

Statement for the Record by the National Association of Criminal Defense Lawyers

The State of Forensic Science in the United States

March 28, 2017 hearing

House Committee on the Judiciary

Subcommittee on Crime, Terrorism, Homeland Security and Investigations

The National Association of Criminal Defense Lawyers (NACDL) is the largest organization in the United States advancing the mission of the nation's criminal defense lawyers to ensure justice and due process for persons accused of crimes. Fundamental to the representation of the accused is that all defendants have the Fifth Amendment right to due process of law and the Sixth Amendment rights to present evidence, to confront witnesses against them, to a fair trial, and to the effective assistance of counsel. All of these protections are designed to promote what the United States Supreme Court has called the "ultimate objective" of the criminal justice system, to ensure that "the guilty [are] convicted and the innocent go free."¹

Faulty forensic science is the second leading cause of wrongful conviction.² A 2009 blue-ribbon panel of experts funded by Congress and convened by the National Academy of Sciences (NAS) produced *Strengthening Forensic Science in the United States*, a landmark report that analyzed a range of forensic disciplines.³ In 2016, the President's Council of Advisors on Science and Technology (PCAST) issued its own report, reaffirming many of the underlying conclusions of the 2009 NAS study.⁴ These reports, along with the seemingly endless litany of major scandals at forensic laboratories nationwide, reveal that the fundamental system for delivery of forensic science in the criminal justice system is broken in the United States, and that structural reform is needed.

NACDL convened its own task force in response to the 2009 NAS report, and issued a series of recommendations in 2010.⁵ That document endorsed: (1) forming a central, science-based federal agency that is independent of law enforcement and prosecution agencies, (2) improving the culture of science, (3) adopting a national code of ethics, (4) reinforcing the prerequisite of research, (5) providing greater education, (6) ensuring

¹ *Herring v. New York*, 422 U.S. 853, 862 (1975).

² BRANDON L. GARRETT, CONVICTING THE INNOCENT: WHERE CRIMINAL PROSECUTIONS GO WRONG 114, 84-117, 280 (2012) ("Over half of the 250 exonerees, or 128, had one of more of the problems discussed in this chapter: invalid, unreliable, concealed, or erroneous forensic evidence.").

³ NAT'L RESEARCH COUNCIL, STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD (2009) [hereinafter 2009 NAS Report].

⁴ Executive Office of the President, President's Council of Advisors on Science and Technology, *Forensic Science in the Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods* (Sept. 2016) [PCAST Report].

⁵ National Ass'n of Criminal Defense Lawyers, *Principles and Recommendations to Strengthen Forensic Evidence and Its Presentation in the Courtroom*, Adopted Feb. 27, 2010, Austin, Texas.

transparency and discovery, and (7) allocating greater defense resources, particularly for indigent defense services. Progress has been made on some of these objectives. But sadly, much of the promise of the 2009 NAS report and its associated recommendations remain unfulfilled, as the 2016 PCAST report attests.

NACDL reaffirms its commitment to the principles laid out in these prominent reports, issued under the auspices of the legislative and executive branches, which were specifically ratified by NACDL in its response to the NAS report. NACDL urges this body to support efforts that have been made to improve forensic science as a result of these reports and to safeguard against attempts to rollback that progress just as it has begun to have a positive impact on the field of forensic science.

1. Provide a dedicated funding stream to support the existing National Commission on Forensic Science and formally separate it from the DOJ.

The 2009 NAS report recommended the formation of an independent agency to provide oversight, issue guidance documents, and support research in forensic science. That agency was never established. In its place, the Department of Justice (DOJ) and the National Institute for Standards and Technology (NIST) agreed in 2013 to found the National Commission on Forensic Science (NCFS).⁶ The NCFS is composed of 40 members. In the short time since it began work in 2014, it has been remarkably productive. As stated in its two-year report, the Commission adopted 43 work products as of its January 2017 meeting, covering a broad range of topics including accreditation and proficiency testing, identification of needed areas of research, reporting and testimony standards, training and de-biasing materials, and more.⁷

The Commission has not been without controversy. The DOJ initially refused to consider recommendations related to discovery practices for forensic evidence, causing member Judge Jed Rakoff to resign in protest; he later rejoined the NCFS after the DOJ softened its position.⁸ The composition of the Commission draws too heavily from prosecutorial and government interests, without adequate representation from those committed to safeguarding the rights of defendants. Moreover, because the NCFS falls under the auspices of the Department of Justice, the DOJ exercises ultimate authority and control over its direction, and even its existence.

In fact, it appears that the DOJ is not acting to renew the NCFS's charter and may instead move control of forensics back under the exclusive wing of the DOJ.⁹ The charter of the

⁶ The NCFS charter is here: <https://www.justice.gov/ncfs/file/624216/download>.

