Physician Heal Thyself: Whither the Police and Prosecutor in the Tale of Forensic Science Gone Wrong?

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In February of this year, the Department of Justice and the National Institute of Standards and Technology in the Department of Commerce announced their partnership in forming a National Commission on Forensic Science (the Commission). 1 This new commission marks the first federal response to the findings of the landmark National Academy of Sciences report (the NAS report), issued in 2009, that criticized almost every established forensic science methodology deployed in contemporary criminal courts. 2 The aim of the Commission, which will be composed of thirty interdisciplinary members, is to realize some of the recommendations of the NAS report, including to develop “a framework for coordination across forensic disciplines under federal leadership” and to establish national standards for forensic scientists. 3 Both critics and defenders of forensic

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2. See id. (noting that the creation of the National Commission on Forensic Science was a response to the NAS report); Four Years On, No Action on NAS Forensic Science Report; Across the Nation, Crime Lab Scandals Abound, NACDL (Feb. 15, 2013), http://www.nacdl.org/NewsReleases.aspx?id=26459 (stating that the government had thus far failed to take any action in response to the NAS report).

science in the criminal justice system largely applauded the announcement.\textsuperscript{4} Jennifer Laurin, however, probably let out a sigh.

That’s because Laurin’s important new article, \textit{Remapping the Path Forward: Toward a Systemic View of Forensic Science Reform and Oversight}, challenges the assumption that fixing the nation’s crime laboratory problem will in turn solve its integrity-of-forensic-evidence problems.\textsuperscript{5} Lawyers make a life out of blaming other people, and Laurin essentially points out that we have done no differently in the forensic evidence context. A long list of academic and other legal commentators have cited the practices of crime laboratories as the central causes of the well-documented shortcomings in the management of forensic science in the criminal context.\textsuperscript{6} And to be sure, Laurin acknowledges the importance of their contributions.\textsuperscript{7}

But \textit{Remapping the Path Forward} goes one step further and does something few others within the legal establishment have been willing to do: turn that critical eye back onto legal actors as well. Her efforts reap rich rewards: she convincingly argues that concentrating attention on improving the quality of crime laboratories not only fails to appreciate the significant impact of other players in the forensic evidence system, especially law enforcement and prosecutors, but also unwise ignores the ways in which those actors can thwart or confound the overall project of reform.\textsuperscript{8}

Given that there is so much to agree with in Laurin’s article, this response takes up two modest tasks. The first Part extracts the most salient arguments advanced by \textit{Remapping the Path Forward}, and then simply adds to them its own occasional hallelujahs. The second Part endeavors to go one step beyond the scope of Laurin’s immediate project by asking what more might be said about or learned from the conspicuous silence of critical commentators on the issues she so rightly raises. It is in this Part that I attempt to probe Laurin’s narrative more deeply and to contend that we have viewed forensic evidence systemically, and so we must try to understand why we have nevertheless chosen to ignore two critical figures in the landscape.


\textsuperscript{7} Laurin, \textit{supra} note 5, at 1053, nn.2–6.

\textsuperscript{8} \textit{Id.} at 1075–1105.
I. What is Absolutely Right: We Have Overlooked the Important Role Played by Prosecutors and Police

The subtitle of Laurin’s article says it all: “Toward a Systemic View of Forensic Science Reform and Oversight.” Like many authors before her, Laurin starts by recognizing the severe defects in our current system of forensic evidence.\(^9\) Where she departs, however, is in going beyond the laboratory to identify the “critical set of dynamics” that she views as essential to getting a complete picture of forensic evidence processing.\(^10\) Specifically, Laurin aims to call attention to the upstream users of forensic science—police and prosecutors—[who] will select priorities, initiate investigations, collect and submit evidence, choose investigative techniques, and charge and plead cases in ways that have critical and systematic, though poorly understood, influences on the accuracy of forensic analysis and the integrity of its application in criminal cases.\(^11\)

In refocusing the lens of inquiry, Laurin laments that the recent engagement with forensic science has happened almost exclusively at the site of the laboratory.\(^12\) Actual analysis of crime scene evidence is but one small part of a greater chain of events that starts when forensic evidence comes into existence and ends with its appearance at trial in a criminal case.\(^13\) Thus, she notes, before evidence ever gets seen in a lab, it must first be collected, preserved, and submitted.\(^14\) And even once submitted, evidence may only be as useful as prosecutors allow it to be, for instance via explicit requests for testing, receptiveness to the results that are generated, or timely disclosure and access during discovery prior to trial.\(^15\)

