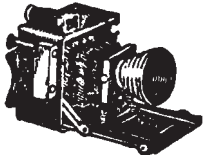




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Forensics Under The Microscope

Unproven Techniques Sway Courts, Erode Justice

(This article was downloaded from the October 17, 2004, issue of the Chicago Tribune at www.chicagotribune.com.)

By **FLYNN MCROBERTS,**
STEVE MILLS, and MAURICE POSSLEY

Tribune staff reporters

Settling into the witness chair of a Kane County courtroom, Stephen McKasson tutored jurors in a murder trial on the wonders of a rarely used divining tool: lip prints.

The Illinois State Police crime lab examiner told them forensic science accepts that lips have unique creases and he could match the prints found on duct tape at the crime scene to the defendant, Lavelle Davis.

Davis was convicted and sentenced to 45 years. The lip print, one juror in the 1997 trial recalled, "proved that he had actually committed the crime."

There was just one problem: What McKasson asserted about lip prints isn't true.

The story of how an unproven forensic theory helped send a man to prison might seem like a legal curiosity befitting an episode of "CSI: Crime Scene Investigation."

But a Tribune investigation of forensics in the courtroom shows how Davis' conviction exemplifies the questionable science, flawed analysis and shoddy lab practices that sometimes undermine the quest for justice. Long considered unbiased and untainted, crime labs and analysts are facing new scrutiny and tough questions about their accuracy.

At the center of this upheaval is the advent of DNA testing, which has injected a dose of truth serum into other forensic tools. With its dramatic precision, DNA has helped reveal the shaky scientific foundations of everything from fingerprinting to firearm identification, from arson investigation to such exotic methods as bite-mark comparison.

It is difficult, if not impossible, to quantify precisely how many cases have been affected by faulty forensic testimony or poor analytical work, partly because defense attorneys often haven't challenged forensic evidence. Many lack the resources to do so, others assume the science is unassailable, and some simply don't bother.

But the 200 DNA and Death Row exoneration cases nationwide in the last 20 years offer one clue. More than a quarter--55 cases with 66 defendants--involved forensic testing or testimony that was flawed.

The Tribune investigation included hundreds of interviews across the country, an examination of thousands of court documents and an analysis of criminal cases that turned on forensic evidence. Among the findings:

- Fingerprinting is so subjective that the most experienced examiners can make egregious mistakes. This year, in a stunning embarrassment, the FBI was forced to admit it wrongly linked an Oregon lawyer to the Madrid terror bombing case because of an erroneous fingerprint comparison.
- Prosecutors continue to rely on experts who embrace debunked theories about arson. Among the hard-to-kill myths is "crazed glass"--glass lined with a spider web of cracks--which was thought to be evidence of an accelerant until researchers learned it could occur when hot glass is sprayed with water, as in putting out a fire.
- Forensic dentists, who link suspects to bite marks left on crime victims, continue to testify despite having no accepted way to measure their rate of error or the benefit of peer review. DNA testing has shown that even the field's leading practitioners have made false bite-mark matches.
- Scandals at labs from Maryland to Washington state have spotlighted analysts who have incorrectly assessed evidence, hidden test results helpful to defendants and testified falsely in court. The scandals underscore the often-ineffective standards governing crime labs.

Analysts involved in faulty forensic work typically have testified in hundreds of trials, just one indication of how widespread the impact of bad science and bad scientists can be. The lab scandals also have laid bare a more fundamental failure: Experts often express certitude based on an unfounded confidence in their forensic specialty and their ability to practice it.

"I have no problem with forensic science. I have a problem with the impression that's being given that those disciplines ... can make an absolute identification of someone, and that's not the case," said Terrence Kiely, a DePaul University law professor and author of "Forensic Evidence: Science and the Criminal Law."

"It's the white coat-and-resume problem," he added. "They're very, very believable people. And sometimes the jurors will take [their testimony] as a 'yes,' where the science can only say it's a 'maybe.'"

The explosive popularity of TV shows such as "CSI" has led prosecutors and crime lab directors in recent months to complain that juries and the public have unreasonable confidence in what forensic analysts can do and how quickly they can do it.

