

Senate Judiciary Hearing on Senate Bill 321

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

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Thank you for the opportunity to present testimony on Senate Bill 321 regarding post-conviction testing for deoxyribonucleic acid (DNA) in criminal cases. We appreciate the Committee's willingness to consider revisions to the existing Post-Conviction DNA Testing Statute. The Legislature made helpful changes to the statute in 2015, and experience across the state since then has shown that additional changes can help to make the process more transparent and access to testing more effective. I offer the following testimony based on studies of wrongful convictions and the use of DNA around the country.

A. Background of the Forensic Justice Project

The use of faulty forensics (like bite mark analysis or microscopic hair analysis) is one of the leading causes of wrongful conviction. The Forensic Justice Project ("FJP") is a nonprofit that was created in Oregon to challenge the use of faulty forensics and to help find helpful forensics like DNA, regardless of innocence or guilt and at all stages of the criminal process from pre-trial through post-conviction. FJP is largely funded by public defense. The Project partners with defense attorneys in criminal cases to promote sound science in the courtroom and also provides direct representation to inmates claiming actual innocence and seeking DNA testing. One of FJP's strategic priorities is educating lawyers and judges on the use of DNA as an investigative tool.

B. Wrongful Convictions Happen Around the Country

As of February 9, 2019, there had been 2,372 exonerations around the country, making up 20,735 years lost.¹ That is 2,372 men and women who were innocent, but incarcerated and taken from their families. Of those total exonerations, 482 of them were exonerations based on DNA evidence.² Some of those men and women spent decades behind bars before they were finally released. There are new exonerations each week, and recent years have set record numbers of exonerations around the country.³

¹ National Registry of Exonerations, available at: <http://www.law.umich.edu/special/exoneration/Pages/detailist.aspx>

² *Id.*

³ *Id.*, available at: <http://www.law.umich.edu/special/exoneration/Pages/Exoneration-by-Year.aspx>



In Oregon, there have been 19 exonerations since 1991. To date, there have been no DNA exonerations in Oregon. It is worth recognizing, though, that the majority of post-conviction motions for DNA testing are denied by Oregon courts. We will not know how many wrongful convictions may exist in Oregon until we really look for them. Meaningful access to post-conviction DNA testing is an essential part of reviewing our system and asking ourselves whether that system is working effectively.

C. Background on DNA and Advances in Testing

DNA is a molecule that contains genetic information. It is found in an organism's cells and is the blueprint for that organism's functions. DNA can be found in many biological materials because it is contained in every organism's cells. In criminal cases, DNA is often found in biological evidence including blood, saliva, sweat, semen, hair, and skin. Each person's genetic code is inherited and unique, so each DNA profile is distinct (except in identical twins). DNA profiles are encrypted sets of letters that reflect an individual's DNA makeup, which can also be used to identify the person.

The development of DNA testing has revolutionized criminal investigations and our ability to recognize actual innocence. Before the 1980s, the study of wrongful convictions had been "largely and somewhat curiously ignored" by researchers, with published literature so rare that "it might have seemed bizarre, if not incoherent, to suggest that the study of miscarriages of justice constituted a field or area of academic study."⁴ The once-dominant certainty was that the U.S. criminal justice system almost never convicts an innocent person. In 1985, Attorney General Edwin Meese commented, "[T]he thing is, you don't have many suspects who are innocent of a crime. That's contradictory. If a person is innocent of a crime, then he is not a suspect."⁵ The "ghost of the innocent man convicted," according to Judge Learned Hand, was "an unreal dream."⁶ The ghost proved real with the advent of DNA testing.

The scientific advancements that have occurred in this field have been revolutionary. The rudimentary techniques forensic investigators used in the past to compare DNA samples to a known source bear little resemblance to the exacting DNA matching capabilities of today's forensic scientists. Today, the universally used method of DNA testing employs a process known as "short tandem repeats," or "STR," typing.⁷

Arguably the most important advancement made possible by STR typing is the ability to acquire and test DNA from incredibly minute samples of biological material, such as trace amounts of skin cells, saliva, and sweat, which was not possible under previous

⁴ Richard A. Leo, *Rethinking the Study of Miscarriages of Justice: Developing a Criminology of Wrongful Conviction*, 21 J. CONTEMP. CRIM. JUST. 201, 204 (2005) (tracing the scholarship of wrongful convictions from 1932 to the mid-2000s).

⁵ Justice Under Reagan: Reagan Seeks Judges with "Traditional Approach," U.S. NEWS & WORLD REPORT, October 14, 1985 at p. 67.

⁶ *US v Garsson*, 291 F. 646, 649 (S.D. N.Y. 1923).

⁷ John M. Butler, FUNDAMENTALS OF FORENSIC DNA TYPING 69 (2010).

methods of testing.⁸ Today, practically any item handled or used by the perpetrator of a crime can be subjected to DNA analysis, including weapons, hats, bandanas, masks, eyeglasses, facial tissues, toothpicks, cigarettes, tape, ligatures, bottles, cans, glasses, swabs of bite marks, fingernail clippings or scrapings, and even half-eaten food.⁹ The advances in DNA testing mean that a DNA profile can now be obtained by testing sweat and skin cells invisible to the naked eye that are left behind on clothes worn by the assailant, weapons the assailant held, or clothes worn by the victim when touched by the assailant.¹⁰

Although STR testing is the current standard for forensic DNA testing, testing has also expanded to other methods that may be more useful depending on the sample and the information sought. For example, mitochondrial DNA testing was developed to enable testing of a wider variety of biological materials, such as bones, hair, and teeth.¹¹ Likewise, another technology called Y-STR DNA testing allows a crime lab to isolate male DNA that might have been overwhelmed by the presence of female DNA or might have gone undetected altogether through past testing.¹²

D. Access to DNA Testing is a Key Investigative Tool to Prove Actual Innocence

Many of the exonerations nationwide are the indirect result of advances in forensic DNA analysis and its introduction into the criminal justice system. DNA-driven discoveries have forced our communities to acknowledge that even the most advanced criminal justice systems in the world make frequent and serious mistakes that result in wrongful convictions and incarcerations.