Turning her own attention to these ignored moments, Laurin convincingly demonstrates the indispensable role played by police and prosecutors in the enterprise of creating forensic evidence. She notes that it is these actors that often determine the utility of forensic evidence, and yet all indications point to their systematic shortcomings in this regard.\(^16\) She writes:

[T]he best (albeit limited) empirical data that exists indicates that, across the board, significantly less physical evidence is collected in most cases than is available; that the rates of collection vary widely across categories of crime; and that this gap between collection

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9. Id. at 1048–65.
10. Id. at 1055.
11. Id.
12. Id. at 1055–56.
13. Id. at 1075–99.
14. Id. at 1076–86.
15. Id. at 1087–99.
16. Id.
potential and actuality has not meaningfully diminished even as forensic science has become a more central feature of criminal cases.\footnote{Id. at 1079.}

Indeed, most readers will be shocked to learn that rates of evidence collection for serious offenses can hover around one in five, or that actual testing of evidence occurs in still fewer instances.\footnote{Id. at 1082–83.} And although she acknowledges the dearth of comprehensive empirical studies, Laurin is also right to identify the lack of formally trained, dedicated crime scene technicians as a major problem in the proper identification, collection, and preservation of forensic evidence.\footnote{Id. at 1083–84.} As she notes, many scenes are attended only by patrol officers, who may not have received any specialized training and may have other pressing concerns.\footnote{Id. at 1094–96} And even if a scene is searched, evidence may be collected in a way that overlooks important pieces or compromises the integrity of that which is gathered.\footnote{Id. at 1096–98.}

Similarly, for forensic evidence to reach its optimal utility, it must be available for prosecutorial use. But in a world of backlogs, the trial is often the precipitating reason to jump evidence to the front of the queue for analysis. Yet over ninety percent of cases never make it to trial, but instead are resolved by a guilty plea.\footnote{Id. at 1094–96} Even in those cases in which testing occurs, as Laurin notes, it may happen too late for it to exert much influence over the judicial process. A prosecutor who has already committed to a theory of the case may dismiss or minimize contradictory test results, even if they call into direct question the guilt of the suspect.\footnote{Id. at 1096–98.} In other words, to the extent that objective science might whisper in a prosecutor’s ears, it often only gets a chance to do so long after it will be heard as anything other than confirmatory or inconclusive.

In the face of this convincing and insightful explication of the central role played by police officers and prosecutors as part of the larger story of forensic evidence, Laurin launches her first major critique, which is that none of this before-and-after decision making has occasioned nearly as much attention as what happens within the walls of the lab itself.\footnote{Id. at 1071.} Laurin observes that the NAS report “almost entirely focused on a single producer–user path—namely, from the laboratory to the courtroom.”\footnote{Id. at 1071.} And yet, she observes, “police and prosecutors are themselves playing critical and frequently dispositive roles in ‘adjudicating’ the significance of scientific
evidence in a particular case...”

To be sure, she’s right. Academic commentators, myself included, have expended a great deal of energy cataloging the laundry list of failures in crime scene laboratory practice and offered an array of proposed improvements, with only fleeting reference to the other actors in that chain. Even political reform efforts have concentrated largely on improving crime scene labs—whether through the federal Coverdell laboratory improvement program or grants distributed by the Department of Justice.

If the article’s first major contribution is simply to call attention to the legal actors whose choices can have as much impact on the use and integrity of forensic evidence as does that of the laboratory technician, then the article’s second contribution is to transform this awareness into a lens through which to critique the current proposals for reform. The bracing suggestion of the article is that we may end up sinking a lot of money and attention into improving forensic crime labs, only to find that problems persist because we have failed to likewise address the other critical players on the forensics field.

By way of specific illustration, Laurin challenges both the effectiveness of the National Institute proposal advanced by the NAS report and the wisdom of pressing for wholly independent forensic laboratory systems. Both reforms, she suggests, are inadequate because they speak only to laboratory function without paying proper heed to the greater complex of players in the forensic evidence system.

