, that his postconviction attorney suffered from a substance-abuse problem and had been intoxicated during the initial Rule 37 proceedings in 1999. As a result, the Arkansas Supreme Court granted Mr. Lee's motion to recall the mandate and remanded the matter to the circuit judge for further proceedings. *Lee v. State*, 367 Ark. 84, 238 S.W.3d 52 (2006).

38. On remand, Mr. Lee filed an amended petition for postconviction relief under Arkansas Rule of Criminal Procedure 37. The circuit judge held another hearing on August 28, 2007, and subsequently denied Mr. Lee's petition and entered findings of fact and conclusions of law on November 21, 2007. Lee appealed to the Arkansas Supreme Court which affirmed the lower court. *Lee v. State*, 2009 Ark. 255, 308 S.W.3d 596 (2009).

39. During the above proceedings, on September 18, 2008, the Supreme Court of Arkansas denied a pro se motion of defendant. *Lee v. State*, 2008 Ark. LEXIS 447 (2008), because he was not entitled to accept appointment of counsel and also proceed pro se. The Supreme Court noted that one of the reasons Mr. Lee was claiming his counsel were ineffective was because they would not request

scientific testing of the evidence used against him at trial. *Id.* at *2 (emphasis supplied).

40. On November 9, 2008, the United States Supreme Court denied *certiorari* to Mr. Lee in connection with the Second Rule 37 petition. *Lee v. Arkansas*, 558 U.S. 1013 (2009).

41. On June 18, 2013, United States District Judge Jimm Larry Hendren denied Mr. Lee's Petition for Writ of Habeas Corpus. *Lee v. Hobbs*, 2013 U.S. Dist. LEXIS 85271, 2013 WL 3149755 (E.D. Ark. 2013). On December 18, 2013, Judge Hendren denied Mr. Lee's Motion to Vacate, Alter or Amend Judgment Pursuant to Rule 59(e). *Lee v. Hobbs*, 2013 U.S. Dist. LEXIS 177403, 2013 WL 6669843 (E.D. Ark. 2013).

42. The Eighth Circuit denied relief to Mr. Lee and a petition for rehearing en banc was denied. *Lee v. Hobbs*, 2014 U.S. App. LEXIS 22121 (8th Cir. 2014). The United States Supreme Court denied certiorari. *Lee v. Kelley*, 2015 U.S. LEXIS 6544 (U.S., Oct. 13, 2015).

43. On April 17, 2017, Mr. Lee filed a Motion to Conduct Post-Conviction DNA Testing pursuant to Arkansas Code Annotated §§ 16-112-201, et seq. After holding oral argument on April 18, 2017, the Honorable Herbert T. Wright, Jr., Circuit Judge, Pulaski County, Arkansas, Fourth Division, denied the motion.

44. On April 19, 2017, Mr. Lee filed a Motion to Recall the Mandate and Appeal of the Denial of the Motion to Conduct DNA Testing with the Arkansas Supreme Court.

45. On April 20, 2017, the Arkansas Supreme Court denied Mr. Lee's motion to recall the mandate and appeal of the denial of the request to conduct DNA Testing.

46. Mr. Lee is currently scheduled for execution on April 20, 2017 at 7:00 p.m.

B. As Noted by the Eighth Circuit, Mr. Lee's Earlier Proceedings Involved "Truly Exceptional" Deprivation of Effective Counsel

47. The fact that Mr. Lee's case has proceeded through state and federal courts for the last two decades does not mean that any court has yet to hear, or consider, an adequate presentation or review of his claims during those proceedings.

48. For the last two decades Mr. Lee's case has passed through appeals, state post-conviction, and federal habeas without the most basic investigation into his guilt or innocence, mental health, or life history. During the years of litigation, no lawyer presented, and thus no court considered, the evidence of his brain dysfunction, fetal alcohol syndrome, or intellectual disability. No lawyer presented a social history of Mr. Lee or the powerful bases that would have supported a life

sentence. And most importantly for this case, there has never been any examination of Mr. Lee's strong claims of innocence through modern DNA techniques that were not available at the time of his trial.

49. Mr. Lee's case has become infamous in this aspect of its history, and with good reason. From a trial judge who was having an affair with the assistant prosecutor on the case (with the two later married), to his post-conviction attorney who was so drunk during his state post-conviction hearing that the State asked to have him drug tested, the scales of justice have been tipped against Mr. Lee.

50. While Mr. Lee was relying on his post-conviction counsel to advocate for him and prove his innocence, his counsel was waging a different battle. The trial judge stated that Mr. Lee's counsel was "not competent to try a case." Counsel was so impaired at the post-conviction hearing that the prosecutor asked the Court to require counsel to submit to a drug test.

51. Post-conviction counsel's intoxication also was noted at the federal habeas hearing when the District Court Judge, *sua sponte* noted in April of 2003 that Mr. Lee's counsel "may have been impaired to the point of unavailability on one or more days" of hearings on Mr. Lee's state habeas proceeding. Order, *Lee v. Hobbs*, No. 5:01-cv-0377 (E.D. Ark.), ECF No. 11. After the State filed an interlocutory appeal, the Eighth Circuit affirmed, noting that the circumstances of

the case were "truly exceptional." *Lee v. Norris*, 354 F.3d 846, 847 (8th Cir. 2004).

52. Yet despite the "truly exceptional" record of systemic breakdown in Mr. Lee's post-conviction proceedings as found by the Eighth Circuit, and the fact that Mr. Lee was only assigned competent counsel to represent him months before his hastily scheduled execution, Defendants remain poised to execute Mr. Lee without allowing his new counsel to conduct a simple DNA test for the purpose of proving his innocence.

53. Even more galling, Defendants have accused Mr. Lee – a profoundly intellectually disabled man, who spent more than two decades without minimally effective counsel to assist him – of "delaying" his request for DNA testing until the eve of his own execution. They have asserted that for this reason alone, his meritorious request for DNA evidence should be denied.

VII. EXCULPATORY POTENTIAL OF DNA TESTING IN THIS CASE

A. Scientific Advances and Newly Available Technology

54. DNA technology has advanced exponentially since the time of Mr. Lee's 1995 trial. Today, probative biological evidence currently in the custody and control of the State may now be able to provide—through the use of modern, cutting edge DNA testing technologies—confirmation of the veracity of Mr. Lee's innocence claim. This testing is available at no cost to the State or this Court, as the

Innocence Project has agreed to pay the costs of private testing by a qualified and fully accredited laboratory.

55. Specifically, Mr. Lee seeks to test the hair collected at the crime scene that the State argued at trial came from the perpetrator -- identified by the State's expert at trial as one "intact Negroid head hair," and other hair "fragments" of purported African American origin from the scene. As noted *supra,* the jury was told that the State's expert could not include or exclude Mr. Lee as the source of these hairs, but the jury was told that they were "consistent" with Mr. Lee's own. In addition, Mr. Lee seeks to have the Converse sneakers seized from him upon his arrest sent to a DNA laboratory for reexamination, to determine whether the blood on those shoes, as well as any other traces of blood that the 1995 serology examination may have missed, in fact come from Ms. Reese (as the State asked the jury to infer) or are wholly unrelated to her or her murder (as Mr. Lee has always contended).

56. Today's advanced DNA testing methods can now provide definitive answers to the questions that could not be resolved by the State's experts at trial. Indeed, this previously-unavailable testing could now demonstrate that the blood on the shoes was ***not*** Ms. Reese's, and that the hairs of African American origin found at the scene were *not* Mr. Lee's. Further, if a sufficient quantity of "root" (tissue) material is present on the hairs, and a DNA profile is obtained that excludes Mr.

Lee as the source, the profile can be searched in the national CODIS DNA databank and potentially identify Ms. Reese's actual killer. In recent years, modern DNA technology has been used in numerous cases to exonerate innocent defendants who were sent to prison or death row on the same kinds of limited serology and hair evidence offered by the State against Mr. Lee, after DNA testing provided more definitive and accurate results.

57. DNA testing is thus perfectly suited for cases like this one, where technology unavailable at the time of trial can conclusively establish the legitimacy of a Petitioner's innocence claim and undermine evidence used to convict. As the United States Supreme Court has recognized, "DNA testing has an unparalleled ability both to exonerate the wrongly convicted and to identify the guilty." *Dist. Attorney's Office for Third Judicial Dist. v. Osborne*, 557 U.S. 52, 55, 129 S. Ct. 2308, 2312, 174 L. Ed. 2d 38 (2009).

58. Indeed, today's forensic DNA testing methodologies are inarguably more sensitive, discriminating, and accurate than almost any other form of evidentiary proof. *See Maryland v. King*, 133 U.S. 1958, 1964 (2013) (citing "the unparalleled accuracy DNA provides" over other forensic testing methods and databases).

59. At the time of Mr. Lee's trial in 1995, today's advanced methods of STR DNA analysis were unavailable. *See* Affidavit of Charlotte Word, Ph.D.,

attached as Exh. B at ¶ 3, 8-11("Word aff"). Short Tandem Repeat ("STR") "increas[ed] exponentially the reliability of forensic identification over earlier techniques" and is "qualitatively different from all that preceded it." *Harvey v. Horan*, 285 F.3d 298, 305, n.1 (4th Cir. 2002). STR testing fully replaced other DNA testing methods in the FBI crime laboratory and most other crime laboratories by 2000.

60. Today, autosomal (non-sex determining) STR technology is the principal mechanism for obtaining DNA profiles in forensic laboratories around the nation, and is essentially the gold standard of modern DNA testing. For a decade, the forensic science community used a minimum of thirteen genetic markers, referred to as the thirteen core CODIS (Combined DNA Index System) loci, when conducting forensic DNA testing. And newer STR-DNA kits validated for use in 2016-17 provide even greater discrimination and sensitivity.

61. Thus, there is no question that STR-DNA testing previously unavailable to Mr. Lee has the potential to determine the DNA profile of the donor of the blood on Mr. Lee's shoes, putting the State's claim that these blood spots "place [him] at the scene" to the test of objective DNA science.

62. Similarly, advances in DNA technology have wholly supplanted the microscopic hair comparison done by the State and relied upon so heavily at Mr. Lee's trial. Microscopy was, in 1995, a commonly-used but unvalidated forensic

technique – one that has since been entirely replaced by mitochondrial DNA analysis as a method of forensic identification.

63. Under the microscope analysis method, an analyst would place two hairs (a crime scene hair and a known hair) side-by-side under a microscope and visually compare them to determine whether there was a positive association. However, in 2009, after Congress assigned the National Academy of Sciences ("NAS") the task of evaluating the scientific validity and reliability of various forensic techniques, including hair microscopy, the NAS published a seminal report that revealed fundamental flaws in many forensic disciplines and the dangers of testimony regarding such "science." Nat'l Academy of Sciences, Nat'l Research Council, Strengthening Forensic Science in the United States: A Path Forward (2009). The NAS found that hair microscopy cannot uniquely identify one person as the source of a hair, concluding that evidence of a match "must be confirmed using [mitochondrial] DNA analysis." *Id.* at 161.

64. Mitochondrial DNA testing ("mtDNA") analyzes DNA found in the cytoplasm of the cell; that is, the area that surrounds the nucleus. The mitochondrial genome, which is unchanged as it is passes from mother to child, is passed on to all the offspring of a mother and to those children's offspring. Mitochondrial DNA testing thus provides one particular advantage over STR testing; it can be compared to forensic samples that do not have the nucleated chromosomal information

required for STR, and thus may be used on biology without nucleated cells, including hair with no "root," and bones. Mitochondrial DNA can exclude an individual as the source of the hair.

