

Reflection

THE PUBLIC RECEPTION OF THE “PATH FORWARD” REPORT

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I would begin by quoting from a statement by Judge Harry T. Edwards of the U.S. Court of Appeals for the District of Columbia Circuit to the National Commission on Forensic Sciences at its inaugural meeting:

In his 1963 *Letter from Birmingham Jail*, Reverend Martin Luther King, Jr., reminded us that “Injustice anywhere is a threat to justice everywhere.” Isn’t this the point? We are not talking about good science merely for its own sake. We are talking about the need for good science in order to serve justice. And when justice is done, our society as a whole is the better for it.¹

Judge Edwards was the cochair of the committee that authored *Strengthening Forensic Science in the United States: A Path Forward* a decade ago.² That Report stimulated a national discussion about the need to improve forensic science, fostered a reevaluation of how forensic evidence is reported in court, prompted increased funding for forensic science research, inspired reforms in practice and procedure

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1. Judge Harry T. Edwards, Reflections on the Findings of the National Academy of Sciences Committee on Identifying the Needs of the Forensic Science Community (Feb. 3, 2014), <http://www.law.nyu.edu/sites/default/files/EdwardsSpeechtoNCFS.pdf> [https://perma.cc/A6B3-F2UQ].

2. COMM. ON IDENTIFYING THE NEEDS OF THE FORENSIC SCI. CMTY., NAT’L RESEARCH COUNCIL OF THE NAT’L ACADS., *STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD* (2009), <https://www.nap.edu/read/12589/chapter/2> [https://perma.cc/JG6Y-X8SN] [hereinafter *STRENGTHENING FORENSIC SCIENCE*].

for forensic science professionals, and led to reexaminations of forensic techniques that are frequently used in criminal investigations. It was my great privilege to have been part of the staff that worked for the study committee that produced *Strengthening Forensic Science in the United States*.

Today, I have been asked to reflect on how the Report has been received in the press and elsewhere. *Strengthening Forensic Science in the United States* is exceptional among the National Academies’ reports in that, ten years after its release, it remains influential in the scientific and policy communities that are the Academies’ traditional audience. Moreover, the Report continues to attract attention beyond these communities. I will use my time this morning to highlight some of the attention the Report has received in the decade since its release. What I will present represents just a fraction of coverage that we have captured in the course of our work day.³

The report has been featured both on the cover of popular publications like the *New York Times*, *Science Times*, *National Geographic*, and *Popular Mechanics* and on the covers of scholarly journals like *Nature* and *Science*. The lead article in the *New York Times*’s *Science Times* feature, which was published just three months after the report was released, noted that

perhaps the most damning conclusion [of the report] was that many forensic disciplines—including analysis of fingerprints, bite marks and the striations and indentations left by a pry bar or a gun’s firing mechanism—were not grounded in the kind of rigorous, peer-reviewed research that is the hallmark of classic science. DNA analysis was an exception, the report noted, in that it had been studied extensively. But many other investigative tests, the report said, “have never been exposed to stringent scientific certainty.” While some forensic experts took issue with that conclusion, many welcomed it.⁴

Seven years later, the lead article in a *Science* special issue described progress toward reform. It observed that although the Academies’ report

found that the analysis of many types of evidence—from footprints and tire tracks to bullet marks and blood spatters—lacks a solid foundation Forensic analysts are trying to do better. Many fields

3. See *Media Coverage*, NAT’L ACADS. OF SCI., ENGINEERING, AND MEDICINE, https://sites.nationalacademies.org/PGA/PGA_084144 [<https://perma.cc/TS2P-Z6T8>] (last updated June 29, 2017), for the Academies’ collection of media coverage on the Report.

4. Henry Fountain, *Plugging Holes in the Science of Forensics*, N.Y. TIMES (May 11, 2009), <https://www.nytimes.com/2009/05/12/science/12fore.html> [<https://perma.cc/U8VM-4MFD>].

are testing the accuracy of existing methods and developing new ones that are more science-based. Statisticians have embarked on an ambitious effort to express the strength of so-called pattern evidence . . . in a more scientific way.⁵

Coverage of the report has not been limited solely to print media. *Strengthening Forensic Science in the United States* has been featured on numerous television programs, including *Frontline*, *NOVA*, and the popular crime drama *NCIS*. It has even been featured on an episode of *Last Week Tonight with John Oliver*. Although John Oliver's show is satirical, the message of his forensic science episode was on point. For example, Oliver stated that "it's not that all forensic science is bad, because it's not; but, too often, its reliability is dangerously overstated."⁶ Compare this with the Academies' report, which said, "some forensic science disciplines are supported by little rigorous systematic research to validate the discipline's basic premises and techniques."⁷ And further, the Academies' report called for "[t]he development of quantifiable measures of uncertainty in the conclusions of forensic analyses."⁸ As of February 26, 2019, the forensic science episode of *Last Week Tonight* has been viewed 6.6 million times on YouTube.⁹