II. Why Have We Ignored Prosecutors and Police?

Given all that is right about Remapping the Path Forward, what is there left to say? Laurin’s central critique—that we have largely ignored the significant influence exerted by police and prosecutors over the creation and utilization of forensic evidence, and as a result our system “fixes” may be left wanting—certainly is correct. But that observation naturally leads me to

26. Id. at 1072 (citation omitted).


29. Laurin, supra note 5, at 1106.

30. Id. at 1106–14.

31. Id.

32. Id. at 1055.
the next question, which is to ask why? How is it that, despite all the attention lavished on forensic science these days, two such central players have largely escaped scrutiny?

A. Laboratories Were Easier Targets than Lawyers

The first response might be the one this Essay began with, which is that we lawyerly types tend to focus our attentions on outsiders when it comes to identifying the sources of trouble. But that account cannot be correct because in truth the academics and other critics who have trained their sights on the forensic evidence system have spared few words for many legal actors other than prosecutors or the police. Defense lawyers, for instance, routinely receive a great deal of both opprobrium and sympathy for the part they have played in allowing shoddy forensic evidence to enter the system unchecked. I say opprobrium and sympathy because although the commentary often places blame squarely on defense attorneys who simply roll over in the face of “science” rather than exercise their duty of zealous representation, many of those same critics nonetheless appreciate the structural and other impediments that prevent defense counsel from assuming a more robust role.

Similarly, plenty of accusatory ink has been spilled in the direction of judges, who admitted the faulty forensics into evidence in all the cases described by Laurin in her history of the ramp-up to the NAS report in 2009. Among other things, judges have been attacked as too complacent, too fearful of science, and too susceptible to the bewitching effects of the white lab coat. And, since it is ultimately the judges that are charged with the task of “gatekeeper,” they have been criticized even when other actors falter in the performance of their respective duties. It is the judge upon whom we think ultimate responsibility for exclusion of dubious evidence rests, and so for that reason much of the criticism is perhaps well-deserved.

Even jurors have received their fair share of blame. In fact, a whole cultural phenomenon of a supposed “CSI effect” has sprouted up to explain the orientation of jurors when it comes to accurate use of forensic evidence.

33. See, e.g., Murphy, supra note 27, at 769 (observing that “[r]esource constraints may ultimately persuade the ‘amateur scientists’ of the bench, particularly those inclined to intellectual timidity with regard to sophisticated scientific techniques, to lean heavily upon the ‘law-like’ status of other courts’ rulings rather than spend precious time deciphering a seemingly legitimate methodology”); David L. Faigman, The Law’s Scientific Revolution: Reflections and Ruminations on the Law’s Use of Experts in Year Seven of the Revolution, 57 WASH. & LEE L. REV. 661, 666–67 (2000) (criticizing judges’ unwitting acceptance of the reliability of expert testimony).

34. See Murphy, supra note 27, at 760 (suggesting that “the problem may rest” not only with judges, but “in the very structure and nature of criminal process,” and partly attributing the shortcomings of the current system to prosecutors and defense attorneys).

Jurors have been painted as alternatively mesmerized by faulty forensics, or skeptical of the absence of forensic evidence or of demonstrably legitimate science.\textsuperscript{36} Although the images are contradictory, it is significant that there is an entire literature about the relationship between forensic evidence and jurors alone.

So if defense lawyers, jurors, and judges all join laboratory technicians and analysts in the faulty forensic evidence Hall of Shame, then whither the prosecutor and whither the police? In other words, it does not seem to be the case that we never think systemically about forensic evidence, but rather that when we do, we leave out two essential stakeholders.

\textbf{B. Lack of Data}

In the prescriptive section that closes the article, in which Laurin recommends greater data collection regarding police and prosecutorial practices, Laurin indirectly offers another possible explanation for the historical overlooking of these key actors: lack of information.\textsuperscript{37} Of course, it could not be credibly claimed that crime laboratories and forensic scientists have been the subject of close study, but in the past ten or so years there have been greater efforts to collect, record, and document their functioning. Increased oversight has also brought about greater awareness of the kinds of challenges that crime laboratories face.