65. Mitochondrial DNA testing was not available to either the State or Mr. Lee in 1995. *See* Exh. B, Word aff. at ¶8. In 2012, three men who were convicted based on false hair comparison testimony by three different FBI hair examiners were exonerated when post-conviction mitochondrial DNA testing discredited the evidence proffered against them at trial.[4] The NAS Report and the DNA exonerations compelled the Department of Justice and the FBI to re-examine thousands of criminal cases between 1985 and 2000 where its hair examiners conducted microscopic hair analysis and testified to a positive association between a defendant's hair and a hair collected from a crime scene. In April, 2015, as a result of this historic review, the FBI formally acknowledged that nearly every examiner in its microscopic hair comparison unit gave flawed and exaggerated testimony in more than 95% of the trials reviewed.[5] The FBI conceded for the first time that its agents lacked any scientific basis when they testified that an individual was likely the source of a crime scene hair and that hair microscopy is limited "in

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[4] Spencer S. Hsu, *Kirk Odom, Who Served 20 Years for 1981 D.C. Rape, is Innocent, Prosecutors Say*, Wash. Post, July 10, 2012; Spencer S. Hsu, *Santae Tribble Cleared in 1978 Murder Based on DNA Hair Test*, Wash. Post, Dec. 14, 2012.

[5] Spencer Hsu, *FBI Admits Flaws in Hair Analysis Over Decades*, Wash. Post, Apr. 19, 2015.

that the size of the pool of people who could be included as a possible source of a specific hair is unknown."[6] It is therefore impossible to say that strands of hair came from a particular person.

66. In fact, of the 340 convictions overturned by post-conviction DNA testing in this nation, at least 74 – about one in four – involved flawed microscopic hair analysis, where a hair from the crime scene was deemed to be "similar to" or "consistent with" the defendant's or the victim's hair standard. *Id.*

B. Proven Fallibility of Other Evidence Used to Convict Mr. Lee

67. The Arkansas Court(s) denied Mr. Lee access to post-conviction DNA testing under the state statute in part because of what Defendants maintained was the strength of the other evidence used against him at trial – in particular, the testimony of the three eyewitnesses who told the jury they believed he was the man they saw at or near the victim's home that day.

68. Reliance on lay eyewitness testimony to defeat a claim for DNA testing is particularly inappropriate, and constitutionally unreasonable, given what

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[6] *See* Norman L. Reimer, *The Hair Microscopy Review Project*, The Champion, July 2013, at 16; Spencer S. Hsu, *Justice Dept., FBI to Review Use of Forensic Evidence in Thousands of Cases*, Wash. Post. July 10, 2012; Spencer S. Hsu, *U.S. Reviewing 27 Death Penalty Convictions for FBI Forensic Testimony Errors,* Wash. Post, July 17, 2013; Innocence Project, *Innocence Project and NACDL Announce Historic Partnership with the FBI and Department of Justice on Microscopic Hair Analysis Cases* (July 18, 2013), *available at* http://www.innocenceproject.org/news-events-exonerations/press-releases/innocence-project-and-nacdl-announce-historic-partnership-with-the-fbi-and-department-of-justice-on-microscopic-hair-analysis-cases.

is now widely known among courts and scholars about the fallibility of eyewitness testimony – particularly where, as with the State's two principal eyewitnesses against Mr. Lee, the identifications are made by persons of a different race than the suspect.

69. Numerous Courts have discussed and relied upon this body of knowledge. *See, e.g., State v. Henderson,* 208 N.J. 208, 232-34 (2011) (discussing extensive social science research and data from DNA exonerations regarding risk of error in eyewitness identification testimony, including cross-racial identification); *Comm. v. Walker,* 625 Pa. 450, 461-64 (2014) (same). Similarly, there is now extensive data showing the role that eyewitness misidentification has played in wrongful convictions of persons later exonerated through DNA science. For example, a recent comprehensive study of data from the first twenty-five years of DNA exonerations reported that fully 72% of the exonerations involved eyewitness misidentification as a contributing factor. *See* West & Meterko, *DNA Exonerations 1989-2014: Review of Data and Findings from the First Twenty-Five Years,* 79 Alb. Law Rev. 717, 730-31 (2015-16). Moreover, fully one-third of the DNA exoneration cases involved – as in Mr. Lee's case – misidentifications of an innocent defendant by two or more witnesses. *See id.*

C. Exculpatory Potential from Databank "Hit" to Real Assailant

70. If Mr. Lee is actually innocent of Ms. Reese's murder, then the real perpetrator of this brutal crime has not yet been brought to justice. That individual may still be at large, or incarcerated but pending release, and thus putting other members of the public at risk of future violence.

71. The potential for post-conviction DNA testing to identify the real perpetrator of a serious crime is not speculative: in fully 29% of the post-conviction DNA exonerations documented over a twenty-five year period (1986-2014), the same DNA testing that exculpated a wrongly convicted defendant was used to directly identify a known alternate suspect in the crime(s). *See* West & Meterko, *DNA Exonerations 1989-2014: Review of Data and Findings from the First Twenty-Five Years,* 79 Alb. Law Rev. 717, 730-31 (2015-16).

72. Tragically, many of these individuals had committed still more violent crimes while the innocent defendants were wrongly incarcerated: sixty-eight of these perpetrators went on to commit at least 142 additional violent crimes – including 34 homicides and 77 rapes. *See id.* at 731.

73. The potential for DNA evidence to exculpate a defendant by identifying the actual perpetrator has chiefly been made possible by the advent of another advance in DNA technology since the time of Mr. Lee's 1995 trial: the CODIS DNA databank. Maintained by the FBI, and first online for state use in the

early 2000s, this database is a vast, computerized network of STR-DNA profiles from convicted offenders, arrestees, and crime scenes from around the country that can be immediately compared to unknown profiles in pending investigations.

74. As of February 2017, the database contained over 12.7 million convicted offender profiles, and 2.6 million arrestee profiles – including more than 200,000 profiles for offenders and arrestees submitted by the State of Arkansas. *See* CODIS-NDIS Statistics, Federal Bureau of Investigation, *available at https://www.fbi.gov/services/laboratory/biometric-analysis/codis/ndis-statistics* (last visited April 14, 2017).

75. Defendants' refusal to permit Mr. Lee to test, in particular, the root (tissue) of the hair attributed to him at trial, and which the State alleged was shed by the perpetrator at the scene, thus deprives him not only of the opportunity to prove that this hair is not his own. It also deprives him of access to the CODIS databank, which could identify another convicted offender as the actual source of the hair – who may well prove to be an individual with a history of similar crimes – and which could thus prove Mr. Lee's innocence beyond any doubt.

VIII. CLAIMS FOR RELIEF

A. First Claim for Relief: Denial of Due Process

76. Mr. Lee re-alleges and incorporates herein by reference the allegations contained in all the preceding paragraphs of this Complaint.

77. Pursuant to Ark. Code Ann. §§ 16-112-201, et seq., if an individual convicted of a felony or sentenced to death, such as Mr. Lee, presents a motion that requests DNA testing of biological material that both still exists in a condition that makes testing possible and may substantially advance his claim of innocence, he is entitled to have the evidence tested.

78. Ark. Code Ann. §§ 16-112-201, et. seq., remains the exclusive vehicle under Arkansas for a convicted person such as Mr. Lee to access DNA evidence in the State's custody and control for the purpose of proving innocence or otherwise securing post-conviction relief.

79. Further, Arkansas provides a statutory vehicle not only to obtain DNA testing, but to obtain habeas corpus relief based on the favorable results of new scientific evidence, including DNA test results. Specifically, Ark. Code Ann. §§ 16-112-201(a) provides that a convicted person may commence a new proceeding to vacate his or her conviction based on new scientific evidence – specifically by demonstrating that:

> (1) Scientific evidence not available at trial establishes the petitioner's actual innocence; or
>
> (2) The scientific predicate for the claim could not have been previously discovered through the exercise of due diligence and the facts underlying the claim, if proven and viewed in light of the evidence as a whole, would be sufficient to establish by clear and convincing evidence that no reasonable fact-finder would find the petitioner guilty of the underlying offense.

Ark. Code Ann. §§ 16-112-201(a)(1), (2). *See also* Ark. Rule Crim. Proc. 37.5 (establishing procedures for death-sentenced prisoners to seek post-conviction relief based on constitutional violations and other grounds).

80. Nonetheless, the Defendants have refused to make available to Mr. Lee under this statute either the blood or hair evidence that has the unquestioned potential to exculpate him of the crime for which he is convicted and presently sentenced to death.

81. Defendants have interpreted Ark. Code Ann. §§ 16-112-201 *et. seq.* in a manner that unreasonably and unconstitutionally restricts Mr. Lee's right of access to exculpatory DNA evidence. To the extent that the statute on its face, or as applied, prohibits (1) a convicted person such as Mr. Lee from filing a motion for DNA testing prior to his execution because his incompetent or inadequate assigned counsel failed to do so previously, and/or (2) otherwise imposes an unreasonable time limitation in which to file based on advances of DNA technology that a prisoner in Mr. Lee's position cannot reasonably be expected to understand or present to a court, such restrictions are unconstitutional.

82. Similarly, Defendants have interpreted §§ 16-112-201 *et. seq.* in a manner that unreasonably burdens a convicted person's right to use DNA evidence to establish actual innocence by failing to recognize the probative value of this

technology to rebut and undermine other, non-DNA evidence used against a defendant at trial.

83. As such, Defendants have deprived and continue to deprive Mr. Lee of due process. Specifically, they have denied him his right to reasonable state-law procedures that protect and vindicate his "liberty interest in demonstrating his innocence with new evidence under state law." *Osborne, supra,* 557 U.S. at 68. For when a state enacts a statute providing postconviction defendants access to evidence and a procedure for accessing such evidence, the procedures it utilizes to vindicate that interest must be reasonably adequate. *Id.* at 68-69.

84. Defendants have interpreted and applied Arkansas's DNA testing law in a manner that unreasonably restricts Mr. Lee's and other defendants' access to this critical evidence of innocence.

85. For example, as set forth in the Affidavit of Charlotte Word, Ph.D, attached here as Exhibit B; in his petition for DNA testing below; and in the accompanying authorities, it is clear that the testing he seeks uses advanced STR and mitochondrial DNA technology that was unavailable to any party at the time of trial. That testing can now: (1) show that the blood on Petitioner's shoes was not Mr. Lee's; (2) show that the "Negroid" hairs found at the crime scene came from someone other than Mr. Lee, and (3) if an STR-DNA profile is obtained from the root of the "intact" hair (as the State's expert said was present when he examined

the root), and Mr. Lee is not the source, that STR-DNA profile can be searched in the CODIS DNA database, and potentially identify Ms. Reese's actual killer.

86. Indeed, the testing that Mr. Lee seeks on the root of this hair is so fundamental to the investigation of criminal culpability that it is *routinely used by law enforcement* to identify and prosecute criminal defendants in the modern era. *See, e.g., State v. Alexander*, 194 So.3d 33 (La. Ct. App. 2nd Cir. 2016) (affirming conviction for murder based principally on DNA profile of defendant obtained from root of hair on victim's corpse, which led to his identification as suspect through CODIS database search); U.S. Dept of Justice, Off. Justice Programs, *What Every Law Enforcement Officer Should Know About DNA Evidence*, at 2 (discussing how DNA from "a single hair" inside victim linked to suspect "provided critical evidence in a capital murder prosecution), *available at* https://www.ncjrs.gov/pdffiles1/nij/bc000614.pdf.