An examination of forensic science's role in the courts, however, suggests that a much broader problem is the ease with which prosecutors have brought unproven forensic theories or unchallenged forensic experts into the courtroom.

In doing so, they harness the special sway such experts hold in court. Not even police officers are allowed the kind of latitude granted them--the freedom to give their opinion, not simply what they observed or heard.

Forensic experts and their testimony are being questioned because of two distinct forces reconfiguring the legal landscape.

In addition to the advent of DNA testing, U.S. Supreme Court rulings have sought to impose greater scientific rigor on forensic testimony.

In a defining 1993 decision, *Daubert vs. Merrell Dow Pharmaceuticals*, the court demanded that such testimony not simply meet the existing standard of "general acceptance" in its field, but also address some of the hallmarks of scientific inquiry--testing, peer review and rates of error.

That is precisely what has been lacking in many forensic fields, some of which have scrambled to catch up since the ruling while others continue to resist.

One facet of the problem is that while those involved in forensic disciplines wear the white coat of science and portray themselves as scientists, they often do not operate under the same rules as those in other scientific pursuits.

Crime labs regulate themselves, often operating without the scientific touchstones of experimentation and validation.

Consequently, lab analysts have been allowed to testify about such evidence as ear prints and examinations of shoe insoles, though little or no research exists to support their claims that these methods can identify matches.

Some respected figures in forensic science say the failure to address such problems and impose tougher standards is unacceptable.

"The stakes are too high--life, liberty, destroying families," said Dr. Joseph Davis, the chief Miami-Dade County medical examiner for four decades before he retired in 1996. "A person who is truly innocent is permanently disfigured or destroyed."

Lip prints seal fate

The adversarial nature of America's courts is supposed to insulate them from bogus testimony.

Both sides may offer their experts. The judge and jury determine what testimony is reliable. And a just verdict is reached.

The safety valve malfunctions when those qualified as experts make unsubstantiated assertions, defense attorneys don't properly challenge those individuals, and judges and juries believe them.

Each of those failures was on display in the case of Lavelle Davis' lips. Though the questions raised by the use of lip print evidence don't prove his innocence, they cast doubt on the fairness of his trial.

A week before Christmas 1993, Patrick "Pall Mall" Ferguson was killed outside an Elgin apartment complex--felled by a single shotgun blast at close range.

Davis' first trial ended in a mistrial after a key eyewitness said she was backing off testimony she gave at the earlier trial of a co-defendant. At Davis' second trial, the woman said she was finally coming forward with the truth--that she saw him shoot Ferguson.

Even prosecutor Alice Tracy called the woman "an admitted liar" during the February 1997 trial.

Faced with that credibility problem, prosecutors pointed to physical evidence to corroborate their theory. They believed investigators had found it in the grass not far from the scene of the slaying: a roll of duct tape.

Tracy theorized how Davis' lip print could have been left on the sticky side of the tape. "He might have taken the duct tape to show one of the others what they were going to do with it if Patrick Ferguson ... started to scream," she told the jurors.

McKasson, who worked at the state crime lab in Carbondale, said he had examined lip prints in two other cases, though he had been unable to match a suspect to those prints.

He had no such reservations in the case of Davis, declaring the defendant's lips matched those found on the duct tape.

McKasson explained his conclusion by telling the court that lip prints were no different from any other form of what is called "impression" evidence.

"It's just a matter of the side-by-side comparison of impressions," he told the judge, who qualified him as an expert. "And to that degree it wouldn't matter whether it was a fingerprint, an ear print or a lip print."

Trying to buttress the credibility of a method rarely

seen in American courts, a print examiner from the state police crime lab in Rockford, Leanne Gray, told the court that the FBI believes lip prints are a positive form of identification.

She was mistaken. The FBI "to this day hasn't validated lip print comparisons," said Ann Todd, spokeswoman for the bureau's lab in Quantico, Va.

Gray and the Illinois State Police declined to comment on the Davis case because his post-conviction petition seeking a new trial is pending.

