FORENSIC JUSTICE PROJECT
the science of justice

House Judiciary Hearing on Senate Bill 819A

Written Testimony of Janis C. Puracal, Executive Director, Forensic Justice Project

May 12, 2021

Chair Bynum, Vice-Chairs Noble and Power, and members of the Committee,

Thank you for the opportunity to present testimony on Senate Bill 819A, which establishes a procedure by which a prosecutor and an incarcerated person may jointly petition the court to vacate a conviction or reduce a sentence. I offer the following testimony in support of the bill based on my work with incarcerated individuals who are fighting wrongful conviction based on faulty and/or misleading forensic evidence.

A. Background of the Forensic Justice Project

The use of faulty and misleading forensic evidence is one of the leading causes of wrongful conviction. The Forensic Justice Project ("FJP") is a nonprofit organization that was created in Oregon to challenge the use of faulty and misleading forensic evidence and to find helpful forensic evidence. We work at all stages of the criminal process from pre-trial through post-conviction. Our mission is to prevent wrongful convictions before they happen and correct them after they happen. To that end, we focus on getting good science into the courtroom and bad science out of the courtroom.

B. Faulty and Misleading Forensics are a Leading Cause of Wrongful Conviction

As of May 12, 2021, there had been at least 2,783 exonerations around the country, which accounts for more than 24,915 years lost in our prison system.[1] Approximately twenty four percent of those men and women were wrongly convicted in cases that involved faulty or misleading forensic evidence.[2]

C. Prosecutors and Defenders Can Agree that Certain Forensic Methods are Not Scientifically Valid

The National Academy of Sciences has recognized that the advent of DNA testing has led to the exoneration of hundreds of innocent people and continues to uncover a "disturbing number of wrongful convictions—some for capital crimes—and expos[e] serious

[1] The National Registry of Exonerations, http://www.law.umich.edu/special/exoneration/Pages/detaillist.aspx.
[2] *Id.*

limitations in some of the forensic science approaches commonly used in the United States."[3]

Independent scientists agree that certain forensic methods, like microscopic hair comparison and bite mark comparison, for example, should no longer be used.[4] Research proves that these methods are not scientifically valid to connect a suspect to a crime scene, although an untold number of suspects were convicted on those bases. Subjective methods like these are highly susceptible to error and bias because of unfounded assumptions.[5]

The federal government has also recognized the limitations of some forensic methods. For example, on July 18, 2013, the FBI—the agency responsible for developing the method of microscopic hair comparison (*i.e.*, using a high-powered microscope to view hair from a crime scene and compare it to a known hair sample from a suspect)—publicly conceded that testimony offered for decades by its hair examiners, and those it trained, had been exaggerated and is scientifically invalid to "individualize" crime scene hairs to a particular suspect.[6]

According to the FBI, "there aren't studies that show how many people have identical-looking hair fibers" and thus, incorrect or inflated testimony on microscopic hair analysis can mislead a judge or a jury.[7] As one commentator put it, microscopic hair analysis "is virtually worthless as a method of identifying someone. It can only safely be used to ***rule out*** a suspect as the source of crime-scene materials or in combination with the vastly more accurate technique of DNA testing."[8]

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[3] NAT'L RESEARCH COUNCIL, STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD 42 (2009), https://www.ncjrs.gov/pdffiles1/nij/grants/228091.pdf [hereinafter NAS Report].

[4] *Id.* at 156, 174.

[5] *See, e.g.*, PRESIDENT'S COUNCIL OF ADVISORS ON SCI. AND TECH., FORENSIC SCIENCE IN CRIMINAL COURTS: ENSURING SCIENTIFIC VALIDITY OF FEATURE-COMPARISON METHODS 47 (2016), https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf [hereinafter PCAST Report].

[6] Available online at https://www.mtacdl.org/attachments/CPE/Nelson/FBI_Limits_of_Science__%20Microscopic_Hair_Comparison.pdf The FBI wrote that the only possible probative value of hair microscopy is that it may indicate, at the broad class level, that a contributor of a known sample ***could*** be included in a pool of people of unknown size, as a ***possible*** source of the hair evidence at the scene or that the contributor of a known sample could be excluded as a possible source of the hair evidence based on the known sample provided.

[7] Letter from James Comey to Governors, dated February 26, 2016, *https://www.fbi.gov/file-repository/comey-letter-to-governors.pdf/view*.