87. Such testing has also been used to exonerate the factually innocent -- including, for example, Innocence Project client Randolph Arledge of Texas, who served more than thirty-two years in prison for a rape and murder he did not commit, before DNA testing conducted on a root of a hair found on clothing in the victim's car yielded a "hit" in CODIS to another convicted felon. Following the hit, Texas prosecutors investigated the new suspect and agreed to Mr. Arledge's immediate release and dismissal of all charges against him. *See* Innocence Project:

Randolph Arledge, *available at* https://www.innocenceproject.org/cases/randolph-arledge/ (last visited April 18, 2017).

88. Unlike the Arkansas Supreme Court, numerous other courts have recognized that the exculpatory potential of a DNA databank search is critical to vindicate a convicted person's interest in proving actual innocence. As such, these States have either enacted their DNA statutes with provisions expressly providing for such access, or interpreting their statutes in a reasonable manner that makes clear a defendant's entitlement to testing for such purposes.[7]

89. Depriving Mr. Lee the ability to access DNA evidence of the exact same type that Defendants regularly use to identify, arrest, and prosecute criminal suspects violates Mr. Lee's right to due process. That Defendants seek to impose the ultimate and irrevocable punishment – death by lethal injection – on Mr. Lee without allowing him the ability to access this evidence only heightens the unreasonableness and unconstitutionality of Defendants' actions.

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[7]*See, e.g., Powers v. Tennessee*, 343 S.W.3d 36, 55 (Tenn. 2011); *Hardin v. Kentucky*, 396 S.W.3d 909, 915 (Ky. 2013) (non-statutory postconviction DNA motion) ("The Commonwealth urges us to deny testing on grounds that, even if the hairs are shown to belong to Whitley, this would only serve to incriminate a third person and not exculpate Appellants. . . . [W]e are mystified, if not amazed, that the Commonwealth has such little interest in the possibility that DNA testing might lead to the prosecution and conviction of a guilty person heretofore uncharged and now at large upon the Commonwealth."); *New Jersey v. DeMarco*, 904 A.2d 797, 807 (N.J. Super. Ct. App. Div. 2006); *Ohio v. Noling*, 992 N.E.2d 1095, 1105 (Ohio 2013); *Pennsylvania v. Conway*, 14 A.3d 101, 114 (Pa. Super. Ct. 2011); *Connecticut v. Butler*, 21 A.3d 583, 588 (Conn. App. Ct. 2011); *Wisconsin v. Denny*, No. 2015AP202-CR, 2016 WL 1125593, at *392-93 (Wis. Ct. App. Mar. 23, 2016); *see also* Miss. Code Ann. § 99-39-11(10) (West Supp. 2015); N.Y. Crim. Proc. Law § 440.30(1-a)(c) (McKinney Supp. 2016).

B. Second Claim for Relief: Access to Courts

90. Mr. Lee re-alleges and incorporates herein by reference the allegations contained in all the preceding paragraphs of this Complaint.

91. In *Bounds v. Smith*, 430 U.S. 817, 828 (1977), the United States Supreme Court recognized that the right to access to courts, rooted in the First and Fourteenth Amendments, requires that the states make available the tools necessary for prisoners to obtain meaningful access to available judicial remedies. *See also Lewis v. Casey*, 518 U.S. 343, 346 (1996). State law must ensure that prisoners like Mr. Lee have "adequate, effective, and meaningful" access to postconviction remedies. *Bounds*, 430 U.S. at 822

92. As alleged above, Mr. Lee has available remedies under Arkansas law for access to postconviction DNA testing, a declaration of innocence based on the exculpatory results of such testing, to relief from his conviction based on the exculpatory results of such testing, and to executive clemency based on the exculpatory results of such testing. And as alleged above, Arkansas's restrictive procedure for obtaining access to DNA testing under Ark. Code Ann. §§ 16-112-201, et seq., is not adequate, meaningful or effective.

C. Third Claim for Relief: Cruel and Unusual Punishment

93. Mr. Lee re-alleges and incorporates herein by reference the allegations contained in all the preceding paragraphs of this Complaint.

94. Even if the Eighth Amendment does not create a right that permits an individual convicted of a capital crime to establish his innocence in federal habeas proceedings under the Anti-Terrorism and Effective Death Penalty Act ("AEDPA"), *see Herrera v. Collins* 506 U.S. 390 (1993), the Supreme Court of the United States has entertained a stand-alone innocence claim filed in its original habeas jurisdiction based, in part, on a claim that the execution of an innocent person would violate the Eighth Amendment. *See In re Davis*, 557 U.S. 952 (2009).

95. Ark. Code Ann. §§ 16-112-201, et. seq., has been interpreted by Defendants to bar DNA testing even where, as in Mr. Lee's case, realistically possible exculpatory DNA results from such testing have the capacity to prove innocence. Because Arkansas law does not allow for DNA testing under circumstances where such testing has the capacity to prove innocence, Ark. Code Ann. §§ 16-112-201, et seq., violates the Eighth Amendment prohibition on cruel and unusual punishment. Accordingly, Mr. Lee is entitled to the following declaratory relief:

> The Eighth Amendment of the Unites States Constitution prohibits the execution of persons who are actually innocent of the crime for which they are convicted. Ancillary to that protection, the Eighth Amendment requires that postconviction DNA testing be afforded to persons facing the death penalty where realistically possible exculpatory results can prove innocence. Because realistically possible exculpatory results from DNA testing of the evidence identified in Mr. Lee's complaint can prove his innocence, the

constitution requires the he be afforded the DNA testing requested in his complaint.

D. Fourth Claim for Relief: Denial of Opportunity to Prove Actual Innocence

96. Mr. Lee re-alleges and incorporates herein by reference the allegations contained in all the preceding paragraphs of this Complaint.

97. By refusing to release the physical evidence for DNA analysis, and thereby preventing Mr. Lee from gaining access to evidence which can exonerate him, Mr. Lee is denied the opportunity to make a conclusive showing that he is actually innocent of the crime for which he is currently incarcerated, in violation of the Eighth Amendment, the Right to Access to Courts, the Right to a Remedy, and the Due Process Clause of the Fourteenth Amendment of the United States Constitution.

98. Defendants will suffer no prejudice by allowing Mr. Lee to access the evidence for purposes of DNA testing. The testing Mr. Lee seeks may be conducted at a fully accredited DNA laboratory with the expenses to be paid by his counsel at the Innocence Project, in which case it would proceed at no cost to the State. DNA testing is also in the State's interest. Testing can both determine whether an innocent man is in prison and identify the real murderer, who may still be at large.

E. Request for Injunctive Relief: Release of Evidence for Testing

99. For the reasons stated above, the United States Constitution requires both that Defendants conduct testing on the evidence identified in this complaint and that Mr. Lee be afforded the opportunity to do the same. To effectuate this right, injunctive relief must be ordered compelling those Defendants who are custodians of the evidence identified in this Complaint to release the evidence for DNA testing. Accordingly, Mr. Lee asks this Court to grant prospective injunctive relief compelling the Defendants to release the evidence identified in this complaint so that the requested DNA testing can be accomplished.

F. Request for Injunctive Relief: Stay of Execution

100. This Court has jurisdiction to issue the requested stay of Mr. Lee's execution under the Anti-Injunction Act, 28 U.S.C. §2283 as such is "necessary in aid of its jurisdiction," permitting the Court to thereby issue an injunction under the All-Writs Act (AWA), 28 U.S.C. § 1651(a) (authorizing the federal courts to "issue all writs necessary or appropriate in aid of their respective jurisdictions and agreeable to the usages and principles of law").

101. Mr. Lee is entitled to a preliminary injunction because the allegations in this Complaint show that he is likely to succeed on the merits, and because permitting the State to carry out his execution before DNA testing is granted would obviously cause him irreparable harm.

IX. PRAYER FOR RELIEF

WHEREFORE, Mr. Lee prays that the Court provide relief as follows:

1. Injunctive relief in the form of an order staying his execution, presently scheduled for April 20, 2017 at 7:00 p.m., until such time as DNA testing on the evidence set forth in this Complaint can be conducted.

2. A declaratory judgment stating as follows:

> Ark. Code Ann. §§ 16-112-201, et seq., as interpreted by the Arkansas Supreme Court, is unconstitutional because it imposes a fundamentally unfair limitation, in violation of Due Process, on Mr. Lee's access to statutory remedies available under Arkansas law to access exculpatory DNA evidence for the purpose of proving his innocence and securing relief from his conviction and death sentence under the state-law vehicles that Arkansas has chosen to afford convicted citizens.
>
> Accordingly, the Unites States Constitution requires both that Mr. Lee be afforded the opportunity to conduct DNA testing on the evidence.
>
> The Eighth Amendment of the Unites States Constitution prohibits the execution of persons who are actually innocent of the crime for which they are convicted. Ancillary to that protection, the Eighth Amendment requires that postconviction DNA testing be afforded to persons facing the death penalty where such results can prove innocence. Because exculpatory results from DNA testing of the evidence identified in Mr. Lee's complaint can prove his innocence, the constitution requires the he be afforded the DNA testing requested in his complaint.
>
> Ancillary to Mr. Lee's substantive constitutional rights under the Eighth Amendment, Access to Courts, the Right to a Remedy, and to Due Process stated above, the United States Constitution requires that

Mr. Lee be afforded the tools necessary to prove his innocence including DNA testing of the evidence identified in his complaint.

3. Injunctive relief requiring Defendants to release the following evidence for DNA testing:

(i) Converse sneakers seized from Mr. Lee upon which the State Crime Laboratory reportedly detected the presence of human blood;

(ii) An "intact" hair of purported "Negroid" origin, and other hair fragments, analyzed by the State's experts in 1993-95;

(iii) Any other hair or blood evidence seized by the State from the scene of the crime or during its investigation of Ms. Reese's murder not specified above.

(iv) DNA samples from the victim, Ms. Reese, for comparison purposes.

4. A preliminary and permanent injunction requiring Defendants to produce all the foregoing evidence to Mr. Lee, pursuant to an appropriate protocol regarding chain of custody and preservation and return of the evidence.

5. Reasonable attorneys' fees, costs of suit and such other and further relief as this Court deems just and proper.

Dated: April 20, 2017

Respectfully Submitted,

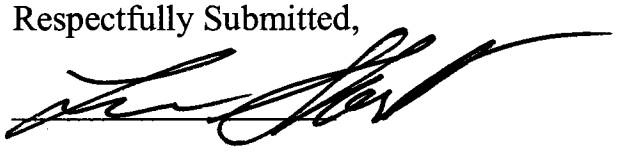

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EXHIBIT A

FORMAL ORDER

STATE OF ARKANSAS,)

) **SCT.**

SUPREME COURT)

BE IT REMEMBERED, THAT A SESSION OF THE SUPREME COURT BEGUN AND HELD IN THE CITY OF LITTLE ROCK, ON APRIL 19, 2017, AMONGST OTHERS WERE THE FOLLOWING PROCEEDINGS, TO-WIT:

SUPREME COURT CASE NO. CR-17-312

STACEY EUGENE JOHNSON APPELLANT

V. APPEAL FROM SEVIER COUNTY CIRCUIT COURT - 67CR-93-54

STATE OF ARKANSAS APPELLEE

PETITIONER'S MOTION FOR STAY OF EXECUTION AND FOR AN ORDER REMANDING FOR A HEARING ON PETITIONER'S MOTION FOR POSTCONVICTION DNA TESTING. STAY OF EXECUTION GRANTED. REMANDED TO CIRCUIT COURT FOR A HEARING ON PETITIONER'S MOTION FOR POSTCONVICTION DNA TESTING. BAKER, WOOD, AND WOMACK, JJ., WOULD DENY. SEE **DISSENTING OPINIONS** THIS DATE.