In contrast, there is virtually no data about the practices of police and prosecutors when it comes to forensic evidence. Even the DNA database statistics commonly touted as evidence of the incredible success of forensic DNA typing simply underscore the extent of what we don’t know: the “investigations aided” metric which reports the number of associations made through the database is effectively a laboratory calculation. It does not tell us how those investigations were aided (in other words, what policing occurred as a result), whether any cases were brought, or what happened to them (in other words, what prosecution occurred).

The reasons for this lack of information are likely many. First, forensic evidence is more common in state rather than federal cases because it is in the state courts that the bulk of violent crimes—the ones historically most amenable to forensic testing of some kind—are tried. But both the policing and prosecutorial function are highly decentralized across the states, and offices have varying degrees of sophistication and professionalization. As a result, collecting information from such a diverse set of players may simply intimidate many researchers, and even those willing to take on the task may

\textsuperscript{36} See Tom R. Tyler, Viewing CSI and the Threshold of Guilt: Managing Truth and Justice in Reality and Fiction, 115 YALE L.J. 1050, 1053–54 (2006) (indicating that certain legal analysts believe that jurors “expect prosecutors to show them sophisticated forensic evidence” at trials) (internal quotation marks and citation omitted).

\textsuperscript{37} Laurin, supra note 5, at 1106–17.
find themselves immediately confronted with trying to harmonize wildly disparate rules and policies in a way that provides grounds for even basic comparisons.

Second, because there is so much localization of policing and prosecution practices, it may seem unfruitful to gather information more broadly given that local idiosyncrasies may dictate much of what is observed. By way of example, if the collection, testing, and use of forensic evidence is driven more by a personal interest on the part of the police chief or the scientific background of the local district attorney, then attempts to generalize from those observations might backfire.

Third, until quite recently, it might also have been that forensic evidence was deemed to arise too stochastically across cases to yield any worthwhile data from comprehensive study. In other words, if the opportunity to collect evidence arose in so few cases and when it did it was considered easy and obvious, then studying forensic evidence collection practices with an eye toward areas of improvement might have seemed silly. The few studies that exist seem somewhat to confirm this point. Early efforts concentrated largely on simply trying to get a handle on the problem, rather than conducting deeper analysis. And it is really only with the advent of DNA typing—a reliable, highly discriminating forensic technique—that researchers have undertaken to question whether we are wrenching as much information as possible out of current crime scenes.\(^3\) A question like “might better training in handling of forensic evidence close more cases” is one that seems most plausible to ask with regard to a method like DNA, which has such broad application. It might not have been equally as intuitive with regard to first generation disciplines like hair, fiber, or ballistics analysis.

Lastly, it may simply be that we have not scrutinized the roles played by police officers and prosecutors because we have not known that they have that much of a role to play. To be sure, this is a significant likelihood, and seems to be the misapprehension that both implicitly animates and is definitively put to rest by Remapping the Path Forward. And yet, thorough investigation of the structure of forensic evidence would inevitably bump up against questions related to police and prosecutors. In other words, even if most laypeople think that crime scene investigation is performed primarily by scantily clad twentysomethings employed in a forensic laboratory, the

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actual students of forensic science know that ordinary patrol officers and police detectives do the lion’s share of evidence collection. To the extent that we haven’t acknowledged the important role played by police and prosecutors, it must in some sense have been intentional.

In sum, each of these reasons for the lack of data certainly seems plausible, but none is entirely convincing. After all, even the major public attention heaped upon crime scene laboratories has been rather recent; it is not as though previously there existed a surfeit of information about the way that forensic analysts work. Thus, there is no reason that the current interest in crime labs ought not also have spilled over onto police and prosecutors, at least with regard to their role in the forensic evidence process. Moreover, to the extent that the exoneration cases served as a major impetus for greater caution with respect to forensic evidence—once it was revealed that shoddy science was a second leading factor in wrongful conviction cases—it is hard to see why scrutinizing prosecutors and police in addition to lab technicians would not also have naturally resulted from larger efforts to unpack what went wrong. In the end, then, lack of data seems more like an effect than a cause of the disregard of the role of police and prosecutors in the forensic evidence story.

