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LABS UNDER THE GUN

Can police crime laboratories be trusted?



“Of the 33 adjudicated cases from the Wayne County Prosecutor’s Office that were reanalyzed, 3 exhibited Class I inconsistencies. In total, this equates to approximately 10% of the completed firearms cases having significant errors. On average, the DPD firearms unit analyzes 1,800 cases per year. If this 10% error rate holds, the negative impact on the judicial system would be substantial, with a strong likelihood of wrongful convictions and a valid concern about numerous appeals.”

By Julius (Jay) Wachtel. These words aren’t from do-gooders wringing their hands about possible miscarriages of justice. They’re from an official [September 2008 report](#) by the Michigan State Police setting out the preliminary findings of an audit of the Detroit crime lab’s firearms unit.

Firearms examiners often test-fire recovered guns hoping to link them to crimes. Firing a weapon leaves markings on bullets and cartridge casings that are supposedly unique to that specific gun. If a *sufficient number of identical* marks are present in the *same locations* on cartridge casings or bullets recovered at a crime scene (or extracted from a body) it’s evidence that they were fired by the same gun. Naturally, great care must be taken to insure that there are enough points in common. It’s also critical that there are no dissimilarities; just like in fingerprinting, only one inconsistency rules out a gun as being the source of a particular bullet or cartridge casing.

Michigan State Police auditors reviewed 200 firearms cases. Nineteen had “either Class I or Class II inconsistencies”. A Class I error means that an examiner erroneously declared a match. Such “false positives” can obviously lead to a wrongful

conviction. In Class II errors, “false negatives,” a match was overlooked, possibly letting a guilty person go free.

Detroit PD responded by [shutting down the entire crime lab](#) -- not just the firearms unit -- and turned over all forensic analysis to the State. It then set out on the unenviable task of reviewing past cases involving testimony by firearms examiners. There was little choice, as defense attorneys immediately announced they would begin questioning everything the lab has ever done. Meanwhile displaced lab employees [mounted a protest](#), claiming that problems in the firearms unit did not affect the good work the lab was doing elsewhere, from fingerprint comparison to DNA. Their view was undercut by the words of their own superior, who in a September 2008 memo reported that the lab’s overworked and underpaid staff was running *four-thousand* chemistry and biological cases behind. (She retired when the lab closed.)

Alas, Detroit isn’t unique. In November 2002 Houston [shut down the DNA section](#) of the police crime lab after an investigation by a TV station revealed a history of shoddy work. A subsequent audit of the lab’s DNA work disclosed “a wide range of serious problems ranging from poor documentation to serious analytical and interpretive errors that resulted in highly questionable results being reported by the Lab.” Issues were also reported in firearms, trace evidence and drug analysis.

What’s worse, *at least two cases of wrongful conviction* have been attributed to Houston DNA errors. [Josiah Sutton](#) served four and one-half years of a 25-year term after the lab incorrectly determined that his DNA was present in a sperm sample. [George Rodriguez](#) served *seventeen years* of a 60-year term; his conviction was due in part to bad witness ID, in part to a mistaken failure to exclude him as a DNA donor, and in part to an incorrect conclusion that a hair found on the victim was likely his.

That’s not all. In January 2008, one and one-half years after the Houston lab’s DNA section reopened, [its new supervisor was allowed to resign](#) for helping staff members cheat on proficiency exams. (Amazingly, she was then hired to run the State lab’s DNA section.)

It happens to the best of labs. In May 2005 a grievous analytical error at the Virginia State crime lab, reportedly one of the nation’s finest, prompted [Governor Mark Warner](#) to order the re-examination of 150 DNA cases. His move was prompted by a 1985 case, where a prisoner on death row, Earl Washington, *came within nine days of being executed* before a team of pro-bono defense lawyers finally got him a stay. In 1993, with the threat of execution again looming, a DNA test (which the State partly botched) got Washington’s sentence commuted to life imprisonment. It would take another seven years and a correctly performed DNA procedure to

conclusively clear Washington and identify the guilty party. By the time he was finally released in 2000 the innocent man had spent *seventeen years* behind bars.

Mismanagement and lax quality control have vexed crime laboratories for decades. O.J. might have never been in the position to pull the shenanigan in Vegas except for a lab goof. (His acquittal in the 1994 murder was in large part due to evidence of widespread contamination at the LAPD crime lab.) But trying to keep labs on the straight and narrow with after-the-fact controls such as accreditation visits is a loser's game. As long as facilities are tidy, paperwork is in order, equipment is in proper repair, manuals are up to date and everyone on staff is certified a "pass" is virtually guaranteed.

Everyone wants to solve crime through science and technology. But as auditors in Houston pointed out, running a good lab is an expensive proposition. When resources are limited -- and when aren't they? -- it's easy to wind up with a production-oriented pressure cooker that encourages shortcuts and sloppy work. Throw in a dash of unskilled examiners and a pinch of poor oversight and it's a recipe for disaster.

Next week we'll look at issues in forensic techniques, from fingerprinting to ballistics. Stay tuned!