## IN THE INDIANA

## COURT OF APPEALS

DARRYL PINKINS

VS.

STATE OF INDIANA

## **AFFIDAVIT OF GREG HAMPIKIAN**

Greg Hampikian, being first duly sworn upon his oath, does affirm and state as follows:

1. I am a professor in the department of Biology at Boise State University in Boise, Idaho, with a joint appointment in the department of Criminal Justice. I have a Ph.D. in Genetics from the University of Connecticut, and performed postdoctoral research at La Trobe University in Australia, and at the Worcester Foundation for Experimental Biology in Massachusetts. I have also held teaching and research positions at The Yale University Medical School, the Centers for Disease Control and Prevention (CDC), the Georgia Institute of Technology, Emory University, and Clayton College and State University. I teach graduate and undergraduate courses, including Forensic Biology, Advanced Genetic Analysis, Biotechnology, Forensic Evidence in Cold Cases, DNA Evidence in Wrongful Convictions, and Genetics. I am also the Director of the Idaho Innocence Project. I supervise both undergraduate and graduate students, and I have taught students who have gained employment at government forensic crime laboratories. A true and correct copy of my curriculum vitae is attached hereto as Exhibit A and is incorporated herein as if set forth in full. 2. Currently my research focuses on DNA analysis, including DNA database and population studies, forensic casework analysis, and forensic DNA technology development. I have published the results of my work in peer-reviewed journals including Nature, the Proceedings of the National Academy of Sciences, the Journal of Forensic Science, the International Journal of Legal Medicine, and Human Biology, among many others. I have written scholarly reviews of forensic DNA topics for the Canadian Journal of Police and Security Services, and the Annual Review of Genetics and Genomics, among others. I am a member of the American Academy of Forensic Sciences, and I have offered professional development courses for the American Academy of Forensic Sciences on forensic DNA analysis. I am also a member of the International Society for Forensic Genetics, and have presented my research findings there.

3. My laboratory and legal research have been supported by the National Institute of Justice in the US Department of Justice, the Department of Defense, the Environmental Protection Agency and the National Science Foundation, among others.

4. I have published articles and presented at professional meetings on the topic of subjectivity and bias in DNA interpretation (see Dror, Itiel E., and Greg Hampikian.
"Subjectivity and bias in forensic DNA mixture interpretation." Science & Justice 51.4 (2011): 204-208.)

5. I have trained police, crime lab workers, and lawyers in DNA analysis, and I have worked on murder and rape cases with police in both the United States and France, and I have recently published my work with the French police in the peer-reviewed Journal of Forensic Science (see Pham-Hoai, Emmanuel, M.S., Crispino, Frank, Ph.D., M.Phil. and Hampikian, Greg Ph.D. Journal of Forensic Sciences, Volume 59, Issue 3, pages 816– 819, May 2014). I have been qualified by the courts as a DNA expert in Colorado, Georgia, Idaho, Indiana, Maine, Michigan, Ohio, Pennsylvania, Texas, Utah, and Virginia; and I have worked on criminal cases involving DNA throughout the United States, in England, France, Italy, Ireland, Liberia and Taiwan.

6. I first became familiar with the forensic DNA and serology facts at issue as evidence in regard to a post-conviction action on behalf of Roosevelt Glenn, in 2006, when I was contacted by Frances Watson, Clinical Professor and attorney. I consulted on the case, and testified in support of Roosevelt Glenn at the post-conviction proceeding in Lake County, Indiana, in 2006.

7. Through my education, training, and experience in dealing with DNA issues in criminal cases, I am familiar with the standard of work applicable to forensic DNA cases, and to the profession generally. I am familiar with the procedures which should have been followed in this case, many of which are still current in the field and which I deal with on a regular basis in my laboratory. The statements and information in this affidavit are based upon personal knowledge, my analysis of the information obtained in discovery in this action, and more than 15 years of experience as a forensic biologist.

3

8. My opinion in 2008 on this case was most recently confirmed **and bolstered** by the results obtained using the TrueAllele method: Beyond any credible scientific doubt the DNA exclusions of Pinkins and Glenn establishes their innocence.

9. The opinion given by State Police Lab Analyst Kim Epperson at the jury trial, as to the existence of serology inclusions, in the face of the then-existing DNA exclusions, was not scientifically credible. In my opinion, her testimony was an ethical violation of the duty to tell the whole truth. The State's Exhibit entitled GENETIC MARKER CHART was horribly misleading. If a biological sample produces a DNA profile as it did in this case, a contradictory opinion based on serology findings is misleading, lacking any probative value, and misleads the jury. It is unconscionable that a qualified scientist would testify to almost meaningless serology inclusions, when she knew that the more precise and discriminating DNA test had excluded the suspects. I fail to see how DNA results ordered for and paid for by the state, which excluded Pinkins and Glen, were ignored during the testimony of a scientist who absolutely knew that the DNA excluded Pinkins and Glen. The state obviously had pursued the best possible science (DNA) after obtaining their own serology results, because the serology results were nearly meaningless (as they included a majority of the state's population). Thus, again, in my opinion, when Kim Epperson reported an inclusion, and offered the chart in support, she was giving misleading and false testimony.

10. In my 2008 post-conviction testimony in support of Glenn, I noted that research in DNA mixtures was advancing. I gave the opinion then that the mixture evidence in the case would not support an opinion that the victim and **only two other persons** were in the mixture. With the knowledge available in 2008, I believed the state's evidence to be inconsistent with the belief that the mixture contained DNA from the victim and only two unknowns.

11. Given the opinion I advanced in my 2008 testimony, I have stayed in communication with Frances Watson, the lawyer for Pinkins and Glenn. As I became familiar with the TrueAllele method developed by Dr. Mark Perlin, I recognized that the True Allele method might achieve yet more defining results from the data in the Pinkins and Glenn cases. The TrueAllele method is intended to give statistical definition to individual alleles in biological mixtures. Knowing Frances Watson and Dr. Mark Perlin in a professional capacity, I acted to connect the attorney and scientist in 2013. I have not been compensated for my work on this case since 2008.

12. I have reviewed and discussed the TrueAllele results from the analysis of the data from Cellmark Forensics Case Number FOR4863.

13. The DNA exclusions of Darryl Pinkins and Roosevelt Glenn are confirmed absolutely.

14. In addition, the new evidence, by virtue of the TrueAllele method of analysis, reveals that with a high degree of scientific certainty, there are four (4) persons, other than the victim, in the DNA mixtures. Further, the statistical analysis reveals that it is quite likely that two of the individuals are related.

15. In addition, the two related individuals are distinct from, but again related to, the individual who left the hair from the victim's combing, known as Exhibit 59D. The individual who left the hair obtained from the victim's combing is related to the persons in the mixtures and constitutes the profile of a fifth  $(5^{th})$  individual assailant.

16. Thus, current analysis of the DNA mixture establishes profiles of four (4) persons other than the victim. Adding the fifth and related suspect (identified from the profile of the hair, Exhibit 59D) the forensic evidence supports the victim's statement that she was assaulted by five men. With a high degree of scientific certainty, those men are not Pinkins, Glenn, or Durden.

> Dr. Greg Hampikian Professor, Department Biological Sciences Department of Criminal Justice Boise State University, Boise, Idaho

Subscribed and sworn to before me, a Notary Public, this \_\_\_\_\_ day of

\_\_\_\_\_, 2015.

Notary Public Signature

Printed Name

Commission Expires

County of Residence