C. Part of the Bigger Black Box of Police and Prosecutorial Decision Making

To my thinking, the likeliest reason for the general absence of close scrutiny of prosecutors and police when it comes to diagnosing the problems of forensic evidence today is simple: we do not like to question police and prosecutorial decision making, and we do not like to demand that police and prosecutors account for their exercises of discretion. These two precepts are true across the board, not just in the context of forensics. They are also true as a matter of law, not simply as a matter of policy or scholarly or intellectual preference. Both law enforcement and prosecutors typically have enjoyed totally unfettered discretion to allocate resources and set priorities as they wish, with very little oversight either through legal or political channels.

Consider what closer attention to law enforcement’s role in the generation of forensic evidence might entail. It could implicate the way police departments are structured, in terms of the divisions among

39. See H. Patrick Furman, Wrongful Convictions and the Accuracy of the Criminal Justice System, 32 COLO. LAW. 11, 11 (2003) (asserting that the focus on DNA technology and wrongful convictions has been recent).

40. See Unreliable or Improper Forensic Science, INNOCENCE PROJECT, http://www.innocenceproject.org/understand/Unreliable-Limited-Science.php (explaining that unreliable forensic science is the second leading factor in wrongful conviction cases overturned with DNA testing).

investigative, patrol, and evidence-collection units. It might require re-examination of training and ongoing-education programs for officers. Broaching concerns related to preservation and packaging of evidence might involve closer inspection of physical plants and administrative infrastructure. Stricter control over crime scene evidence processing could infringe on the independence exercised by chiefs and commanders with regard to the allocation of resources for policing versus other tasks. Take for example, one study that noted that “crime scenes investigated during the 2–10 p.m. shift—when calls for service peak and officer time is most constrained—are least likely to yield a DNA profile.” In other words, busy patrol officers are less able to devote effort to careful evidence collection than those with more time. To mandate a certain set of procedures at every crime scene would therefore directly impact a department’s capacity to engage in other aspects of its law enforcement function.

Moreover, from a different perspective, closer scrutiny of police practices might shed unwanted light on the shadowy truth that police investigators exploit gaps in the law, even though they cannot contravene the law. So much of policing operates in this liminal space, where it may sometimes feel preferable to leave the boundaries undefined than to try to stake them unambiguously. For instance, take forensic DNA. State and federal law authorized the establishment of state and national DNA databases, along with the compulsory collection of DNA from certain individuals. But law enforcement has not, for the most part, limited its examination of forensic DNA, or DNA databases, to these circumstances alone. Some law enforcement officials have assumed authority to engage in certain kinds of database searches (like familial searches), even absent express legislative authority. Others have created local or informal (or, colloquially, “rogue”) databases that contain genetic information collected legally (such as through dragnets) but for which there is no express authorization to preserve in a database. Law enforcement has also expanded and enhanced the genetic tests that it uses without seeking judicial or legislative preapproval, and as new kinds of genetic tests are unveiled law enforcement may elect to take advantage of them as well. In sum, if we

44. See Erin Murphy, Relative Doubt: Familial Searches of DNA Databases, 109 Mich. L. Rev. 291, 293 (2010) (noting that laboratories have conducted familial searches “even in the absence of formal legal authorization or express policies”).
45. See Natalie Ram, Fortuity and Forensic Familial Identification, 63 Stan. L. Rev. 751, 762 (2011) (noting the existence of such “rogue” databases and the various sources of the samples therein).
looked carefully at the role of police in the forensic evidence context, we would in turn have to engage a complicated series of questions about discretion, legal authority, and the deployment of resources.

Similarly, probing the use of forensic evidence by prosecutors would also entail close interrogation of government practices. To understand what role forensics play in decision making is also to grapple with the factors that drive charging decisions, plea offers, or case strategy—whether savory (like seriousness of the offense or strength of the evidence) or less savory (like a need to decrease the caseload or considerations related to the perceived strength of opposing counsel). We have become so accustomed, both as a matter of law and policy, to acceding complete discretion to prosecutors that the idea of even attempting to account for what they are doing, much less mandate changes in behavior, may seem an insurmountably difficult (although not impossible) task. In short, it is much easier to cry out for better laboratory testing protocols or standardization of case processing than it is to do the same for the intake and management of criminal cases by prosecutors.