IN TESTIMONY, THAT THE ABOVE IS A TRUE COPY OF THE ORDER OF SAID SUPREME COURT, RENDERED IN THE CASE HEREIN STATED, I, STACEY PECTOL, CLERK OF SAID SUPREME COURT, HEREUNTO SET MY HAND AND AFFIX THE SEAL OF SAID SUPREME COURT, AT MY OFFICE IN THE CITY OF LITTLE ROCK, THIS 19TH DAY OF APRIL, 2017.

Stacey Pectol

CLERK

BY: _____

DEPUTY CLERK

ORIGINAL TO CLERK (W/COPY OF DISSENTING OPINIONS)

CC/ENCLS: JEFF ROSENZWEIG
PAMELA RUMPZ, ASSISTANT ATTORNEY GENERAL
GOVERNOR ASA HUTCHINSON
WENDY KELLEY, DIRECTOR, ARKANSAS DEPARTMENT OF CORRECTION
MARK CASHION, WARDEN, VARNER SUPERMAX UNIT
WILLIAM STRAUGH, WARDEN, CUMMINS UNIT
HON. CHARLES A. YEARGAN, CIRCUIT JUDGE

EXHIBIT B

AFFIDAVIT OF CHARLOTTE J. WORD, Ph.D.

Charlotte J. Word, being duly sworn according to law, upon her oath deposes and says:

1. I, Charlotte Word, am a consultant in forensic DNA testing. I am a former Laboratory Director at Cellmark Diagnostics (which became Orchid Cellmark) in Germantown, MD. I was employed at Cellmark from April 1990 to April 2005.
2. Cellmark Diagnostics in Germantown, MD was a private laboratory that conducted human DNA identification testing and was accredited in 1994 by the American Society of Crime Laboratory Directors/Laboratory Accreditation Board. For many years the Laboratory was also accredited by the American Association of Blood Banks for parentage testing. As a private laboratory in business for over 17 years, Cellmark offered DNA testing services to a wide variety of clients including but not limited to, crime laboratories, prosecutors, defense attorneys, law enforcement, the military, and state and local agencies from around the country.
3. I received a Bachelor of Science degree in Biology from The College of William and Mary in Virginia, and a Ph.D. in Microbiology from The University of Virginia. I did a postdoctoral fellowship at the University of Texas Southwestern Medical School in Dallas, TX conducting research in the areas of molecular biology and immunology. I was on the faculty at the University of New Mexico, School of Medicine, where I did research and taught in the areas of molecular biology and immunology from 1984 to 1990. I have over 37 years of molecular biology experience and over 27 years of experience applying molecular genetics techniques to forensic testing including experience with the majority of the scientific tests used in the United States since 1990 for forensic human DNA identification testing. This includes the extensive use of restriction fragment length polymorphism (RFLP) and polymerase chain reaction (PCR) testing. I have experience in the application of the various, and now outdated, test

procedures used in forensic casework including DQα/DQA1, PM (also referred to as "Polymarker"), D1S80 and short tandem repeat (STR) testing using the "CTT" and "CTT-A" GenePrint systems from Promega Corporation, as well as with the various test systems using fluorescently-labeled STRs, commonly used since the late 1990's.

4. In 1998 and 1999 I was a member of the Post-Conviction Issues Working Group of Attorney General Janet Reno's National Commission on the Future of DNA Evidence and co-author of "Postconviction DNA Testing: Recommendations for Handling Requests" 1999, U.S. Department of Justice Office of Justice Programs. I am on the Editorial Board of the Journal of Forensic Sciences, which is the premiere forensic journal in the United States, where I serve as a peer reviewer and advisor to the editor. I am also a guest reviewer for the journal *Forensic Science International: Genetics*. I am currently a member of the Biological Data Interpretation and Reporting Subcommittee of the Biology/DNA Scientific Area Committee of the Organization of Scientific Area Committees (OSAC) and a member of the DNA Consensus Board of the American Academy of Forensic Sciences (AAFS) Academy Standards Board. I was a member of the Reporting and Testimony Subcommittee of the National Commission on Forensic Science that just ended this week.
5. My curriculum vitae is attached as Exhibit A.
6. I have been requested by counsel for Ledell Lee to provide my opinions regarding the possibility of performing DNA testing on evidence in the case of *State of Arkansas v. Ledell Lee*. It is my understanding, based on information received from counsel and my review of the 1995 trial testimony of Kermit Channell, a forensic serologist with the Arkansas State Crime Laboratory, that a pair of Converse tennis shoes worn by Mr. Lee when he was arrested in 1993 was tested by Mr. Channell at the State Crime Laboratory, and that human blood was identified from two spots observed on the shoes.

The testimony from the trial indicates that the entire sample from at least one of the shoes was consumed so additional tests could not be performed.[1]

7. At the time of Mr. Lee's arrest in 1993, two forms of DNA testing were available in the United States, and had been available since the late 1980s. Restriction fragment length polymorphism ("RFLP") testing required a large biological sample (e.g., dime to quarter-sized blood stain) to generate interpretable results, and likely would not have been a reasonable test to perform in this case due to the sample-size requirements. Polymerase chain reaction ("PCR") testing using the DQα AmpliType Amplification and Typing Kit was being used in a number of laboratories in the United States, including the FBI laboratory and several private laboratories. This test required a much smaller sample than RFLP testing. However, since it only provided DNA test results at one locus, the data were often not very discriminating. Based on Mr. Channell's testimony at trial, it is unlikely that useful test results would have been obtained from the two shoes in 1993-95 due to the very small sample size.

8. Since 1993, there have been significant improvements in forensic analysis of biological samples beyond what was available for blood typing and early DNA testing; this is especially true with the major advances in DNA testing capabilities. Three of the key advances in the field provide substantially more and more useful DNA data than what may have been obtained in the early 1990s. First, the current DNA tests permit the analysis of very small quantities of biological material, including human blood, allowing for the testing of far smaller amounts of material than could be performed using conventional serology (blood grouping) analysis. Second, these tests have exponentially greater "discrimination" power – the ability to distinguish among individuals in the population, and determine whether or not a specific individual can or cannot be the

[1] The trial transcript of Mr. Channell indicates that each of the two stains tested were from the tongue of the right shoe and left shoe. It is my understanding from counsel that the 1997 appellate decision indicates that the spot tested on the left shoe was from the sole of the shoe.

donor of the material. With today's tests, it is possible to obtain statistical frequencies for a match between a DNA profile from a blood stain and a known individual that far exceed the population of the world, leaving little doubt as to the source of the biological sample. Conversely, today's DNA tests can determine that an individual is absolutely not the source of the material tested (i.e., exclude the individual as the source). Third, is the introduction of mitochondrial DNA (mtDNA) testing using DNA sequencing technologies in a few laboratories in the United States, including at the FBI laboratory. This test, which was not available at the time of Mr. Lee's trial, is most commonly used on hair shafts and on biological samples that have been environmentally-stressed such that the DNA is so highly degraded (i.e., broken down into very small pieces) that it is unable to generate test results with conventional DNA tests.

9. Today in the United States, the PCR-based DNA test kits routinely used in all forensic laboratories test for at least 20 STR (Short Tandem Repeat) loci in addition to other markers that confirm the gender of the donor of the DNA in the biological sample. These tests require very small samples, and have been shown to generate interpretable profiles from 20 cells or less, especially if the DNA is from a single contributor. These new test kits, which have only been available in forensic laboratories over the past few months to a year, are also resistant to inhibition by factors inherent in some samples allowing for testing of samples that may not have generated DNA test results with the earlier PCR-based STR tests. In addition, these new kits were developed specifically to generate results from older samples that may have undergone some limited degradation of the DNA over time.

10. If there is any small amount of the original blood stains on the shoes or on the swab (or other material) used during the test for blood in the crime laboratory, it is very possible that DNA test results can be generated using today's technology with kits having significantly improved sensitivity. It is also possible that additional small stains that were

not noted previously, and which may be suitable for testing, could be identified on the shoes upon re-examination. For example, minute deposits of blood may remain on the shoe which were not noted or tested by Mr. Channell -- perhaps because such quantities were insufficient for serology testing and thus not deemed significant at that time -- but which could yield the blood donor's DNA profile using today's methods. It is not uncommon for additional biological stains to be discovered upon re-examination of evidence samples years later and to produce significant scientific data. Any DNA test results obtained from a stain on the shoes may be compared to the DNA profile from Mr. Lee and from Ms. Debra Reese to determine if either are included or excluded as the source of the DNA.

11. Similarly, any other biological evidence deposited by an individual or transferred to the victim from the perpetrator, and vice versa, present on other items recovered from the crime scene, victim or the defendant may also be suited for testing with today's various STR DNA typing and/or mtDNA sequencing technologies. For example, a mtDNA sequence can often be generated from the shaft of a hair that is approximately an inch in length or longer and can exclude an individual as the source of the hair. Alternatively, if there is a root on the hair, conventional PCR STR DNA testing procedures may be used to generate a profile suitable for comparison to DNA profiles obtained from Ms. Reese and Mr. Lee and for entry into the FBI's CODIS database.

I swear, under penalty of perjury, that the foregoing is true and correct to the best of my knowledge, under the laws of the United States.

Dated: April 14, 2017

Charlotte J. Word, Ph.D.

SUBSCRIBED AND SWORN to before me this 14th day of April, 2017.

Sworn and subscribed before me, in my presence
This 14 day of APR 2017, a Virginia Notary
Public, In and for Chesterfield County.

M. Olszewski
Notary Public
My Commission Expires: 05/31/2020

MELISSA ANNA OLSZEWSKI
NOTARY PUBLIC
REG # 7704825
MY COMMISSION EXPIRES
5/31/2020
COMMONWEALTH OF VIRGINIA

Exhibit A

Curriculum Vitae

Charlotte J. Word, Ph.D.

Education

Ph.D. Microbiology, University of Virginia, Charlottesville, Virginia, 1981

B.S. Biology, College of William and Mary, Williamsburg, Virginia, 1976

Professional Experience

Consultant, Human DNA Identification and Paternity Testing, 2005 - present

Consultant, Boston University School of Medicine, NIJ Training Grant awarded to Dr. Robin Cotton, 2008 – 2015.