The Report has also attracted the attention of people at the highest levels of government. In a 2017 *Harvard Law Review* article, President Obama noted that *Strengthening Forensic Science in the United States* "brought to light many of the challenges that the forensic sciences face in reliability and validity."¹⁰ To "help ensure the validity of forensic evidence used in the Nation's legal system" in the "aftermath" of the Academies' Report, the Obama Administration, operating through the President's Council of Advisors on Science and Technology ("PCAST") produced a report that concluded that there was a need for clarity about the scientific standards for validity and

5. Martin Enserink, *Evidence on Trial*, SCIENCE (May 11, 2016), <https://science.sciencemag.org/content/351/6278/1128> [<https://perma.cc/6LXB-BR7B>].

6. *Last Week Tonight: Forensic Evidence* (HBO television broadcast Oct. 1, 2017).

7. STRENGTHENING FORENSIC SCIENCE, *supra* note 2, at 22.

8. *Id.* at 23.

9. See *Last Week Tonight, Forensic Science: Last Week Tonight with John Oliver* (HBO), YOUTUBE (Oct. 21, 2017), <https://www.youtube.com/watch?v=SemJvmzDcG0> [<https://perma.cc/3YVZ-H56J>].

10. Barack Obama, Commentary, *The President's Role in Advancing Criminal Justice Reform*, 130 HARV. L. REV. 811, 860 (2017).

reliability in forensic methods.¹¹ There was also a need to evaluate specific forensic methods to determine whether they had been scientifically established to be valid and reliable.¹² The PCAST 2016 report provided recommendations for strengthening “the scientific underpinnings of the forensics disciplines, as well as on actions that could be taken by the Attorney General and the Judiciary to promote the more rigorous use of these disciplines in the courtroom.”¹³

Ten years after the Academies’ Report was published, a *Los Angeles Times* story titled *Bad Forensic Science is Putting Innocent People in Prison* referenced the “highly critical” 2009 Report, which “found a dearth of scientific backing for most forensics methods other than DNA. It cited evidence that ‘faulty forensic science analyses may have contributed to wrongful convictions of innocent people.’”¹⁴ “[T]he wizardry lionized by the ‘CSI’ television empire,” the article continues, “turns out to have serious flaws. The science of bite-mark comparisons, ballistic comparisons, fingerprint matching, blood-spatter analysis, arson investigation and other common forensic techniques has been tainted by systematic error, cognitive bias . . . and little or no research or data to support it.”¹⁵

So where does all this leave us ten years after the publication of *Strengthening Forensic Science in the United States? A recent statement by Representative Eddie Bernice Johnson, Chairwoman of the House Science, Space, and Technology Committee, offers one indication:*

While much in the forensics science space has improved in the past ten years, there is still plenty of room for improvement. We have taken steps forward, and, unfortunately, some steps back—particularly the . . . disbanding of the nonpartisan National Commission on Forensic Science The legal, scientific, and policymaking communities must all work to ensure that our Nation

11. PRESIDENT’S COUNCIL OF ADVISORS ON SCI. & TECH., EXEC. OFFICE OF THE PRESIDENT, FORENSIC SCIENCE IN CRIMINAL COURTS: ENSURING SCIENTIFIC VALIDITY OF FEATURE-COMPARISON METHODS x–xi (2016), https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf [<https://perma.cc/TN4M-Q5VT>].

12. *Id.*

13. *Id.* at xi.

14. Edward Humes, *Bad Forensic Science is Putting Innocent People in Prison*, L.A. TIMES (Jan. 13, 2019 3:15 AM), <https://www.latimes.com/opinion/op-ed/la-oe-humes-forensic-evidence-20190113-story.html> [<https://perma.cc/Z8A2-V5JF>] (quoting STRENGTHENING FORENSIC SCIENCE, *supra* note 2, at 4).

15. *Id.*

has a court system that metes out justice with accuracy, transparency, and accountability.¹⁶

Indeed.

16. Press Release, Chairwoman Johnson's Statement on Ten-Year Anniversary of Release of National Academies Forensics Study (Feb. 15, 2019), <https://science.house.gov/news/press-releases/chairwoman-johnsons-statement-on-ten-year-anniversary-of-release-of-national-academies-forensics-study> [<https://perma.cc/7XKT-T5FX>].