**TESTIMONY OF MR. JOHN GRISHAM**
**SENATE COMMITTEE ON COMMERCE, SCIENCE & TRANSPORTATION**
**TURNING THE INVESTIGATION ON THE SCIENCE OF FORENSICS**
**DECEMBER 7, 2011**

Thank you Chairman Rockefeller, Ranking Member Hutchison, and members of the Committee. My name is John Grisham and I am a member of the Board of Directors of the Innocence Project in New York. The Innocence Project is a national litigation and public policy organization dedicated to exonerating wrongfully convicted people through post-conviction DNA testing and reforming the criminal justice system to prevent future miscarriages of justice. I am also the Chairman of the Board of Directors at the Mississippi Innocence Project, an organization that is a member of the Innocence Network, an affiliation of organizations dedicated to providing pro bono legal and investigative services to individuals seeking to prove innocence of crimes for which they have been convicted and working to redress the causes of wrongful convictions. Today there are 57 of these projects based in the United States and nine international projects.

I am also an author and I have written about wrongful convictions in both fictional and non-fictional settings. In fact, it was the pursuit of a good story that has led me to the world of wrongful convictions. Almost seven years ago, I was reading the *New York Times* and saw the obituary of Ron Williamson. Ron was a man much like me. We were the same age, we both dreamed of being Major League baseball players, we both grew up in small towns in the Bible Belt, and we both came from the same religious backgrounds. However, Ron was convicted of a rape and a murder he did not commit, was sent to death row, went insane, and came within five days of being executed before receiving a miracle reprieve.

Ron Williamson was the second-round draft pick of the Oakland A's in 1972. He signed for $50,000, left his small town of Ada, Oklahoma, and went away in search of major league glory. Injuries soon derailed a promising career, as did drugs, alcohol, and women. By the time Ron was twenty-eight, he was showing signs of mental instability. He would later be diagnosed as bipolar. His drinking increased, and he found it difficult to keep a job. A man who had once been a local sports hero became a misfit around town. He had a few brushes with law enforcement and spent time in jail.

In 1981, an attractive young cocktail waitress was brutally raped and murdered in Ada, not far from where Ron was living with his mother. The victim's name was Debra Carter, and she was last seen outside a bar, late at night, engaged in some type of confrontation with a thug named Glen Gore. Though Gore was well-known to the police, and the last person seen with the victim, the authorities in Ada failed to pursue him as a suspect.

Eighteen years later, Gore's DNA would link him to the rape and murder of Debra Carter, and he is now serving a life sentence in Oklahoma.

Five years passed after the murder and the Ada police could not solve the crime. Finally their investigation mistakenly led them to conclude that Williamson and his friend Dennis Fritz were the perpetrators, and arrested them, charged them with capital murder, and proceeded to trial.

Since Ron Williamson was innocent, there was virtually no physical evidence presented against him in court. However, using false testimony from jailhouse snitches, a half-baked jailhouse confession, and unvalidated science, the prosecutor got a conviction and a death sentence. The most damaging testimony against Ron came from an expert—an analyst with the Oklahoma Bureau of Investigation. This expert testified that there were seventeen scalp and pubic hairs taken from the crime scene, and that his analysis revealed that these hairs were "microscopically consistent" with the samples taken from Ron Williamson and his co-defendant, Dennis Fritz. Specifically, two scalp hairs and two pubic hairs were "microscopically consistent" with Ron's samples and, he incorrectly testified, therefore there was a positive "match."

Jurors typically give great weight to such testimony. They want to believe the authorities – the prosecutors, police, and experts called by the State – and when a veteran analyst who boasts of investigating hundreds or thousands of cases testified with great confidence about his or her findings, jurors believe the testimony.

Eleven years after Ron's trial, all seventeen hairs were subjected to DNA testing. Not a single one came from Ron Williamson or Dennis Fritz.

To this day, there are no scientifically accepted population statistics for the frequency of hair characteristics; thus there is no data proving what is rare or common. There are no uniform standards on the number of features on which hairs must agree before an examiner may declare a "match." [1] His wrongful conviction can be blamed primarily on the use of unreliable, unproven, untested, and unregulated use of hair analysis testimony.

Fortunately, Ron was exonerated and released from prison in 1999. Needless to say, his mental health had not improved during his ordeal in prison and on death row, and he soon returned to his old habits. He died in 2004 of liver failure.