For some jurors in Davis' trial, including Doris Gonzalez, the lip print evidence was convincing--much more than the eyewitnesses and others called by both sides who she said "were not very truthful people."

That made the lip print evidence crucial. "I mean, it was a big breakthrough for determining his guilt," Gonzalez said.

Davis' attorney, Lee Bastianoni, repeatedly challenged the methodology and qualifications of the two examiners during cross-examination but did not hire an expert to counter them.

Bastianoni instead tried to do the research himself. "I basically went to the library and read all the books I could on fingerprints and the scientific method," he recalled.

The novelty of the lip print evidence apparently did not trouble the Illinois Appellate Court, which affirmed Davis' conviction in a May 1999 ruling that illustrates how legal safeguards can fail to weed out questionable theories.

The court turned aside the challenge to the evidence, noting that the state experts had testified the FBI considered lip prints a "means of positive identification," and they "did not know of any dissent inside the forensic science community" challenging that assertion.

Had Bastianoni called the likes of Andre Moenssens, one of the deans of forensic science in the U.S., he would have discovered that many of Gray and McKasson's claims were unfounded.

A law professor emeritus at the University of Missouri-Kansas City and author of "Scientific Evidence in Civil and Criminal Cases," Moenssens happened to read the Illinois Appellate Court's decision.

He was so appalled that he wrote to the appellate defender's office, and at the request of Davis' appellate attorney, Kim Campbell, Moenssens agreed to file an affidavit for the post-conviction petition.

"You can't rely on your own cross-examination of the state's witnesses," said Campbell, now an assistant

state's attorney in Downstate McLean County. "You have to have your own expert to say why this kind of science is unreliable. And there was nobody saying that at his trial."

In his affidavit, Moenssens wrote that "making the quantum leap ... to the ultimate notion of identifying an individual by the visible imprint of his or her lips, is a journey fueled by two elements: pure speculation and unadulterated conjecture."

The president of the American Academy of Forensic Sciences, the nation's chief professional society for forensic disciplines, was equally blunt in an interview.

"At this stage of the game, you can put ear prints and lip prints and nose prints and elbow prints all in the same category--unverified and unvalidated," said Ronald Singer, who also is director of the Tarrant County medical examiner's crime lab in Ft. Worth.

Since Davis' conviction, McKasson has retired from the state crime lab and runs his own document examination business. He gives frequent workshops around the country on how to be an effective expert witness and has co-written a book on the subject.

When told of the doubts raised by the FBI and others, McKasson repeated his defense of his work.

"It bothers me that the rest of them are wimping out," he said. "They're just worried about being attacked."

Pointing to the lip prints' apparent similarities on a computer screen at his home near Carbondale, McKasson added: "I still don't see what other choice I had, because there it was--it looked good to me. These two impressions came from the same person. There's no doubt in my mind."

Last week, a Kane County judge granted Davis a Jan. 31 hearing to make the case for a new trial, based in part on the questions about the lip-print evidence.

For Moenssens, the only thing as disturbing as McKasson's testimony was the Appellate Court's affirmation of it. "It doesn't say much for the courts' willingness to take the gatekeeper role seriously when it comes to novel techniques," he said.

FBI's fingerprint fiasco

Though lip prints may never be widely used or accepted, fingerprints have both a long history and the stamp of approval in courts and in the public consciousness. Yet a century of their use in solving crimes obscures a sobering reality: Despite claims that the discipline is an infallible science, it is neither infallible nor a science.

No standards exist for what portion of a fingerprint must be recovered before it is suitable for comparison.

At most crime scenes, the police usually find only a fraction of a fingerprint, and that latent print, as it is called, frequently is smudged or otherwise distorted, making it difficult to compare.

Just as troubling, no research exists to say if people share fingerprint patterns--whether a few points of similarity or many.

Theoretical problems are just one issue. In 1995, one of the only independent proficiency tests of fingerprint examiners in U.S. crime labs found that nearly a quarter reported false positives, meaning they declared prints identical even though they were not--the sort of mistakes that can lead to wrongful convictions or arrests.