⁷ National Comm'n on Forensic Science, *Reflecting Back – Looking Toward the Future* (Mar. 22, 2017) available at <https://www.justice.gov/ncfs/page/file/952316/download>.

⁸ Joseph Ax, After quitting in protest, prominent U.S. judge rejoins DOJ commission, Reuters, Jan. 30, 2015, available at <http://www.reuters.com/article/us-rakoff-evidence-idUSKBN0L32B020150130>.

⁹ The DOJ has a history of ignoring the problems in forensic science, in favor of pursuing its own objectives. For instance, when Congress passed the Paul Coverdell National Forensic Science Improvement Act, it smartly provided that public funds could be received only upon a showing that

NCFS provided for a two-year initial period, subject to renewal in accordance with Section 14 of the Federal Advisory Committee Act. A meeting is presently set for April 10-11. Although the DOJ has not formally announced that this will be the final meeting, it also has not renewed the Commission nor set a future meeting schedule. In addition, the DOJ recently gave notice that it intends to establish an Office of Forensic Sciences and a Forensic Science Board within the DOJ, which would have many of the same duties and responsibilities as the current NCFS, but without scientific, neutral composition and character.¹⁰

Permitting law enforcement to reclaim complete control over forensic science standards and oversight threatens to wind back the clock on the progress made in the past decade since the NAS report. The NCFS has been influential on both the federal and state level, and served as a critical intermediary between the interests of science and law enforcement.¹¹ There is still much work to be done, as outlined in the NCFS's closing report. That work will suffer if dominated only by the objectives of law enforcement.¹²

Congress should take this opportunity either to: 1) fulfill the promise of the 2009 NAS report and establish an independent commission entirely; or 2) set up a funding stream directly to NIST to continue the NCFS's important work with ample input from, but not direct exclusive control by, the DOJ.

2. Establish mandatory accreditation, certification, and proficiency standards.

For decades, crime laboratories functioned in the United States with little to no oversight at all. Very few laboratories were accredited, and few crime scene technicians had received formal certifications of any kind. Once on the job, technicians were rarely tested in field conditions to determine their continued competence.

Recent years have brought important changes in the areas of accreditation, certification, and proficiency testing.¹³ Currently, roughly 88% of 409 publicly funded crime

an independent authority existed within the state to investigate claims of serious negligence or misconduct. But the DOJ never implemented that portion of the Act, choosing instead to prioritize its own law enforcement objectives. An Inspector General report sharply criticized the DOJ for not only flouting its duties, but for routinely awarding grants in violation of that requirement. Oversight of the Department of Justice's Forensic Grant Programs: Hearing Before the S. Comm. on the Judiciary, 110th Cong. (2008) (statement of Glenn A. Fine, inspector general, US Department of Justice), 6.

¹⁰ The latest version of that proposal can be found here:

https://csidds.files.wordpress.com/2017/03/cfso_ofs_proposal-3_6_17_rev.pdf.

¹¹ The NCFS's closing report lists a number of ways in which the Commission has had a tangible impact. See *supra* note 7, at 1-2.

¹² See *id.* at 6-10.

¹³ *Accreditation* refers to a requirement that a laboratory demonstrate that it has met certain pre-established criteria for quality control and management. *Certification* refers to a test or standard that an individual employee must pass to establish competency in a field of testing. *Proficiency*

laboratories in the nation are accredited by a professional forensic science organization.¹⁴ Roughly 72% of public crime labs have at least one externally certified analyst,¹⁵ and 98% of labs conduct some kind of proficiency testing.¹⁶ Some states even require accreditation for their crime laboratories.¹⁷

The problem, however, is that these standards remain too lax to be meaningful. As a result, nearly every major lab has weathered a major scandal of incompetence or malfeasance,¹⁸ even though nearly all were accredited. Standards for proficiency testing are actually *dropping*. In 2014, only 35% of labs conducted random case analysis testing (down from 54% in 2002), and only 10% conducted blind exams (down from 27% in 2002).¹⁹ These declines are worrying. Far more labs use declared tests to gauge proficiency.²⁰ Such tests often do not include samples that truly replicate the ambiguity or difficulty inherent in real-world conditions and, by nature of being declared, are a poor means by which to judge an analyst's typical work performance.

Congress has an opportunity to shore up forensic science by imposing national standards for accreditation, certification, and proficiency testing for forensic scientists. That opportunity has arisen because the dominant commercial accreditor – a spinoff of a professional organization known as ASCLD/LAB – was recently acquired by ANAB,²¹ an entity with a long track record of more meaningful oversight. If basic standards are set – such as ones that require certification of some technicians as well as proficiency testing more meaningful than by declared exam – then ANAB will craft its oversight guidelines to meet those standards.