Consultant, Orchid Cellmark, Germantown, MD; Dallas, TX, 2005 - 2012

Consultant, Applied Biosystems, Inc. 2006 - 2012

Project Staff Associate, Northeast Regional Forensic Institute, Research Foundation of State University of New York, Albany, New York, 2006 - 2007

Senior Manager, Forensics and Laboratory Director, Orchid Cellmark, Germantown, Maryland, 2001 - 2005

Deputy Laboratory Director, Forensic Laboratory, Cellmark Diagnostics, Inc., Germantown, Maryland, 1997 - 2001

Senior Scientist, Cellmark Diagnostics, Inc., Germantown, Maryland, 1995 - 1997

Scientist, Cellmark Diagnostics, Inc., Germantown, Maryland, 1990 - 1995

Research Assistant Professor, Department of Cell Biology, University of New Mexico School of Medicine, Albuquerque, New Mexico, 1984 -1990

Research Fellow, Dr. Philip W. Tucker, Department of Microbiology
University of Texas Southwestern Medical School, Dallas, Texas, 1981 - 1984

Graduate Research Student (Ph.D.), Dr. W. Michael Kuehl, Department of Microbiology,

University of Virginia. Thesis Title: "Murine B Lymphomas: Models for Immunoglobulin Expression in B Cell Development.", 1976 - 1981

Sabbatical with Dr. Randolph Wall, University of California at Los Angeles Molecular Biology Institute, Los Angeles, California, 1980

Participant, Histopathobiology of Cancer Workshop, Keystone, Colorado, 1979

Professional Associations and Licensures

American Society of Human Genetics

American Academy of Forensic Sciences

Mid-Atlantic Association of Forensic Scientists

Mid-Atlantic Cold Case Homicide Investigators Association (MACCHIA)

CE Users Group

Maryland Department of Health and Mental Hygiene, Office of Health Care Quality, Forensic Letter of Permit Exception

Honors and Research Support

Member, Subcommittee on Biology/DNA Analysis 2 (Biology Data Interpretation and Reporting) of the Biology/DNA Scientific Area Committee of the Organization of Scientific Area Committees (OSAC), 2014–present

Member, American Academy of Forensic Sciences, Academy Standards Board, DNA Consensus Board, 2016-present

Member, Reporting and Testimony Subcommittee of the National Commission on Forensic Science, 2014–2017

District of Columbia Department of Forensic Sciences Science Advisory Board, 2014–2015

Grant Review for National Institutes of Justice, 2006–present

Auditor for the National Forensic Science Technology Center, 2005–2011

Inspector for the American Society of Laboratory Directors/Laboratory Accreditation Board 2004 – 2005, 2010.

Editorial Board, *The Journal of Forensic Sciences*, 2004 – present

Guest Reviewer, *The Journal of Forensic Sciences*, 2002 – 2004

Guest Reviewer, *Forensic Science International:Genetics*, 2012-present

Member, Post-Conviction Issues Working Group of the National Commission on the Future of DNA Evidence, 1998-1999. Co-author of "Postconviction DNA Testing: Recommendations for Handling Requests" 1999, U.S. Department of Justice Office of Justice Programs.

United States Department of Defense, 1996-1998, Enhanced DNA Recovery, $318,000.

NIH 1 RO1 HD20409. Immunoregulatory Factors in Human Colostrum. $88,218 (direct). 07/01/87 – 06/30/90. Co-PI: S. Crago.

American Heart Association Grant-In-Aid 1985-1989, Regulation of B Cell Immunoglobulin Isotype by T Cells, $99,000.

American Cancer Society Junior Faculty Research Award 1985-1988, Regulation of B Cell Immunoglobulin Isotype by T Cells, $90,500.

Recipient of AAI travel award for 6th International Congress of Immunology, 1986.

Fellow, Damon Runyon –Walter Winchell Cancer Fund Award, 1982-1984.

Semi-Finalist, 1981 Distinguished Dissertation Award from the Council of Graduate Schools/University Microfilms International.

Publications

Word, C.J. and Kuehl, W.M. 1981. Expression of surface and secreted IgG_{2a} by a murine B lymphoma before and after hybridization to myeloma cells. Mol. Immunol. 18:311-322.

Rogers, J., Choi, E., Souza, L., Carter, C., Word, C., Kuehl, M., Eisenberg, D. and Wall, R. 1981. Gene segments encoding transmembranal carboxyl termini of immunoglobulin γ chains. Cell 26:19-27.

Word, C.J., Mushinski, J.F. and Tucker, P.W. 1983. The murine immunoglobulin α gene expresses multiple transcripts from a unique membrane exon. EMBO J. 2:887-898.

Jones, S., Chen, Y.-W., Isakson, P., Layton, J., Pure, E., Word, C., Krammer, P.H., Tucker, P.W. and Vitetta, E.S. 1983. Effect of T cell-derived lymphokines containing B

cell differentiation factor(s) for IgG (BCDFγ) on γ-specific mRNA in murine B cells. J. Immunol. 131:3049-3051.

Vitetta, E.S., Brooks, K., Chen, Y.-W., Isakson, P., Jones, S., Layton, J., Mishra, G.C., Pure, E., Weiss, E., Word, C., Yuan, D., Tucker, P., Uhr, J.W. and Krammer, P.H. 1984. T cell-derived lymphokines inducing IgM and IgG secretion in activated murine B cells. Immunol. Rev. 78:137-157.

Wels, J., Word, C.J., Rimm, D., Der-Balan, G., Martinez, H.M., Tucker, P.W. and Blattner, F.R. 1984. Structural analysis of the murine IgG_3 constant region gene. EMBO J. 3:2041-2046.

White, M., Shen, A., Word, C., Tucker, P. and Blattner, F. 1985. Human Immunoglobulin D: Genomic sequence of the δ heavy chain. Science 228:733-737.

Chen, Y.-W., Word, C.J., Jones, S., Uhr, J.W., Tucker, P.W. and Vitetta, E.S. 1986. Double isotype production by a neoplastic B cell line: I. Cellular and biochemical characterization of a variant of BCL_1 that expresses and secretes both IgM and IgG_1. J. Exp. Med. 174:548-561.

Chen, Y.-W., Word, C.J., Dev, W., Uhr, J.W., Vitetta, E.S. and Tucker, P.W. 1986. Double isotype production by a neoplastic B cell line: II. Allelically excluded production of μ and γ1 heavy chains without C_H gene rearrangement. J. Exp. Med. 164:562-579.

Word, C.J., Crago, S.S. and Tomasi, T.B. 1986. Regulation of IgA expression by isotype-specific T cells and soluble binding factors. Ann. Rev. Microbiol. 40:503-524.

Crago, S.S., Word, C.J. and Tomasi, T.B. 1987. Interaction of antisera to the secretory component with FcαR. In: Recent Advances in Mucosal Immunology, Part A. Eds. J. Mestecky, J.R. McGhee, J. Bienenstock, P. and L. Ogra. Plenum Publishing, NY, pp. 601-611.

Crago, S.S., Word, C.J. and Tomasi, T.B. 1989. Antisera to the secretory component recognizes the murine Fc receptor for IgA. J. Immunol. 142:3909-3912.

Word, C.J., White, M.B., Kuziel, W.A., Shen, A.L., Blattner, F.R. and Tucker, P.W. 1989. The immunoglobulin IgM-IgD heavy chain constant region locus in the human. I. Complete nucleotide sequence and structural analysis. Int'l. Immunol.1:296-309.

Kuziel, W.A., Word, C.J., Mushinski, J.F., Blattner, F. and Tucker, P. 1989. The immunoglobulin IgM-IgD heavy chain constant region locus in the human. II. Regulation of expression during B cell differentiation. Intl. Immunol. 1:310-319.

White, M.B., Word, C.J., G-Humphries, C., Blattner, F.R. and Tucker, P. 1990. IgD switching can occur through homologous recombination in human B cells. Mol. and Cell Biol. 1990 10:3690-3699.

Cotton, R.W., Forman, L., Word, C.J. 1991. Research on DNA typing validated in the literature. (Letter) Am. J. Hum. Genet. 49:898-899.

Walsh, D.J., Corey, A.C., Cotton, R.W., Forman, L., Herrin, G.L., Jr., Word, C.J., and Garner, D.D. 1992. Isolation of DNA from saliva and forensic samples containing saliva. J. For. Sci., 37:387-395.

Word, C.J., 1994. Validation studies on the AmpliType® PM PCR Amplification and Typing Kit for forensic testing: Summary of results from 15 laboratories. Proceedings from the Fifth International Symposium on Human Identification. Promega Corp., pp. 123.

Word, C.J. 1995. Forensic casework analysis using STRs, DQα, and PM in combination. Proceedings from the Sixth International Symposium on Human Identification. Promega Corp., pp. 32-35.

Word, C.J., Sawosik, T.M. and Bing, D.H. 1997. Summary of validation studies from twenty-six forensic laboratories in the United States and Canada on the use of the AmpliType® PM PCR Amplification and Typing Kit. J. For. Sci., 42: 39-48.

Bing, D.H., Sawosik, T.M. and Word, C.J. 1997. Assay performance results with the AmpliType® PM PCR Amplification and Typing Kit on DNA mock casework, adjudicated/non-probative casework and proficiency panels from twenty-one forensic laboratories in the United States and Canada. Crime Lab. Digest, 23:3-21.

Zachary, A.A, Bias W.B. and Word, C.J. 1997. Principles and Applications of Genetic Identification. In Manual of Clinical Laboratory Immunology, 5th Ed., ASM Press, Washington, D.C. pp.1141-1151.

Word, C.J. 1998. STR data goes to court - A laboratory perspective. Proceedings from the Eighth International Symposium on Human Identification. Promega Corp., pp. 1-5.

Word, C. J. 1998. STR data goes to court - A laboratory perspective. Profiles in DNA, 2:7-8.

Word, C. J., Co-author as a member of the Postconviction Issues Working Group of the National Commission on the Future of DNA Evidence. 1999. Postconviction DNA Testing: Recommendations for Handling Requests. U.S. Department of Justice, National Institutes of Justice, Washington, D.C.

Smialek, J.E., Word, C.J., and Westveer, A.E. 2000. The Microscopic Slide - A Potential DNA Reservoir. FBI Law Enforcement Bulletin, 18-22.

Kokoszka, J.E., Cline, R. E., Leisy, C., Grossweiler, L. L., and Word, C. J. 2006. The Successful DNA Typing of Samples Following a Thermal Cycler Power Loss. J. For. Sci. 51:1074-1079.

Word, C. (2010) What is LCN?—Definitions and Challenges. *Profiles in DNA* **13(1)**; [Internet] 2010. Available from: www.promega.com/profiles/1301/1301_01.html

Word, C.J. (2011) Mixture interpretation: Why is it sometimes so hard? *Profiles in DNA* **14(1)**; [Internet] 2011. Available from: www.promega.com/profiles/1401/1401_04.html

Presentations/Abstracts/Workshops

Word, C.J. and Kuehl, W.M. 1980. A murine B-lymphoma expresses surface and secreted IgG_{2a}. 62nd Annual Meeting Federation of American Societies for Experimental Biology.

Word, C.J., Mushinski, J.F., Slightom, J.L., Blattner, F.R. and Tucker, P.W. 1982. Membrane and secretory IgA. 66th Annual Meeting Federation of American Societies for Experimental Biology.

Word, C.J., Mushinski, J.F. and Tucker, P.W. 1983. The murine immunoglobulin α gene expresses multiple transcripts from a unique membrane exon. 12th Annual UCLA Symposium, Journal of Cellular Biochemistry.

Word, C.J., Mushinski, J.F., and Tucker, P.W. 1983. The murine immunoglobulin α gene expresses multiple transcripts from a unique membrane exon. 5th International Congress of Immunology.

Crago, S.S., Word, C.J., and Tomasi, T.B. 1986. Interaction of antisera to the secretory component with FcαR. International Congress of Mucosal Immunology.

Chen, Y.-W., Word, C., Jones, S., Uhr, J.W., Tucker, P.W., and Vitetta, E.S. 1986. Biochemical and molecular characterization of an IgM/IgG_1-producing variant. 6th International Congress of Immunology.

Word, C.J., White, M.B., Shen, A.L., Kuziel, W.A., Blattner, F.R., and Tucker, P.W. 1986. DNA sequence and analysis of the human Ig Cμ-Cδ locus. 6th International Congress of Immunology.