A recent episode in the war on terrorism underscored these shortcomings.

On May 6, federal prosecutors strode into a courthouse in Portland, Ore., and claimed the FBI had made a "100 percent positive identification" linking a local lawyer to a fingerprint found on a bag connected to terrorist bombings in Madrid.

Within weeks, the same prosecutors were forced to return to the courtroom and admit an international humiliation: The fingerprint analysis that led to the arrest of Brandon Mayfield was wrong.

But the FBI didn't realize it until Spanish authorities linked the fingerprint to an Algerian man, Ouhmane Daoud.

Not just one but three FBI analysts, all seasoned veterans, had made the same mistake. A fourth expert independently appointed by the judge erred as well when he determined Mayfield's prints were a match.

The Madrid fingerprint fiasco was one of the highest-profile embarrassments in the century since fingerprinting became one of the most trusted forensic tools, employed by police to catch everyone from burglars and car thieves to rapists and murderers.

In most cases, prints recovered at a crime scene are run through the FBI's massive databank of prints taken from arrests around the country. After the databank spits out a pool of potential matches, fingerprint examiners compare each of those with the crime-scene print.

They look for points of similarity among the circular ridges and lines that make up a fingerprint. Once a match is made, a colleague double-checks the work.

The FBI has long claimed that fingerprint identification is infallible. A top FBI fingerprint official has testified to a "zero error rate."

But even top officials with the leading fingerprint examiners' organization acknowledge that more research

is needed to bolster the scientific foundation of fingerprinting.

“The debate is not so much do fingerprints work, but what is the science?” said Joseph Polski, chief operations officer of the International Association for Identification.

Another concern: Standards for determining how many points of comparison are needed to determine a match vary among police departments across the country. The FBI has no minimum; it says it relies on its analysts’ experience and judgment to determine if fingerprints match.

Those issues are at the heart of the Mayfield case. The FBI said it found 15 points where the prints matched. Kenneth Moses, the former San Francisco crime scene examiner the judge consulted, testified he found 16 points. The Spanish police found eight and said that wasn’t enough to declare a match.

Initially, the FBI found the print--lifted from a plastic bag containing detonator caps near the March 11 train bombings--of sufficient quality to compare and link Mayfield to the attacks.

After its error was made public, though, the government contended the image of the fingerprint it examined was of “no value for identification purposes.”

“That’s particularly difficult to understand since the Spanish police used it to identify Daoud, and the FBI had used it to identify Mr. Mayfield,” said Steven Wax, the federal public defender in Portland who defended Mayfield.

One of the three FBI examiners responsible for the Mayfield match acknowledged the blunder. “We just did our job and made a mistake,” John Massey said in an interview at his Virginia home. “That’s how I like to think of it--an honest mistake.”

Massey said he knew another examiner had already declared a match in the Mayfield case, but he said there was no pressure on him to concur.

While the Department of Justice’s inspector general is reviewing the case, Massey said his faith in fingerprint comparisons is unshaken.

“I’ll preach fingerprints till I die. They’re infallible,” Massey said. “I still consider myself one of the best in the world.”

Such confidence in the face of error has many historical precedents in technical fields; physicians initially preferred to rely on their instincts, balking at using instruments as simple as a blood-pressure gauge that could be understood by laypeople.

Doctors didn’t yield to the adoption of such instruments until insurance companies demanded quantitative measurements of patients’ health, said Theodore Porter, a professor of the history of science at UCLA.

The public’s “trust in the competence of practitioners and the implicit consensus within the field breaks down when skeptical outsiders challenge it,” Porter said.

Fingerprint examiners have exhibited a similar resistance, saying their personal experience is proof enough of their reliability. The lingering question: Will the Mayfield case force them to embrace scientific validation?

Though it captured the most attention, Mayfield’s brief arrest was only the latest in a string of cases in which fingerprinting was called into question.

The hunt to find who stabbed Alvin Davis to death seemed simple at first. After all, investigators in the working-class Philadelphia suburb of Upper Darby had found bloody fingerprints on a window fan leaning against Davis’ decomposing body in autumn 1997.