While researching his story, I spent time with other innocent men, some out of prison, some still behind bars. I slowly came to realize that there are likely thousands of innocent people in prison, most sent there by the same mistakes that convicted Ron Williamson and Dennis Fritz. Every wrongful conviction I've studied could have been prevented. They are caused by a number of factors—bad eyewitness identification; bad defense lawyering; false confessions; false testimony by jailhouse snitches and informants; misconduct by the police and prosecutors; judges who can be either incompetent or afraid to make tough rulings; and bad science. These causes overlap and several are present in every wrongful conviction.

Once I realized the enormity of the problem – the sheer number of wrongful convictions – I decided to get involved. I joined the Board of the Innocence Project in New York, and I helped organize the Mississippi Innocence Project.

The first major case undertaken by the Mississippi Innocence Project involved the killings of two little girls. In the span of two years, the girls were abducted from their homes, raped, murdered, and their bodies were tossed into creeks. Their homes were in the same rural neighborhood. The cases were reviewed by a forensic pathologist, an expert witness essential in every homicide case, and by a forensic dentist. In addition to identifying the cause of death, forensic pathologists are trained to identify pattern injuries and to determine whether marks on the skin are injuries sustained in a struggle before death as opposed to the normal artifacts occasioned by decomposition of skin after death. If the pathologist believes he sees pattern

[1] Strengthening Forensic Science in the United States: A Path Forward, Committee on Identifying the Needs of the Forensic Science Community, The National Academies Press (2009), p. 160. (Hereinafter NAS report)

injuries on the deceased consistent with bite marks, he enlists a forensic dentist to determine whether there is sufficient detail to include or exclude a suspect's dentition.

In the autopsy report of Courtney Smith, the first victim, the prosecution's pathologist, who was not board certified in forensic pathology, incorrectly diagnosed postmortem marks on the body as adult bite marks occurring at or before the time of death. He also neglected to personally conduct the biopsy on the marks to determine whether they were inflicted anti-mortem or post-mortem, improperly delegating that responsibility to the forensic dentist. And when the results of the biopsy strongly indicated that the marks occurred after death, he testified to just the opposite. The dentist also miscalled the post mortem artifacts as human bite marks and erroneously claimed that the source of the bite marks "could be no one but Levon Brooks." In the second case two years later, the same pathologist erroneously called post mortem artifacts human bite marks and claimed the marks were made at or before the time of death without anyone doing the necessary biopsy. And the same dentist, who wrongly identified Brooks as the source of the bite in the first case, testified that "indeed and without a doubt" the bite marks on Christine Jackson were inflicted by a man named Kennedy Brewer. In the first case, Levon Brooks was sentenced to life in prison; in the second, Kennedy Brewer was sentenced to death. Post-conviction DNA testing identified Justin Albert Johnson as the source of the semen in three-year-old Christine. Johnson volunteered a detailed confession to both murders leading to Brooks' and Brewer's exonerations.

Although no scientific studies support the use of bite marks to demonstrate the positive identification of the biter,[2] this method was applied to connect Levon and Kennedy to the deaths of these young girls. Tragically, one of those girl's lives could have been spared: after Levon Brooks was convicted, the real perpetrator of both murders, Justin Albert Johnson, remained free to kill Christine Jackson – the crime for which Kennedy Brewer was convicted.

These cases illustrate the consequences of a very real shortcoming of our criminal justice system that should concern all of us. Granted, these cases have some of the dramatic human elements of misconduct and malfeasance that also contribute to bad convictions; though in that sense they are the exception, not the rule. Instead, in most cases, people who are uninformed

[2] Supra note 1, at p. 176.

about the reliability of a technique make assertions that are, unbeknownst to them, not based on rigorous scientific research. They do not benefit from the educational benefits of a robust academic field. And they do not know that the techniques they rely on have never been comprehensively studied and standardized, and that no evaluation ever quantified their probative value.

The development of DNA testing has allowed us to demonstrate this. We now know about the factual innocence of 280 Americans, 17 of who were sentenced to death and waiting to be executed. Research into the causes of wrongful conviction has revealed that the reliance on unvalidated and/or improper forensics is the second–greatest contributing factor to wrongful convictions, contributing to approximately 50% of those cases overturned by DNA testing.

In those exonerations alone, we have had wrongful convictions based on unvalidated or misapplied serological (or blood type) analysis, microscopic hair comparisons, bite mark comparisons, shoe print comparisons, fingerprint comparisons, forensic geology (soil comparisons), fiber comparisons, voice comparisons, and fingernail comparisons among the many forensic disciplines that have produced wrongful conditions.[3] It comes as no surprise that the National Academy of Science concluded: "With the exception of nuclear DNA analysis, however, no forensic method has been rigorously shown to have the capacity to consistently, and with a high degree of certainty, demonstrate a connection between evidence and a specific individual or source."[4] The overarching problem has been that all too frequently, non-DNA forensic disciplines have been improperly relied upon to connect our innocent clients to crime scene evidence.