Crago, S.S., Word, C.J., and Tomasi, T.B. 1986. Interaction of antisera to the secretory component with the IgA receptor (FcαR) on murine lymphoid cells. 6th International Congress of Immunology.

Word, C.J., White, M.B., Shen, A.L., Kuziel, W.A., Blattner, F.R. and Tucker, P.W. 1986. DNA sequence and analysis of the human Ig Cμ-Cδ locus. Rocky Mountain Immunology Meeting.

Crago, S.S., Word, C.J., Tomasi, T.B. 1986. Interaction of antisera to the secretory component with the IgA receptor (FcαR) on murine lymphoid cells. Rocky Mountain Immunology Meeting.

Crago, S., Word, C. and Tomasi, T.B. 1986. Anti-secretory component inhibits binding of IgA to FcαR. 71st Annual Meeting Federation of American Societies for Experimental Biology.

Crago, S., Word, C.J. and Tomasi, T.B. 1987. Anti-secretory component inhibits binding of IgA to FcαR. FASEB Summer Research Conferences on Fc Receptors and Immunoglobulin Binding Factors.

Word, C.J. - Presenter. 1990. Criminal Law and DNA, The Institute of Continuing Legal Education in Georgia. Atlanta, GA.

Word, C.J. - Presenter. 1990. California Association of Criminalist meeting, Long Beach, CA.

Kriss, J.E., Forman, L., Word, C.J., Garner, D.D. and Cotton, R.W. 1991. Factors affecting migration and resolution of DNA fragments. 43rd Annual Meeting of the American Academy of Forensic Sciences, Anaheim, CA.

Forman, L., Wadhams, M.J., Roby, R.K., Stacy, T.D., Word, C.J., Garner, D.D. and Cotton, R.W. 1991. Comparison of allele frequency distributions in four populations using probe YNH24. 43rd Annual Meeting of the American Academy of Forensic Sciences, Anaheim, CA.

Cotton, R.W., Kriss, J.E., Forman, L., Word, C.J. 1992. The effects of sample buffer composition on migration of DNA fragments. 44th Annual Meeting of the American Academy of Forensic Sciences, New Orleans, LA.

Forman, L., Roby, R.K., Wadhams, M.J., Stacy, T.D., Word, C.J., Garner, D.D. and Cotton, R.W. 1992. Effects on the calculation of frequencies from statistically-differentiated databases for multiple VNTR loci. 44th Annual Meeting of the American Academy of Forensic Sciences, New Orleans, LA.

Word, C.J., Cotton, R.W., Cooper, J.A., McCoy, M.J., Roby, R.K., Stacy, T.D., Walsh, D.J., Wadhams, M.J., Weber, M.A., Yates, P.J. and Forman, L. 1992. Use of single-locus and multilocus DNA probes in forensic paternity cases involving incestual relationships.
44th Annual Meeting of the American Academy of Forensic Sciences, New Orleans, LA.

Cotton, R.W., Forman, L. and Word, C.J. 1992. Minisatellite variant repeats (MVR's): Another layer of polymorphism in repeated DNA sequences. Third International Symposium on Human Identification, Scottsdale, AZ.

Cotton, R.W., Forman, L., Word, C.J. and Sozer, A.C. 1993. Minisatellite variant repeats and forensic analysis. 45th Annual Meeting of the American Academy of Forensic Sciences, Boston, MA.

Weber, M.A., Cotton, R.W., Forman, L., Garner, D.D. and Word, C.J. 1993. RFLP analysis of apparent partially restricted DNA samples from forensic casework. 45th Annual Meeting of the American Academy of Forensic Sciences, Boston, MA. and Northeast Association of Forensic Sciences 19th Annual Meeting, Springfield, MA.

Kriss, J., Corey, A.C., Cooper, J.A., Yates, P.J., Weber, M.A., Cotton, R.W., Garner, D.D. and Word, C.J. 1993. Validation Studies Using the HLA DQα Forensic Kit. 45th Annual Meeting of the American Academy of Forensic Sciences, Boston, MA and the Northeast Association of Forensic Sciences 19th Annual Meeting, Springfield, MA.

Word, C.J., 1993. Case application and court experiences with PCR. Florida DNA Training Session II: PCR Applications. Orlando, FL.

Cotton, R.W., Kriss, J., Wadhams, M.J. and Word, C.J. 1993. Quantitation of human DNA. Fourth International Symposium on Human Identification, Scottsdale, AZ.

Word, C.J., Presenter - AmpliType Users Forum. 1994. 46th Annual Meeting of the American Academy of Forensic Sciences, San Antonio, TX.

Forman, L., Ballmann, R., Campbell, W., Cooper, J.A., Danielsen, L.A., Quandt, K.R., Ranadive, A., Stolorow, M.D., Weber, M.A., Word, C.J., and Yates, P.J. Proficiency testing and DNA profiling. 1994. 46th Annual Meeting of the American Academy of Forensic Sciences, San Antonio, TX.

Word, C.J., and Bing, D. 1994. Validation studies on the AmpliType® PM PCR Amplification and Typing Kit for forensic testing: Summary of results from 15 Laboratories. Fifth International Symposium on Human Identification, Scottsdale, AZ.

Cotton, R.W., Wadhams, M.J., Kriss, J., Sipes, D., Forman, L. and Word, C.J. 1994. Validation of two STR loci in preparation for casework implementation. Fifth International Symposium on Human Identification, Scottsdale, AZ.

Kriss, J., Forman, L., Cotton, R.W., and Word, C.J. 1995. Validation studies using the AmpliType® PM PCR Amplification and Typing Kit. 47th Annual Meeting of the American Academy of Forensic Sciences, Seattle, WA.

Cotton, R.W., Kriss, J., Sipes, D.E., Wadhams, M., Forman, L., and Word, C.J. 1995. Experimental validation of three STR loci for forensic casework. 47th Annual Meeting of the American Academy of Forensic Sciences, Seattle, WA.

Bing, D.H., and Word, C.J., et al. 1995. PCR based forensic testing with AmpliType® PM PCR Amplification and Typing Kit: The results of validation studies from forensic laboratories. 47th Annual Meeting of the American Academy of Forensic Sciences, Seattle, WA.

Word, C.J., Presenter. 1995. AmpliType Users Forum. 47th Ann. Mtg. Seattle, WA.

Word, C.J. 1995. Implementation of STR/$AgNO_3$ protocols on casework. Florida DNA Training Session III: Advanced PCR Applications. Altamonte Springs, FL.

Word, C.J., Cotton, R.W., Ranadive, A.A., and Weber, M.A. 1995. Forensic casework analysis using STRs, DQα and PM in combination. Sixth International Symposium on Human Identification, Scottsdale, AZ.

Word, C.J. 1995. DNA Mid-Atlantic Association of Forensic Scientists Presents "The Gilbert and Trias Murders." Gaithersburg, MD.

Cotton, R.W., Chakraborty, R., Crouse, C., Forman, L., Kriss, J., Ranadive, A. A., Sipes, D.E., Weber, M.A., Weir, B., Word, C.J. 1996. Analysis of casework samples using a combination of the DQα, PM, and 3 STR loci. 48th Annual Meeting of the American Academy of Forensic Sciences, Nashville, TN.

Word, C.J. 1996. DNA Interpretation Issues Workshop. Northwest Association of Forensic Sciences Meeting, Salt Lake City, UT.

Word, C.J. 1996. Interpretation of mixed samples. Human Identification Users Meeting. Rockville, MD.

Word, C.J. 1997. STR data goes to court - A laboratory perspective. Eighth International Symposium on Human Identification, Scottsdale, AZ.

Word, C.J. and Gregory, S.A. 1997. Optimization of recovery and PCR amplification of DNA from stamps and envelopes. Eighth International Meeting on Human Identification, Scottsdale, AZ.

Reynolds, J.E., Weber, M.A., Colombo, K., Swienton, A.R., Word, C.J., Yates, P.J., Cotton, R.W. 1997. DNA typing of the transfused individual. Am. J. Hum. Genet. 61(4):A1311; Poster presentation at the 47th Annual Meeting of the American Society of Human Genetics, Baltimore, MD.

Reynolds, J.E., Weber, M.A., Colombo, K.A., Swienton, A.R., Word, C.J., Yates, P.J., and Cotton, R.W. 1998. The effects of blood transfusion on RFLP and PCR DNA

typing: Forensic casework examples. 50th Annual Meeting of the American Academy of Forensic Sciences, San Francisco, CA.

Word, C.J., Gregory, S.A., Reynolds, J.E., and Cotton, R.W., 1998. PCR amplification and overcoming inhibition of DNA recovered from adhesive surfaces. 50th Annual Meeting of the American Academy of Forensic Sciences, San Francisco, CA.

Word, C. J. 1998. DNA quantitation and PCR inhibition issues. Florida DNA Training Session IV: STRs - The Next Generation, Orlando, FL.

Grossweiler, L.L., Gee, M.A., Crance, K.A., Sipes, D.E., Word, C.J., and Reynolds, J.E. 2000. Successful DNA extraction from serum samples. 11th International Symposium on Human Identification, Biloxi, MS.

Maddox, L.O., Suit, B., Koch, K., Higgins, J., Word, C.J., and Cotton, R.W. 2000. Forensic use of Abacus OneStep ABAcard® test for the identification of the p30 antigen. 11th International Symposium on Human Identification, Biloxi, MS.

Word, C.J., Danielsen, L.A., Reynolds, J.E., Maddox, L.O., and Cotton, R.W. 2000. Multiple-laboratory validation of fluorescent STRs using proficiency test results. 11th International Symposium on Human Identification, Biloxi, MS.

Word, C.J., Reynolds, J.E., Cotton, R.W., Grossweiler, L.L., Maddox, L.O. 2001. Solving old crimes with new DNA testing - contracting "cold" cases. 53rd Annual Meeting of the American Academy of Forensic Sciences, Seattle, WA. (presented by Melissa B. Thompson)

Cotton, R.W., Word, C.J., Danielsen, L.A., Reynolds, J.E., and Maddox, L.O. 2001. Demonstration of general acceptance of STR data to the court. 53rd Annual Meeting of the American Academy of Forensic Sciences, Seattle, WA.

Cotton, R.W., Kriss, J.E., Colombo, K.A., Word, C.J., and Maddox, L.O. 2001. Defining alleles for four Y chromosomal markers without benefit of allelic ladders as part of Y chromosome validation studies. 53rd Annual Meeting of the American Academy of Forensic Sciences, Seattle, WA.

Maddox, L.O., Suit, B., Word, C.J., Cotton, R.W. 2001. Advantages of enhanced sensitivity of product gel staining using GelStar™ nucleic acid stain. 53rd Annual Meeting of the American Academy of Forensic Sciences, Seattle, WA.

Gee, M.A., Grossweiler, L.L., Crance, K.A., Sipes, D.E., Word, C.J., and Reynolds, J.E. 2001. Recovery of DNA from serum samples. 53rd Annual Meeting of the American Academy of Forensic Sciences, Seattle, WA.

Word, C.J. 2001. Panelist at Brooklyn Law School Symposium, DNA: Lessons from the Past, Problems for the Future, Brooklyn, NY.

Grgicak, C.M., Reynolds, J.E., Sipes, D.E., Rosier, L.R., Knickerbocker, C.J., Zimmerman, C.E., Shofkom, A.E., Befus, J.K., Cotton, R.W., Word, C.J. 2002. Relative sensitivity comparison between ABI fluorescent detection instruments using data from large scale no-suspect casework. 54th Annual Meeting of the American Academy of Forensic Sciences, Atlanta, GA.