After two days of examination, examiner Anthony Paparo said he had found at least 11 points of similarity between the bloody prints on the fan and those of a friend of Davis, Ricky Jackson. To be certain, Paparo asked Upper Darby Police Supt. Vincent Ficchi, also a fingerprint examiner, to double-check his work. Ficchi concurred.

Defense attorneys rarely challenge fingerprint evidence. But Jackson’s lawyer, Michael Malloy, dug deeper when he realized the case rested on the fingerprints. There was no confession from Jackson, no eyewitness.

A hairstylist who lived in Philadelphia, Jackson said police had shown him the fingerprints and told him they would convict him--maybe even put him on Death Row.

“They said, ‘See the fingerprints here? They’re yours,’” Jackson said in an interview. “I told them, ‘There’s no way they could be my fingerprints.’”

At trial, Paparo and two other experts testified how they had matched the bloody fingerprints on the fan to Jackson. Malloy got his own experts, two retired FBI agents, who testified the prints did not match.

A jury convicted Jackson, and he was sentenced to life. After his conviction, though, Malloy’s experts filed a complaint with the International Association for Identification about Paparo and the two other experts who testified for prosecutors.

The complaint triggered a review of the evidence by the FBI, which concluded that Paparo had erred.

Two days before Christmas 1999, Jackson walked out

of a Pennsylvania jail. Authorities have yet to link the prints to anyone else.

To this day, Paparo denies misreading the prints. "I'm not going to lock someone up just to clear a case," he said, standing in front of the illuminated screen at the police department where he made the comparison.

The most significant challenge to fingerprinting came in 2002 in another Pennsylvania case, a drug conspiracy with charges of multiple murders. Presiding over it was Judge Louis H. Pollak, a former dean of Yale Law School respected by lawyers on both sides of the aisle in Philadelphia.

In January 2002, Pollak issued a stunning decision: that there was insufficient scientific basis for examiners to declare fingerprint matches.

It was the first time a U.S. trial judge had rejected fingerprint comparison evidence. Despite its long history of acceptance, Pollak ruled, fingerprinting lacked the testing, peer review, uniform standards and known error rates called for under the Supreme Court's new Daubert standard.

Prosecutors asked Pollak to reconsider his ruling, and for three days in February of that year he held hearings that put fingerprinting to the test.

An FBI agent testified that examiners scored well on the bureau's own proficiency tests. But a London fingerprint consultant who had worked for years for Scotland Yard testified for the defense that the tests were too easy. The prints were too clean, he said, unlike what fingerprint examiners have to deal with at crime scenes.

The British expert, Allan Bayle, said his officers, if given the same kind of proficiency tests, would "fall about laughing."

After hearing both sides, Pollak acknowledged the problems with the FBI's proficiency testing. But the judge said he was convinced that examiners in Britain and the U.S. generally agreed on the methods for analyzing prints and that the testimony of an FBI fingerprint expert gave him "a substantially more rounded picture of the procedure."

In the end, the judge who had called into question one of the bedrock forensic sciences gave it a reprieve, agreeing that the FBI had never made a mistake.

"I have found, on the record before me, that there is no evidence that certified FBI fingerprint examiners present erroneous identification testimony," Pollak wrote, before concluding, "In short, I have changed my mind."

His ruling seemed to put the issue to rest. Then, two years later, the FBI wrongly accused Mayfield in the Madrid case.

Fighting unproven science

In the criminal justice system, juries often decide a person's guilt. But judges have broad discretion over what those jurors hear, including which forensic experts and what kind of forensic evidence.

For decades, most judges screened scientific testimony according to a 1923 federal decision. *Frye vs. United States* said such testimony must be based on principles "sufficiently established to have gained general acceptance in the particular field in which it belongs."

In 1993, the U.S. Supreme Court created the stricter Daubert standard, which held that trial judges also "must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable."

But the Daubert standard applies only to federal courts and the state court systems that choose to adopt it. Some state courts, including Illinois, continue to use the *Frye* guidelines.