DNA testing statutes, like the Post-Conviction DNA Testing Statute in Oregon, were enacted with the recognition that testing can lead to greater accuracy in our criminal justice system. But the statutes are effective only through enforcement—that is, permitting access to testing.

Exonerations in other states illustrate why new DNA tests are essential to prisoners who were convicted and are claiming innocence. For example, Stephan Cowans spent six years in prison for crimes that he did not commit after two fingerprint analysts mistakenly matched Cowans' print to a latent print found at the scene, and he was exonerated only after evidence was re-tested using new DNA technology.¹³ Cowans was convicted in Massachusetts in 1997 of shooting a police officer on the basis of eyewitness identification by the surviving officer and the fingerprint evidence found on a mug from which the assailant drank after hiding in a nearby house after the shooting. At that time,

⁸ National Institute of Justice, *DNA for the Defense Bar* 145 (2012).

⁹ *Id.* (citing National Institute of Justice, U.S. Department of Justice, *Using DNA to Solve Cold Cases: Special Report*, Pub. NCJ 194197 (July 2002)).

¹⁰ *Id.*

¹¹ Butler, *supra* n.6, at 64-65.

¹² National Institute of Justice, *DNA for the Defense Bar* 14 (2012).

¹³ *Commonwealth v. Cowans*, 756 N.E.2d 622 (Mass. App. Ct. 2001); National Institute of Justice, *DNA for the Defense Bar* at 149.

clothing and weapons were typically not tested for sweat or skin cells, but only for blood. Seven years later, in 2004, STR typing was performed on saliva from the mug and on sweat and skin cells found on the perpetrator's sweatshirt and baseball cap left at the scene of the crime.¹⁴ On all three items, the testing revealed the same STR DNA profile, which did not match Cowans' profile.¹⁵ The re-testing conclusively excluded Cowans as the source and led officials to review the earlier fingerprint analyses, which were discovered to be erroneous.¹⁶ Cowans was released from prison that same year upon a joint motion by the prosecution and defense.¹⁷

As Cowans' case proves, until STR typing is attempted, there is no way to know if old evidence contains sweat or skin cells left behind by the perpetrator. Cowans' case also illustrates the way in which evidence thought to be conclusive of guilt (like fingerprint analysis) can be re-examined in the face of exculpatory DNA results. As early as 1999, the NIJ endorsed the re-evaluation of evidence, noting the importance of re-analyzing "samples that were unsuitable for testing with previous techniques but may give conclusive results with currently available DNA tests (e.g., very small blood or semen stains, hair shafts)."¹⁸

Those conclusive results not only have the potential to increase the accuracy of convictions, they can also lead to the arrest of the true perpetrator of the crime. In 1998, the FBI officially launched the U.S. National DNA Index System (NDIS) database of the Combined DNA Index System (CODIS).¹⁹ Containing millions of STR profiles, NDIS links all 50 states in the U.S. with the capability to search criminal DNA profiles. Unimaginable under earlier methods of testing, this database gives law enforcement the potential to test crime scene evidence and match the profile to an alternate suspect in the database or evidence from another unsolved crime. The value of testing in this new era of increasing accuracy should not be underestimated.

Law enforcement regularly relies on DNA to help solve cases, and officers submit evidence for testing whenever possible to secure a conviction. In advance of trial or a conviction, law enforcement uses DNA as an investigative tool just like latent fingerprints, fibers, and other trace evidence. It should be thought of the same way post-conviction—as an investigative tool to help discover the truth. The existing language of Oregon's Post-Conviction DNA Testing Statute, however, prevents DNA testing in the majority of cases because it does not provide access to information about the case or the evidence collected and it requires the petitioner to make a prima facie showing of actual innocence in advance of any testing. The prima facie showing is especially problematic because the petitioner has already been convicted of the crime and cognitive bias

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ National Institute of Justice, Postconviction DNA Testing: Recommendations for Handling Requests, Report From the National Commission on the Future of DNA Evidence, Pub. NCJ 177626 (September 1999), at 23.

¹⁹ Butler, *supra* n.6, at 259.

undoubtedly plays a role to prevent the court from seeing the evidence from trial in a different light. The proposed revisions to the statute will help remove these, and other, barriers to testing.

When it originally enacted the Post-Conviction DNA Testing Statute, the Oregon Legislature recognized the value that DNA testing adds to the accuracy of our criminal justice system. Revising that statute to ensure transparency and permit broad access to DNA testing fulfills the purpose of the statute and furthers the truth seeking role of Oregon courts. The proposed changes further recognize the advances in DNA testing that can, and should, be used when we are talking about taking away a person's freedom.

We are encouraged by the Committee's willingness to review the proposed changes to the statute. We support the proposed changes and remain available to assist the Committee going forward. Thank you.

Sincerely,



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