In this sense, ignoring the complicity of prosecutors and police in shoring up a shoddy system of forensic science may simply be the natural byproduct of the greater hands-off approach to scrutinizing the priorities set by those offices more generally. Consider that there is virtually no legal remedy for someone wrongly arrested or prosecuted, absent the showing of the most virulent of intentions, significant damages, or harm. There is virtually no legal remedy for failing to investigate more thoroughly, or for bringing wildly disproportionate charges, or for offering highly coercive pleas. Discovery regarding expert testimony in some jurisdictions is dramatically limited, despite the recognized importance in the civil system of adequate time pre-trial to prepare. It may be a wasted opportunity not to look more closely at prosecutors and police, but it certainly is an understandable one. Even the basic constitutional entitlements surrounding forensic evidence—the right to have the evidence preserved, or to have exculpatory evidence disclosed—are so stripped down in the case law that they effectively only require that the withholding of evidence not be done by police or prosecutors who are twirling their mustaches like villainous silent film bad guys.

Maybe this is also why the national dialogue about the causes and sources of wrongful conviction shies away from straight talk about overzealous police and prosecutors who have turned a blind eye on exculpatory or questionable evidence. Instead, both groups have received a pass because they are imagined as motivated by society’s best interest; the law tends to conceive of prosecutorial or police abuse of power in terms of intentional malfeasance rather than as a byproduct of the same kind of structural and cultural expectations that characterize crime labs.

But if police encounter suspicious evidence outside the boundary of the crime scene as they defined it, but consistent with the accused’s account,
should they not still have an obligation to test it—or at least preserve it—just in case their version of the incident proves wrong? Or if an expert tells a prosecutor that she can tell whether the victim was screaming by examining the shaft of hair found at the scene, do we not expect the prosecutor to have the wits, and then the duty, to verify that such outlandish claims are supported by legitimate science? And should forensic evidence be allowed to be yet another weapon to wield against the defendant, such as requiring waiver of testing rights in plea negotiations or holding discovery of expert testimony tightly to the vest? If the tales of exoneration have made scoundrels out of eyewitnesses, lab analysts, and even defense lawyers, then it is about time that they stop leaving prosecutors and police investigators effectively untouched.

III. Conclusion

If the answer to my question of why is “because we rarely ever poke too much at the hornet’s nest of police or prosecutorial discretion,” then what implications might that have for Remapping the Path Forward?

One clear consequence is that identifying the problem may not be as far a step along the road to solving it as we might like. As Laurin acknowledges, in thinking about some of her prescriptive offerings such as more research and standard-setting for these upstream users, “the demands of these proposals in terms of behavioral change, cultural shift, and resource allocation mean that they are unlikely to be attractive candidates for adoption.”46 In other words, even if we wanted to take steps to address police and prosecutorial use of forensic evidence, those efforts might be rebuffed.

It is in this respect that it might be useful to quibble with Laurin’s metaphor of the forensic evidence process. She describes police and prosecutors as “upstream users”—conjuring a flow of information from laboratory to law enforcement to court. But perhaps the better image is that of guards. After all, when viewed from the perspective of the laboratory, Laurin’s “upstream users” are in fact both upstream and downstream. Police investigate scenes and collect and submit evidence; prosecutors prompt testing, receive results, and call analysts as witnesses. Both parties may interact with laboratory technicians by encouraging prioritization of specific cases, or focusing on certain kinds of evidence, or testing in light of various theories of the incident. But in the center stands the laboratory—receiving evidence from police, and delivering results to prosecutors.

Police and prosecutors, therefore, might be better viewed as enveloping—or again, as standing guard at—the laboratory, filtering which information goes in the front end and controlling exactly what comes out at

46. Laurin, supra note 5, at 1114–16.
the back. This metaphor may better expose why it has been so hard and
taken so long to crack the walls of the laboratory itself: because powerful
forces have stood over it in protection. But it might also help clarify how
intricately tied to the story of faulty forensics police and prosecutors should
be seen to be, and also why the common refrain of “just retest the evidence”
is an inadequate response to calls for greater structural reforms. As we
remap our path, with Laurin’s article as both a call to arms and a guide, it
will be essential to acknowledge that police and prosecutors are fellow
travelers on the path with the lab techs, judges, defense lawyers, and jurors,
even if they are not entirely happy to be there.