Cline, R., Polhamus, C., Winebrenner, L., Leisy, C., Heller, A., Cicco, M., Grossweiler, L., Kokoszka, J. E., and Word, C. J. 2002. The night the lights went out in Germantown, An amplification study. 13th International Symposium on Human Identification, Phoenix, AZ.

Grgicak, C., Sipes, D.E., Grossweiler, L.L., Cotton, R.W., Word, C.J. 2003. Comparative Analysis of the DNA IQ™ and QIAamp DNA® Extraction Kits for the Processing of Forensic Evidentiary Samples. 55th Annual Meeting of the American Academy of Forensic Sciences, Chicago, IL.

Grossweiler, L.L., Word, C.J., Maddox, L.O., 2003. Decision Branches for Testing of No Suspect Casework. 55th Annual Meeting of the American Academy of Forensic Sciences, Chicago, IL.

Word, C.J. Co-presenter 2005. Presenting DNA Evidence in Court. Sixteenth International Symposium on Human Identification, Dallas, TX

Word, C.J. 2006. Presented Workshop: Statistics in the Courtroom. 5th Annual Bode East Coast Advanced DNA Technology Workshop, Captiva Island, FL

Word, C.J. and Clarke, G. W. 2006. Presented Workshop: Courtroom Testimony: What You Need to Know. 17th Annual International Symposium on Human Identification, Nashville, TN

Word, C.J. and Dale, W. M. 2006. Quality Management System Concept and Tools "Mistakes Happen-What to do when it Happens to you & How to Prevent Them". 17th Annual International Symposium on Human Identification, Nashville, TN

Word, C.J. and Clarke, G. W. 2007. Presented Workshop: Expert Witness Testimony. 18th Annual International Symposium on Human Identification, Hollywood, CA.

Word, C.J. 2009. Presented Workshop: Expert Witness Testimony for New and Advanced DNA Analysts. Albany, NY

Word, C.J. 2009. What is LCN? Definitions and Challenges. 20th International Symposium on Human Identification, Las Vegas, NV

Word, C.J., Cotton, R.W., Grgicak, C., Butler, J. and Coble, M. 2010. Mixture Interpretation: Principles, Protocols, Practice Workshop at 21st International Symposium on Human Identification, San Antonio, TX

Word, C.J. 2011. DNA Testing – Can Anyone be Excluded? Bode West meeting, San Diego, CA

Word, C.J. 2011. Achieving Neutrality as an Expert, Bode West meeting, San Diego, CA

Word, C.J., Cotton, R.W., Grgicak, C.M., Coble, M.D., and Butler, J.M. 2011. Mixture Interpretation: Principles, Protocols, Practice Workshops in Florida, Texas, Michigan and Arizona

Word, C.J. 2011. Mixture Interpretation. Green Mountain DNA Conference, Burlington, VT

Word, C.J., Cotton, R.W., Grgicak, C.M., Coble, M.D., and Butler, J.M. 2011. Mixture Interpretation: Using Scientific Analysis Workshop at 22nd International Symposium on Human Identification, National Harbor, MD

Cotton, R.W., Butler, J.M., Coble, M. D., Grgicak, C.M., Word, C.J., and Gunn, L.M. 2011. SWGDAM Mixture Interpretation Guidelines: Successes, Issues and Suggested Future Directions. Poster presented at 22nd International Symposium on Human Identification, National Harbor, MD

Cotton, R.W., Butler, J.M., Coble, M. D., and Word, C.J. 2012. DNA Mixture Interpretation Workshop. The NIJ Conference 2012, Arlington, VA

Word, C.J. 2012. "New and Improved" Technology – Where Have We Come and Where Do We Need to Go? Green Mountain DNA Conference, Burlington, VT

Word, C.J., Butler, J.M., Coble, M. D., Grgicak, C.M. and Cotton, R.W. 2012. 2012 Mixture Interpretation Workshop: Mixtures Using Sound Statistics, Interpretation and Conclusions. 23rd International Symposium on Human Identification, Nashville, TN

Word, C.J. Challenges and Impact of DNA Interpretation for Forensic Analysis. 2013. 29th International Symposium on MicroScale Bioseparations, University of Virginia, Charlottesville, VA

Word, C.J. Current Issues of DNA Testing. 2013. NACDL & CACJ's 6th Annual Forensic Science & the Law Conference "Making Sense of Science VI", Las Vegas, NV

Word, C.J. Different Assumptions & Different Conclusions. 2013. NIST DNA Mixture Interpretation Workshop & Webcast, with Butler, J.M., Coble, M.D., Cotton, R.W., Heidebrecht, B., Gaithersburg, MD

Word, C.J. Complex Mixtures. 2013. NIST DNA Mixture Interpretation Workshop & Webcast, with Butler, J.M., Coble, M.D., Cotton, R.W., Heidebrecht, B., Gaithersburg, MD

Word, C.J., Cotton, R., Butler, J., Coble, M. and Grgicak, C. 2013. A Clarion Call to Improve the Underlying Science, Laboratory Efficiency and Cost Associated with Testing of Complex DNA Mixtures and Interpretation. ASCLD 40th Anniversary Meeting, Durham, NC

Word, C.J. 2013. Complex Mixture Interpretation Issues. 2nd Annual Advanced DNA Technology Workshop – Bode Mid-Atlantic , Charlottesville, VA

Word, C.J., Buzzell, L.H. III, Scoville, S.G., Spurgeon, T. 2013. Expert Witness Testimony Workshop. 24th International Symposium on Human Identification. Atlanta, GA

Word, C.J. 2013. Complex Mixture Fundamentals. DNA Technical Leader Summit. Norman, OK

Word, C.J. 2013. Recent Issues Seen in Court. DNA Technical Leader Summit. Norman, OK

Word, C.J. 2013. Court Admissibility Considerations. DNA Technical Leader Summit. Norman, OK

Butler, J.M., Word, C.J., Coble, M. 2014. DNA Mixture Interpretation: History, Challenges, Statistical Approaches, and Solutions. 66th Annual Meeting of the American Academy of Forensic Sciences, Seattle, WA

Word, C.J. 2014. Science of the Current Generation. MAAFS 2014 Winter Workshop: TARDIS of Molecular Biology, Manassas, VA

Word, C.J. 2014. New Aspects of Testimony. MAAFS 2014 Winter Workshop: TARDIS of Molecular Biology, Manassas, VA

Word, C.J. 2014. Scientific Neutrality in Expert Witness Testimony. Plenary Session co-presented with Lewis Buzzell III, J.D. and Scott Scoville, J.D. MAAFS 2014 Annual Meeting, State College, PA

Word, C.J. 2014. Why Do We Need to Consider Probabilistic Modeling? NIST DNA Analyst Webinar Series: Probabilistic Genotyping and Software Programs (Part 1)

Word, C.J. 2014. Why Do We Need Probabilistic Modeling? Green Mountain DNA Conference, Burlington, VT

Word, C.J. 2014. Why Do We Need Probabilistic Software? and Reporting Likelihood Ratios & Court, Almost Everything You Wanted to Know About Probabilistic Software Workshop, Co-Chair of Workshop, International Symposium on Human Identification, Phoenix, AZ

Word, C.J. 2014. Complex DNA Mixtures: Issues in Interpretation, The Center for Forensic Science Research & Education, Advanced Topics for Human Identification & Data Interpretation, Philadelphia, PA

Word, C.J. 2015. Scientific Neutrality in Expert Witness Testimony Workshop. "Role and Responsibilities of the Forensic Science Expert Witness" and "Preparing for Court Testimony." Co-presented with Lewis Buzzell III, J.D., Christopher Plourd, J.D., Ronald Reinstein, J.D. and Tammy Spurgeon, J.D. American Academy of Forensic Sciences 2015 Annual Meeting, Orlando, FL

Word, C.J. 2015. Errors in DNA Testing: Lessons Learned – A Retrospective Look. American Academy of Forensic Sciences 2015 Annual Meeting, Orlando, FL

Word, C.J. 2015. An Application of the Kipling Method to DNA Validation in the 21st Century Workshop. "Introduction to Validation" and "From Validation to SOP." Co-presented with Michael Coble, Ph.D. and Robin W. Cotton, Ph.D., American Society of Crime Laboratory Directors (ASCLD) 42nd Annual Meeting: Excellence in Forensic Leadership – Policy and Practice in the 21st Century, Washington, DC

Word, C.J. 2015. Errors in Interpretation of DNA Profile Data. International Symposium on Forensic Science Error Management – Detection, Measurement and Mitigation, Crystal City, VA

Word, C.J. 2015. Errors in a DNA Testing Laboratory. International Symposium on Forensic Science Error Management – Detection, Measurement and Mitigation, Crystal City, VA

Word, C.J. 2015. What Does This Statement Really Mean? (poster) 26th Congress of the International Society for Forensic Genetics. Krakow, Poland

Word, C.J. 2015. Scientific Perspective of Current Admissibility Challenges. In "Why are We Having DNA Admissibility Hearings?" panel discussion. 26th International Symposium on Human Identification, Dallas, TX

Word, C.J. 2016. Limitations of Current DNA Testing: Information That May Not Be in Reports. American Academy of Forensic Sciences 2016 Annual Meeting, Las Vegas, NV

Word, C.J. 2016. What Errors Are We Looking For and How Can We Look For More? American Academy of Forensic Sciences 2016 Annual Meeting, Las Vegas, NV

Word, C.J. 2016. Changes in Guidelines Governing Mixture Interpretation:

New SWGDAM Guidelines, Population Database Problems & Implication for Post-Conviction Cases, NACDL In the Mix? Dealing With DNA, Cognitive Bias & Habeas in the Innocence Case, San Antonia, TX

Word, C.J. 2016. Final Reports: Do They Say What We *Really* Mean? Mid-Atlantic Association of Forensic Scientists Annual Meeting, Richmond, VA

Word, C.J. 2016. Probabilistic Genotyping: Issues and Research Needs. Gordon Research Conference: Forensic Analysis of Human DNA, Waterville Valley, NH

Word, C.J. and Coble, M.D. (co-chair) 2016. Validation and Mixture Interpretation SOPs Workshop. 27th International Symposium on Human Identification, Minneapolis, MN

Word, C.J. and Cotton, R.W. (co-chair) 2016. Errors in Forensic Testing: Detection, Management & Resolution Workshop. 27th International Symposium on Human Identification, Minneapolis, MN

Seminars/Workshops Attended

69th Annual Meeting of the American Academy of Forensic Sciences, New Orleans, LA, 2017

27th International Symposium on Human Identification, Minneapolis, MN, 2016

HITA Workshop – Determining Phenotypes from Genotypes. 27th International Symposium on Human Identification, Minneapolis, MN, 2016

Gordon Research Conference: Forensic Analysis of Human DNA, Waterville Valley, NH, 2016

Mid-Atlantic Association of Forensic Scientists Annual Meeting, Richmond, VA 2016

Technical Colloquium Quantifying the Weight of Forensic Evidence, NIST, Gaithersburg, MD, 2016

In the Mix? Dealing With DNA, Cognitive Bias & Habeas in the Innocence Case, NACDL, San Antonio, TX, 2016

68th Annual Meeting of the American Academy of Forensic Sciences, Las Vegas, NV, 2016

26th International Symposium on Human Identification, Dallas, TX, 2015

HITA Workshop – Addressing Social Issues with Human Identification: An Interactive Workshop. 26th International Symposium on Human Identification, Dallas, TX, 2015