Just as DNA exonerations reveal inherent shortcomings in other forensic disciplines, the evolution and regulation of DNA as a forensic technique (from basic research to crime lab and to casework) contrast starkly with many other forensic technologies. Long before there was a national forensic DNA testing program, the National Institutes of Health and others funded and conducted extensive and relevant basic research and followed it with applied research. Scientists appreciated the challenge of transferring the technology from research lab to clinical lab and

[3] Garrett and Neufeld, Virginia Law Review, Vol. 95, No.1, March 2009, p. 14-15.
[4] Supra note 1, at p. 7.

from clinical lab to crime lab. The forensic methods were validated for case work, and individual crime labs further test the kits and protocols for use in their own laboratory settings.

Many non-DNA forensic practices have not been scientifically validated, and there is no formal scientific apparatus in place to scrutinize developing forensic technology. Most of the forensic practices used in law enforcement have no other application; they were developed for the purpose of investigation, prosecution and conviction and, because they were not developed in a scientific setting, they took on a life of their own without being subjected to the rigors of the scientific process. Essentially, the forensic practices were simply accepted as valid; they went online with little or no assessment of their robustness and reliability. No entity comparable to the Food and Drug Administration ever scrutinized the forensic devices and assays, unlike many of the devices and assays that are used in a clinical laboratory. And unlike clinical laboratories, no federal statute requires, and no single entity sets standards for, accreditation and certification, so not all crime laboratories and forensic units are accredited, and practitioners are not required to be certified. Enforceable parameters for interpretation of data, report writing, and courtroom testimony have also never been developed.

Unfortunately, this is a national problem. An exhaustive review of the nation's DNA exonerations showed that 72 forensic analysts from 52 different labs across 25 states had provided testimony that was inappropriate or that exaggerated the probative value of the evidence in either reports or live courtroom testimony.[5] Again, this is not necessarily because they were bad actors or had any ill intention. Instead, look to the NAS report, which noted extensively that our national forensic science system does not sufficiently support education, training, certification, and standards for testing and testifying.[6]

While there is research and work that establishes what needs to be done to improve various forensic practices, the fact is that no one has been able to sufficiently muster the resources nor focus the attention necessary to use the existing information as a launching pad to comprehensively improve the integrity of non-DNA forensic evidence. The NAS Report is the first step – and a tremendous one – toward fully establishing and acting upon what we already know.

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[5] Supra note 1, at p. 9.
[6] Ibid., at p. 14-16.

Many people believe that, at trial, a good defense lawyer and an effective cross-examination will enable the jury to properly assess the strength of forensic evidence. However, as the NAS report states and the post-conviction DNA exoneration cases clearly demonstrate, the scientific understanding of judges, juries, defense lawyers and prosecutors is wholly insufficient to substitute for true scientific evaluation and methodology. It is beyond the capability of judges and juries to accurately assess the minutiae of the fundamentals of science behind each of the various specific forensic assays in order to determine the truth in various cases, and it is an unfair and dangerous burden for us to place on their shoulders. The NAS says that "judicial review, by itself, will not cure the infirmities of the forensic science community."

It is absolutely clear – and essential – that the validity of forensic techniques be established "upstream" of the court, before any particular piece of evidence is considered in the adjudicative process. For our justice system to work properly, standards must be developed and quality must be assured before the evidence is presented to the courts – or even before police seek to consider the probative value of such testing for determining the course of their investigations. There is simply no substitute for requiring the application of the scientific method to each forensic practice or technology, as well as parameters for report writing and proper testimony, as part of the formal system of vetting the scientific evidence we allow in the courtroom.

A federal effort is needed to ensure that the best standard and a single standard is implemented so that we don't have 50 states operating under 50 definitions of "science." Forensic science in America needs one standard of science so we can have one standard for justice. It is time for a serious commitment to provide a scientific system of support for forensic science in order to ensure ongoing evaluation and review of current and developing forensic science techniques, technologies, practices, and devices. Likewise, we need both public and private industry to support the research and development of improved technology with an eye toward future economic investments that benefit the public good and the administration of justice. The impact of rigorous scientific research will be enormous.

The investment of time, effort and resources necessary to deliver us from our false reliance on some forensic practices will pay tremendous dividends in terms of time, effort and resources not wasted by virtue of this false reliance. In short, it will make criminal

investigations, prosecutions and convictions more accurate, and our public more safe – and perhaps most importantly, justice more assured.