A Reality Check on CRIME LAB BACKLOGS



t took the unbiased perspective of a business and economics professor to lend credibility to what forensic scientists always knew was the main culprit in the explosion of crime laboratory backlogs across the United States: Consumers have little respect for things they don't have to pay for. If it's free, it must be abundant.

The work of Dr. Paul Speaker<sup>1</sup> and his colleagues at West Virginia University has earned increasing attention among crime laboratory administrators seeking to deliver fast and reliable services to their customers without the nagging burden of case backlogs. An underlying theme of his research is also a fundamental principle of economics. When a product or service is free to consumers, no economic regulatory influences exist to prevent demand from exceeding the capacity of the service provider. In other words, demand becomes infinite.

"A jury thinks that a crime lab can do all of these magical things because that's what they've seen on TV," Dr. Speaker explained in a 2010 press release issued by West Virginia University.<sup>2</sup> "The reality is that the lab doesn't have the budget to conduct all of those amazing tests."<sup>3</sup>

In a public crime laboratory, this means that case backlogs can reach epidemic proportions. But the idea of charging law enforcement agencies for forensic laboratory services is problematic and largely regarded as nothing more than shifting a fiscal bur-

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den from one public agency to another. In the end, the taxpayers foot the bill.

#### Crisis in Detroit

The Michigan State Police (MSP) backlog—or the total number of uncompleted requests such as DNA, fingerprints, or drug identification—reached 20,300 in December 2009, about one year after the city of Detroit ordered the closure of its crime laboratory, which had been in operation for 80 years but became plagued with quality assurance problems. MSP's seven laboratories absorbed that caseload, and its customers paid dearly for it.<sup>4</sup>

Michigan Bar Journal

Although the closure of the Detroit laboratory was a monumental event affecting the MSP laboratories, the backlog problem actually began long before the troubles in Detroit emerged. During the 2008 calendar year, before the closure of the Detroit lab, the MSP laboratory backlog steadily remained at more than 10,000 service requests—already a full-blown public safety crisis. Cases and evidence were flowing into the laboratories in such high volumes that scientists could not keep pace. As turnaround times soared, frustrated law enforcement agencies asked legislators to fund the hiring of more forensic scientists to speed things up and demanded construction of a new MSP laboratory in Detroit.

#### Unreasonable Demand

Too often, the knee-jerk reaction to crime laboratory backlogs is to push for increases in capacity by purchasing more equipment, hiring more scientists, and building new laboratories. Certainly, more capacity is needed in many of America's crime laboratories. But for what exactly are we building capacity?

For instance, it is not uncommon for laboratory scientists to receive pretrial requests from prosecutors to confirm that a suspect's fingerprints are on a gun even though the police collected the gun directly from the suspect. The purpose of fingerprint analysis is to determine if an object was touched or possessed by a particular person. But is it reasonable to ask taxpayers to bear the burden of paying to have science confirm what we already know?

The CSI effect, which is now well documented in legal and scientific literature, is the perceived expectation that nearly every possible scientific question be answered in a criminal case.<sup>6</sup> No doubt, prosecutors in particular face an increasingly formidable obstacle with jurors whose expectations of science sometimes extend far beyond reason. In the example mentioned, a juror who remains unsatisfied that science did not rule out the possibility that the police officer might actually have planted the gun on the defendant—even when no such claim was raised by the defendant or any witness-may interpret the absence of scientific evidence as reasonable doubt. The resulting frustration among prosecutors is quickly recycled into pressure on crime labs to produce a dose of science that inoculates prosecutors from this pervasive judicial disease. This, however, is not the purpose of crime laboratories, and it is well beyond any reasonable horizon of just how far forensic scientists should be expected to go in their support of the criminal justice system.

# The Sky is the Limit

Complicating matters is the fact that the potential uses for forensic science have no limits, especially when services come at no cost to the users. For example, more DNA testing could be funded to possibly identify shoplifters who steal candy bars at convenience stores. If a police officer is forced to shoot a dangerous dog that has threatened neighborhood children in a playground, the crime laboratory could double check to make sure the bullets actually came from the officer's gun—just to rule out any

possibility the officer is lying. So, too, could forensic scientists examine the signatures on every check written to pay for goods and services to confirm that no fraud or forgery was present.

These may seem like exaggerated scenarios. In fact, they are examples of frequently encountered problems in crime laboratories that delay testing in cases that really need it. This, in the world of economics, is called opportunity cost.7 Although requesting agencies believe they pay no price for having unreasonable expectations of crime laboratories, they unknowingly burden themselves and the rest of society with massive opportunity costs. Those costs come in the form of delayed justice and delayed investigative information that would otherwise allow crimes to be solved faster or, in some instances, prevented. Furthermore, by overly inflating the demand for services intended to respond to crimes already committed, resources can be inappropriately diverted from other important priorities such as after-school programs for troubled teens, innovations in police patrol strategies, or drug treatment programs that actually help prevent crimes from being committed in the first place—a great way to relieve pressure on crime labs.