[8] Ed Pilkington, *Thirty years in jail for a single hair: the FBI's 'mass disaster' of false conviction*, THE GUARDIAN (Apr. 21, 2015) (emphasis added), https://www.theguardian.com/us-news/2015/apr/21/fbi-jail-hair-mass-disaster-false-conviction

Independent scientists agree. In 2009, the National Academy of Sciences released a ground-breaking report (the "NAS Report") on the state of forensics in the United States.[9] On hair microscopy, the NAS Report "found no scientific support for the use of hair comparisons for individualization in the absence of nuclear DNA."[10] In 2016, the President's Council of Advisors on Science and Technology under President Obama issued its own landmark report (the "PCAST Report") in which it reviewed documents on hair microscopy from the Department of Justice and concluded that the documents "do not provide a scientific basis for concluding that microscopic hair examination is a valid and reliable process."[11] The PCAST Report recognized that errors in pattern-matching methods, like hair microscopy, arise, in part, because "in certain settings, humans (1) may tend naturally to focus on similarities between samples and discount differences and (2) may also be influenced by extraneous information and external pressures about a case."[12]

Since 2015, the FBI has been working to audit more than 3,000 cases in federal and state courts in which FBI agents provided microscopic hair analysis of crime scene evidence.[13] Problems have been found in more than 90 percent of the cases reviewed.[14] The U.S. Department of Justice has agreed not to raise procedural objections, such as statutes of limitations and procedural default claims, in response to motions for a new, fair trial in light of faulty evidence.[15]

The FBI also retained an independent company to conduct a full root cause analysis.[16]

The FBI has further written to the governors of each state to encourage the states to audit cases in which state-level examiners who were trained by the FBI offered the same scientifically invalid testimony resulting in criminal convictions.[17] As of this date, FJP is unaware of any formal review of hair microscopy cases in Oregon, despite the FBI's urging.

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[9] NAS Report, *supra* note 3.
[10] *Id.* at 161.
[11] PCAST Report, *supra* note 5, at 120.
[12] *Id.* at 49.
[13] FBI Press Release, *FBI Testimony on Microscopic Hair Analysis Contained Errors in at Least 90 Percent of Cases in Ongoing Review* (April 20, 2015), https://www.fbi.gov/news/pressrel/press-releases/fbi-testimony-on-microscopic-hair-analysis-contained-errors-in-at-least-90-percent-of-cases-in-ongoing-review
[14] *Id.*
[15] *Id.*
[16] ABS Group, *Root and Cultural Cause Analysis of Report and Testimony Errors by FBI MHCA Examiners* (August 2018), https://vault.fbi.gov/root-cause-analysis-of-microscopic-hair-comparison-analysis/root-cause-analysis-of-microscopic-hair-comparison-analysis-part-01-of-01/view
[17] Letter from James Comey to Governors, dated February 26, 2016, https://assets.documentcloud.org/documents/3617804/Comey-Letter-to-Governors.pdf.

Others forensic methods, like bite mark comparison and conventional serology, suffer from similar problems and were the basis for an unknown number of potentially wrongful convictions in Oregon.

D. SB 819A is Essential in Some Cases Involving Faulty and Misleading Forensics

We at FJP are reviewing multiple cases that involve these now-discredited forensic methods, like hair microscopy, bite mark comparison, and conventional serology, among others. Some of our clients have been incarcerated in Oregon's prisons since the 1980s.

These are the very types of cases in which the system could benefit from SB 819A. As it stands, a person convicted in Oregon on the basis of junk science may have few opportunities to get back into court to obtain relief. In many of these cases, procedural rules establish strict time bars that may have expired before state actors recognized flaws in the forensic methodology.

In addition, although Oregon has a post-conviction DNA testing statute that may open the door to a new trial,[18] evidence in some cases may no longer be available for testing. Indeed, many of the hair microscopy cases originated before 2009 when Oregon first enacted a law to preserve biological evidence for DNA testing.[19]

Under SB 819A, prosecutors can waive the time bars and jointly petition the court for relief in the interest of justice. The bill is an invaluable tool for prosecutors to be part of a system that can recognize its mistakes and make them right.

We support SB 819A, and we remain available to assist the Committee. Thank you.

Sincerely,

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[18] ORS 138.688, *et seq.*
[19] ORS 133.707.