Even though judges rarely bar forensic experts from testifying, the director of the Justice Department's research arm argues that the bench is aggressive in its gatekeeper role.

"I have a lot more faith in judges," said Sarah Hart, director of the National Institute of Justice. "They can even hire their own experts to inform them. In this advocacy system ... you can get a lot of information on this stuff."

But some jurists themselves say judges are ill-prepared for this part of their job.

Haskell Pitluck, a retired McHenry County judge and former president of the American Academy of Forensic Sciences, described the problem facing many in the justice system.

"If lawyers could do science, they'd be doctors," he said, noting that he is better versed in forensics than many jurists, "and I don't feel qualified to make many of these calls."

A national survey of 400 state trial judges published in 2001 found that while nearly all jurists believed their gatekeeping role was appropriate, only 4 percent had a clear understanding of the key scientific concepts of probability and error rates.

Some forensic disciplines certify experts in their fields, but that's no guarantee of quality.

"Too often, the lawyers don't do their homework enough so they can properly cross-examine these people," Pitluck said. "They come in and say, 'I'm an expert.' And some lawyers simply roll over."

Every new forensic discipline has been met with skepticism. Even DNA was not readily embraced when first used in the 1980s to identify suspects, because it was largely untested in the courtroom.

This underscores a central dilemma of the justice

system: how to distinguish promising forensic methods and their practitioners from junk science and their charlatans.

One of the more bizarre crime-lab tools has been championed for more than 15 years by a Dutch police officer, Cor van der Lugt. He contended that when pressed upon a flat surface, a person's ear leaves distinct marks that can later be matched through its unique shape, size and contours.

Van der Lugt testified in the 1997 murder trial of David Wayne Kunze in Vancouver, Wash., that he had examined ear prints in over 600 cases abroad.

The Dutch officer, according to court documents, said he thought it was "probable" that Kunze had left his ear print when he pressed against a bedroom door to listen before entering to kill the man sleeping inside. When asked on the stand how certain he was, he said: "I'm 100 percent confident of that opinion."

Michael Grubb, then the manager of the Washington State Patrol Crime Laboratory in Seattle, stopped short of declaring an exact match but testified at the trial that Kunze was "a likely source."

Grubb, now director of the San Diego crime lab, said the Kunze case is the only ear print case he had worked on.

"I examined ear prints from 130 other individuals as part of the Kunze case," Grubb told the Tribune, and "none of the other 130 ear prints were similar."

Kunze was convicted and sentenced to life in prison.

In this instance, though, the courts' checks-and-balances system worked. Kunze's conviction was overturned after an appellate court ruled that the ear print evidence was not reliable enough for such declarations of certainty. Prosecutors later dropped the charges.

Distinguishing the forensic fringe from the cutting edge can be difficult enough; keeping a debunked science from re-entering the courts can be even tougher.

North Carolina anthropologist Louise Robbins helped send more than a dozen defendants across the country to prison or to Death Row with her self-proclaimed power to identify criminals through shoe prints. On occasion she even said she could use the method to determine a person's height, sex and race.

By the time Robbins died in 1987, appeals courts had overturned many of the cases in which she had testified. And the American Academy of Forensic Sciences, in a rare rebuke of one of its members, concluded her courtroom work was not grounded in science.

But in a laboratory at the headquarters of the Royal Canadian Mounted Police in Ottawa, the effort to determine identity from feet and shoes is getting new life.

Sgt. Robert Kennedy, a veteran fingerprint analyst, says he can tell who wore a shoe by comparing impres-

sions left on an insole with a person's foot.

Kennedy calls it "barefoot morphology." Like Robbins, his work has helped prosecutors obtain convictions.

"I know there've been questions about this. Louise Robbins was a real problem," Kennedy said in an interview in his office. But "you don't want to just let an area of forensic science go by the wayside. It's good evidence."

Unlike Robbins, Kennedy has tried to base his work in science. Since the early 1990s, he has been visiting army bases and other sites to build a database of footprints that now exceeds 10,000 sets.

In the 1998 trial of Jeffrey Jones in South Carolina, Kennedy's work proved crucial to sending Jones to Death Row.