### Forensic Science in Perspective

There was a time when forensic science was used to solve crimes. Now, it is used to satisfy curiosities and falsify the most unreasonable of defense alibis. Extreme proponents of forensic science may argue that if it is used to answer even the most basic questions, the truth we learn is worth the cost—we just need to hire more scientists. This, however, is a strategy doomed to failure if executed in haste. Laboratories cannot for long keep talented and motivated scientists employed doing low-value work that brings little or no professional satisfaction. The most talented scientists will quickly become dissatisfied with their jobs and leave for more rewarding work, taking their talent and training with them. So, in an attempt to build laboratory capacity, the end result may very well be the collapse of the laboratory's organizational culture and its growing inability to attract and retain qualified, enthusiastic personnel.

Crime laboratory personnel, however, share responsibility in these efforts to curtail excessive demand. The sterile and static perch of the laboratory workbench makes it tempting to dictate to police and prosecutors how they should investigate and try criminal cases when forensic evidence is involved. To police and prosecutors whose work puts them in direct contact with grieving victims, uncooperative witnesses, and demanding judges, this kind of arrogance will not be tolerated for long and will compromise the constructive communication required to produce more levelheaded expectations of crime labs. In this regard, scientists can be their own worst enemies. Excessive demand is a two-way street. It is equally irresponsible for scientists to have excessive expectations of police and prosecutors, especially when one considers that these two groups make up such a large share of a crime laboratory's customer base. Scientists with a clear understanding of the experiences and pressures encountered daily by their customers are in a better position to provide a more valuable set of services.

# Agreeable Expectations

The solution to crime laboratory backlogs is quite simple if criminal justice agencies can work collaboratively in a genuine and reasonable pursuit of the truth. First, there must be widespread agreement about the expectations public crime laboratories should meet in terms of quality and quantity of services. Then, there must be a commitment to develop the fiscal, staffing, and business models that allow those core expectations to be provided efficiently and reliably to customers at no cost. If a customer agency expects the laboratory to go beyond its core battery of services, then it may be reasonable to expect that agency to pay a nominal fee to offset the cost. Even if the fee does not entirely offset the cost incurred by the laboratory, it does create the economic incentive needed to force investigators and prosecutors, in particular, to think carefully about what they are requesting, which, in keeping with the most basic principles of economics, will benefit the laboratory by lowering demand for unnecessary or elective testing.

Training and continuing education are also key components of a healthy forensic science system. Law enforcement personnel who collect evidence at crime scenes make critical choices about what evidence should be submitted to a crime laboratory for testing, requiring a certain set of competencies and a requisite knowledge base. Prosecutors also exercise significant discretion in deciding when and how forensic test results are employed in the courtroom. Knowledge brings better discretion, which has the effect of regulating demand for forensic testing services. As back-

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logs come under control, scientists have more time to work in partnership with investigators and attorneys to improve practices in the overall management of forensic evidence. When expertise grows across the criminal justice system, it becomes easier for laboratories to control backlogs in a proactive and collaborative way, resulting in laboratories having a greater impact on criminal cases and law enforcement officials having a greater level of expertise in managing forensic evidence from the crime scene to the courtroom.

# Collaboration is Key

Whatever arrangement is made to control laboratory backlogs, the most effective components to any strategy are quality dialogue and collaboration between laboratories and their customers. Crime laboratories are not just service providers. Collectively, they are a check and balance in the system whose sovereignty, independence, and organizational stability must be respected and protected at all times. When all parties understand each other's capabilities and limitations and are willing to work for the best interests of all involved, including those of defendants, the criminal justice system will be enhanced by faster forensic testing services and scientists who actually have time to leave their workbenches once in a while to build lasting and constructive partnerships with their customers.



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#### **FOOTNOTES**

- Dr. Speaker is an associate professor of finance in West Virginia University's College of Business and Economics. West Virginia University, Faculty <a href="http://www.be.wvu.edu/faculty\_staff/paul\_speaker.htm">http://www.be.wvu.edu/faculty\_staff/paul\_speaker.htm</a>. All websites cited in this article were accessed September 19, 2012.
- West Virginia University, WWU Today <a href="http://wvutoday.wvu.edu/n/2010/10/01/wvu-forensics-experts-have-international-stage-at-interpol-symposium-b-e-representatives-to-present-business-practices-to-global-forensics-professionals>.
- 3. Id.
- See Senate Fiscal Agency, State Notes: Topics of Legislative Interest (January/ February 2009) <a href="http://www.senate.michigan.gov/sfa/publications/notes/2009notes/notesjanfeb09bb.pdf">http://www.senate.michigan.gov/sfa/publications/notes/notesjanfeb09bb.pdf</a>>.
- Id. at 6. Historical laboratory backlog and volume data are recorded and maintained by the Michigan State Police.
- Shelton, The 'CSI Effect': Does it really exist?, 259 NIJ 1 (2008), available at <a href="https://www.ncjrs.gov/pdffiles1/nij/221500.pdf">https://www.ncjrs.gov/pdffiles1/nij/221500.pdf</a>.
- Arnold, Economics (Cincinnati: South-Western College Publishing, 5th ed, 2001), ch 1, p 6.
- See Kreeger & Weiss, DNA Evidence Policy Considerations for the Prosecutor (American Prosecutors Research Institute, September 2004), available at <a href="http://www.ndaa.org/pdf/dna\_evidence\_policy\_considerations\_2004.pdf">http://www.ndaa.org/pdf/dna\_evidence\_policy\_considerations\_2004.pdf</a>.