Forensic Mixtures: Assessment, Analysis and Technology: Current Methods, New Approaches and Disruptive Technologies Workshop. 26th International Symposium on Human Identification, Dallas, TX, 2015

Countdown to 2017: Internal Validation of the New CODIS Loci Workshop. 26th International Symposium on Human Identification, Dallas, TX, 2015

26th Congress of the International Society for Forensic Genetics. Krakow, Poland, 2015

Beyond DNA-Profiling: RNA-Profiling, Transfer and Persistence – What is it and How did it Get There? Workshop. 26th Congress of the International Society for Forensic Genetics. Krakow, Poland, 2015

The New Y Chromosome Haplotype Reference Database and Optimized Approaches for the Forensic Y-STR Analysis, Workshop. 26th Congress of the International Society for Forensic Genetics. Krakow, Poland, 2015

Ethical, Legal and Social Issues in Forensic Genetics, Workshop. 26th Congress of the International Society for Forensic Genetics. Krakow, Poland, 2015

International Symposium on Forensic Science Error Management – Detection, Measurement and Mitigation, Crystal City, VA, 2015

American Society of Crime Laboratory Directors (ASCLD) 42nd Annual Meeting: Excellence in Forensic Leadership – Policy and Practice in the 21st Century, Washington, DC, 2015

67th Annual Meeting of the American Academy of Forensic Sciences, Orlando, FL, 2015

Advanced Topics for Human Identification & Data Interpretation, The Center for Forensic Science Res2015earch & Education, Philadelphia, PA, 2014

25th International Symposium on Human Identification, Phoenix, AZ, 2014

New Autosomal and Y-STR Loci and Kits, International Symposium on Human Identification, Phoenix, AZ, 2014

Interpretation of Complex DNA Mixtures: The Biological and Statistical Perspectives, International Symposium on Human Identification, Phoenix, AZ, 2014

Almost Everything You Wanted to Know About Probabilistic Software, International Symposium on Human Identification, Phoenix, AZ, 2014

Emerging Forensic Genomic Applications, Greenville, NC, 2014

Green Mountain DNA Conference, Burlington, VT, 2014

NIST DNA Analyst Webinar Series: Probabilistic Genotyping and Software Programs (Part 1), Gaithersburg, MD 2014

Mid-Atlantic Association of Forensic Scientists Annual Meeting, State College, PA 2014

NFI Symposium: Interpretation of complex DNA profiles, The Hague, Netherlands, 2014

MAAFS 2014 Winter Workshop: TARDIS of Molecular Biology, Manassas, VA, 2014

DNA Technical Leader Summit, Norman, OK, 2013

2nd Annual Advanced DNA Technology Workshop – Bode Mid-Atlantic , Charlottesville, VA, 2013

24th International Symposium on Human Identification, Atlanta, GA, 2013

23rd Congress of the International Society for Forensic Genetics 2013, Melbourne, Australia, 2013

Advanced Principles in Forensic DNA Evidence Interpretation, International Society for Forensic Genetics 2013, Melbourne, Australia, 2013

Writing and Reviewing Scientific Papers Workshop, International Society for Forensic Genetics 2013, Melbourne, Australia, 2013

American Society of Crime Laboratory Directors (ASCLD) 40th Annual Meeting: The Business Behind the Science, Durham, NC, 2013

NIST DNA Mixture Interpretation Workshop & Webcast, Gaithersburg, MD, 2013

NACDL & CACJ's 6th Annual Forensic Science & the Law Conference "Making Sense of Science VI", Las Vegas, NV, 2013

29th International Symposium on MicroScale Bioseparations, University of Virginia, Charlottesville, VA, 2013

65th Annual Meeting of the American Academy of Forensic Sciences, Washington, D.C. 2013

23rd International Symposium on Human Identification, Nashville, TN, 2012

Green Mountain DNA Conference, Burlington, VT, 2012

The NIJ Conference 2012, Turning to Science: Enhancing Justice, Improving Science, Reducing Costs, Arlington, VA 2012

22nd International Symposium on Human Identification, National Harbor, MD, 2011

Green Mountain DNA Conference, Burlington, VT, 2011

The NIJ Conference 2011, Translational Criminology: Shaping Policy and Practice with Research, Crystal City, VA, 2011

Bode West meeting, San Diego, CA, 2011

63rd Annual Meeting of the American Academy of Forensic Sciences, Chicago, IL, 2011

NIJ/OLES-funded Research Symposium, Office of Law Enforcement Standards, National Institutes of Standards and Technology, Gaithersburg, MD, 2010

American Society of Human Genetics, 60th Annual meeting, Washington, D.C. 2010

21st International Symposium on Human Identification, San Antonio, TX, 2010

American Society of Crime Laboratory Directors Meeting, Baltimore, MD, 2010

15th National CODIS Conference, Reston, VA, 2009

20th International Symposium on Human Identification, Las Vegas, NV, 2009

Ethics Workshop, 20th International Symposium on Human Identification, Las Vegas, NV, 2009

The NIJ Conference 2009, Crystal City, VA, 2009

14th National CODIS Conference, Crystal City, VA, 2008

19th International Symposium on Human Identification, Hollywood, CA, 2008
Ethics and Forensic Science Workshop, 19th International Symposium on Human Identification, Hollywood, CA, 2008

Troubleshooting Common Laboratory Problems Workshop, 19th International Symposium on Human Identification, Hollywood, CA, 2008

The NIJ Conference 2008; Criminal Justice Research, Development and Evaluation in the Social and Physical Sciences, Crystal City, VA, 2008

60th Annual Meeting of the American Academy of Forensic Sciences, Washington, D.C. 2008

Human DNA Quantification Using Real Time PCR Assays Workshop, 60th Annual Meeting of the American Academy of Forensic Sciences, Washington, D.C. 2008

DNA Mixture Interpretation: Principals and Practice in Component Deconvolution and Statistical Analysis Workshop, 60th Annual Meeting of the American Academy of Forensic Sciences, Washington, D.C. 2008

Eighteenth International Symposium on Human Identification, Hollywood, CA, 2007.

The NIJ Conference 2007; Forensic DNA: Tools, Technology, and Policy, Arlington, VA, 2007

Grant Progress Assessment Training, Washington, D.C. 2007

HID 3130 Systems Training Program, Applied Biosystems, Rockville, MD, 2007

Twelfth National CODIS Conference, Arlington, VA, 2006

Seventeenth Annual International Symposium on Human Identification, Nashville, TN, 2006

5th Annual Bode East Coast Advanced DNA Technology Workshop, Captiva Island, FL, 2006

58th Annual Meeting of the American Academy of Forensic Sciences, Seattle, WA, 2006

Eleventh National CODIS Conference, Crystal City, VA, 2005

Sixteenth International Symposium on Human Identification, Dallas, TX, 2005

DNA Auditors Training Class, Quantico, VA, 2004

Tenth National CODIS Conference, Crystal City, VA, 2004

56th Annual Meeting of the American Academy of Forensic Sciences, Dallas, TX, 2004

American Prosecutors Research Institute National Conference: Justice Speaks, Crystal City, VA, 2003

Ninth National CODIS Conference, Lansdowne, VA, 2003

ASCLD/LAB Inspector's Training Class, Harrisburg, PA, 2003

Population Genetics Workshop, Taught by Dr. George Carmody, Rockville, MD, 2003

54th Annual Meeting of the American Academy of Forensic Sciences, Atlanta, GA, 2002

Y Chromosome Analysis and its Application to Forensic Casework Workshop, 54th Annual Meeting of the American Academy of Forensic Sciences, Atlanta, GA, 2002

Forensic Mitochondrial DNA Analysis: A Community Forum Workshop, 54th Annual Meeting of the American Academy of Forensic Sciences, Atlanta, GA, 2002

Statistics II – Forensic Mixture Interpretation & Analysis, Thirteenth International Symposium on Human Identification, Phoenix, AZ, 2002

Thirteenth International Symposium on Human Identification, Phoenix, AZ, 2002

Brooklyn Law School Symposium, DNA: Lessons from the Past, Problems from the Future, Brooklyn, NY, 2001

Twelfth International Symposium on Human Identification, Promega, Biloxi, MS, 2001

DNA Audit Class, Quantico, VA, 2000

52nd Annual Meeting of the American Academy of Forensic Sciences, Reno, NV, 2000

Fifth Annual Conference on the Future of DNA: Implications for the Criminal Justice System, New York, NY, 2000

Florida DNA Training Session V: DNA 2000, Miami Lakes, FL, 2000

Eleventh International Symposium on Human Identification, Promega, Biloxi, MS, 2000

Casework Guidelines and Complex Mixture Interpretation Workshop, Promega, Biloxi, MS, 2000

Statistics Workshop, Promega, Orlando, FL, 1999

Mitochondrial DNA Sequence Analysis in Forensic Casework Methods and Issues Workshop, Promega, Orlando, FL, 1999

Tenth International Symposium on Human Identification, Promega, Orlando, FL, 1999

50th Annual Meeting of the American Academy of Forensic Sciences, San Francisco, CA, 1998

Florida DNA Training Session IV: STRs - The Next Generation, Orlando, FL, 1998

Ninth International Symposium on Human Identification, Promega, Orlando, FL, 1998

49th Annual Meeting of the American Academy of Forensic Sciences, New York, NY, 1997

Eighth International Meeting on Human Identification, Promega, Scottsdale, AZ, 1997

A Workshop in Statistics for Forensic Scientists, St. Petersburg Junior College, St. Petersburg, FL, 1996

The Seventh International Symposium on Human Identification, Promega, Scottsdale, AZ, 1996

Northwest Association of Forensic Sciences, Salt Lake City, UT, 1996

Human Identification Users Meeting, Rockville, MD, 1996

47th Annual Meeting of the American Academy of Forensic Sciences, Seattle, WA, 1995

Florida DNA Training Session III: Advanced PCR Applications, Altamonte Springs, FL, 1995

The Sixth International Symposium on Human Identification, Promega, Scottsdale, AZ, 1995

The Mid-Atlantic Association of Forensic Scientists Present "The Gilbert and Trias Murders," Gaithersburg, MD, 1995

46th Annual Meeting of the American Academy of Forensic Sciences, San Antonio, TX, 1994

The Fifth International Symposium on Human Identification, Promega, Scottsdale, AZ, 1994

BioEast '94 Workshop, Washington, D.C., 1994

45th Annual Meeting of the American Academy of Forensic Sciences, Boston, MA, 1993

The Second International Symposium on the Forensic Aspects of DNA Analysis, Quantico, VA, 1993

Florida DNA Training Session II: PCR Applications, Orlando, FL, 1993

The Fourth International Symposium on Human Identification, Promega, Scottsdale, AZ, 1993

44th Annual Meeting of the American Academy of Forensic Sciences, New Orleans, LA, 1992

The Third International Symposium on Human Identification, Promega, Scottsdale, AZ, 1992

AmpliType HLA DQα Forensic DNA Amplification and Typing Workshop, 1992.

43rd Annual Meeting of the American Academy of Forensic Sciences, Anaheim, CA, 1991

The Second International Symposium on Human Identification, Promega, Madison, WI, 1991

Eighth International Congress of Human Genetics, Washington, D.C., 1991

Association of Biotechnology Companies, Washington, D.C., 1991

International Symposium on Continuous Cell Lines - An International Workshop on Current Issues, Bethesda, MD, 1991

The Institute of Continuing Legal Education in Georgia, Criminal Law and DNA meeting, Atlanta, GA, 1990

California Association of Criminalist Meeting, Long Beach, CA. (taught course), 1990

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