3. Bolster the emerging culture of science and increased transparency in forensic work.

As the NCFS history indicates, some of the sharpest areas of conflict on the National Commission occurred with respect to moving forensic science away from its law

testing refers to periodic reviews to ensure that an analyst or laboratory is performing its duties properly.

¹⁴ Andrea M. Burch et al., Publicly Funded Crime Laboratories: Quality Assurance Practices, 2014, Bureau of Justice Statistics (Nov. 2016).

¹⁵ *Id.* at 6.

¹⁶ *Id.*

¹⁷ *See, e.g.*, Tex. Admin. Code § 651.8.

¹⁸ DAVID FAIGMAN ET AL., MODERN SCIENTIFIC EVIDENCE: THE LAW AND SCIENCE OF EXPERT TESTIMONY § 30:15 (2016) (providing a list of laboratories involved in just DNA-related scandals).

¹⁹ Burch, *supra* note 14, at 4.

²⁰ *Id.*

²¹ ANAB stands for the ANSI-ASQ National Accreditation Board, an entity formed in the 1990s in response to the need for an American certification body that would ensure private-sector compliance with international standards developed to facilitate commerce in the nascent European Union. In 2011, it expanded into forensic science with the acquisition of Forensic Quality Services, an established accreditor of forensic laboratories, and in 2015 it acquired ASCLD/LAB. *See generally* <http://anab.org/about-anab/history/>.

enforcement roots and toward a more scientific footing. In the time since the 2009 report, several state and local jurisdictions have made major pronouncements in the field of forensic science, leaving the federal government behind the times. For instance, the Texas Commission on Forensic Science issued several major reports, including one which sharply criticized use of outdated and discredited methods for fire investigation²² and another which recommended against the use of bite mark evidence in any criminal cases.²³ The New York City Council adopted regulations that imposed greater transparency and oversight on its DNA lab, requiring that the lab conduct a “root cause analysis” in the aftermath of significant error and ordering the lab to make its protocols and operating procedures publicly available.²⁴

Questions of transparency and accountability in forensic science only continue to grow and mount as new methods emerge and develop. The PCAST report identified probabilistic genotyping software – proprietary programs developed by for-profit companies to analyze DNA samples – as an area of growth that deserved closer scrutiny and attention. The NCFS closing document likewise identified that field, along with others, such as digital forensics and medico-legal death investigation, requiring studied attention. Congress should appropriate funds to ensure that these fields are cultivated with an eye toward transparent scientific principles of accuracy, rather than an adversarial attitude with a disposition toward secrecy.

4. Enhance the support for defense attorneys commensurate with the increased prevalence and role of forensic science in criminal cases.

Although meaningful reform of forensic science in the United States requires close attention to upstream issues such as establishing the scientific foundations of disciplines, ensuring laboratory training, and analyst oversight, the final safeguard against the misuse of forensic evidence remains the criminal defense attorneys across the United States who represent clients in the individual cases in which this evidence is introduced.

Even as the introduction and use of forensic evidence in both investigations and trials has grown, support for defense attorneys has largely stagnated. Many defenders remain reliant on the state for information about the forensic evidence in the case, and dependent upon courts for the resources to consult with experts or test evidence independently.

Congress should allocate funds to give to states an incentive to provide better resources and support for defense lawyers with respect to forensic evidence. The state of North Carolina has developed a promising model, in the form of a statewide Forensic Resource Counsel position. That office, with minimal financial outlays, provides critical coordination,

²² The Willingham/Willis report, available at <http://www.fsc.texas.gov/cases>.

²³ Forensic BiteMark Comparison Complaint – Final Report, April 12, 2016, available at <http://www.fsc.texas.gov/sites/default/files/FinalBiteMarkReport.pdf>.

²⁴ N.Y.C. Admin. Code §§ 17–207 & 208.

advising, and support for the state's defense attorneys with regard to forensic evidence.²⁵ Congress should allocate funds that provide seed support and incentives to states to develop similar means of addressing the structural lack of support for defense attorneys confronted with forensic evidence in any particular case. Criminal trials can perform their function as a search for the truth only if both parties have the ability to challenge evidence presented by the other side and the resources to present their own.

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This Congress confronts a critical moment in the evolution of forensic evidence in the United States. After two scathing reports on the lamentable state of science in our criminal courts, progress has slowly begun to be made. The forces of positive change are not welcomed by all, however, and there are strong interests to return to the practices – most importantly, exclusive control of forensic science by law enforcement interests – that led the nation to undertake reform in the first place. Congress should reinforce and continue that forward momentum, not set it back.

²⁵ See generally ERIN E. MURPHY, *INSIDE THE CELL: THE DARK SIDE OF FORENSIC DNA* 302-03 (Nation Books 2015) (describing the office).