Police investigating a double murder believed a boot that had left a bloody impression in the victims' kitchen belonged to the killer. They matched the impression to a boot found in a house that Jones shared with another man, James Brown, who admitted his role in the killings. In exchange for a life sentence, Brown testified against Jones.

No physical evidence linked Jones to the crime, and he denied involvement. Though the boots were size 9 1/2 and Jones wore between an 11 and 11 1/2, prosecutors said he was wearing them when the murders were committed.

At the trial, South Carolina crime lab analyst Steven Derrick, who had never before testified to such a comparison, said he examined the boot insole and an impression from one of Jones' feet.

Derrick concluded that the only way someone else's foot could have made the impression on the boot insole would be if the person had precisely the same foot characteristics--such as the shape and the distance between toes.

Derrick also testified that he had not made a comparison with the feet of Brown, who claimed the size 9 1/2 boots were too big for him.

Kennedy vouched for Derrick's work as well as the field of barefoot morphology, testifying that he talked Derrick through the comparison process.

In 2001, the South Carolina Supreme Court reined in such evidence, ruling there was insufficient science to support it. The court ordered the state to either try Jones again or set him free.

Even with the ruling, prosecutor Dayton Riddle said he would use the insole evidence again when he takes Jones back to trial.

"That's good science, despite the fact it got reversed," Riddle said. "I think what happened there is that I was a little bit ahead of the curve."

Police Shutter Print Unit Identification Error, Critical Report Cited

(This article was downloaded from the October 14, 2004, issue of the Boston Globe at www.boston.com.)

By **SUZANNE SMALLEY**
Globe Staff

The Boston Police Department is shutting down and revamping its troubled fingerprint unit after it was blamed for a wrongful conviction and a consultant issued a blistering critique of its shortcomings.

Police Commissioner Kathleen M. O'Toole said yesterday that the unit, which tries to identify suspects by matching prints found at crime scenes with ones in police files, is "inadequate".

Since it would take two years to train officers to fix the problems, O'Toole said that labor relations administrators are already talking to the police union about letting the department hire previously trained civilian specialists to run the unit. If a deal can't be reached, she said, she will hire an outside consultant such as the one who reported on the unit's flaws late last week.

She said she is not completely ruling out having the outsiders handle the work while existing officers are trained for two years.

Until she finds a longer-term solution, State Police will do the work, while the police unit will continue the less scientifically rigorous duties of indexing fingerprints.

The shutdown is a blow to a big-city police department that holds itself up as a national model. "It's not typical at all," said Dr. Michael Baden, a former chief medical examiner in New York state and a prominent forensic pathologist. "Normally things have to be pretty bad before a lab is shut down."

State Police have been verifying the conclusions of the Boston unit's crime scene print analyses since February, about the time O'Toole came aboard and reviewed the wrongful conviction of Stephan Cowans.

Until a judge freed him in January, Cowans spent six years in prison after the unit wrongly matched his print with a fingerprint from a glass mug found at the Egleston Square crime scene where Officer Gregory Gallagher was shot and wounded in 1997.

"Out of all the bad needs to come some good," O'Toole said in an interview. "The latent print section is inadequate. They're not up to industry standard."

Shortly after she was sworn in on Feb. 19, O'Toole called Attorney General Thomas F. Reilly and asked him to investigate the role of two police fingerprint analysts in Cowans's wrongful conviction.

After a four-month investigation, Reilly determined there was not enough evidence to support perjury charges against the two officers, Rosemary McLaughlin and Dennis LeBlanc. But O'Toole placed both officers, one of whom

has since retired, on administrative leave. She also publicly lambasted the unit for its "low standards and a lack of professionalism."

Within days of joining the department, O'Toole said she also decided it was necessary for the department's fingerprint lab to receive accreditation from the American Society of Crime Laboratory Directors. She soon realized that such accreditation would be impossible without a major overhaul of the unit. She brought in Ron Smith, an FBI-recommended fingerprint specialist who was already investigating what went wrong in the Cowans case, to review the entire operation.

O'Toole could not say what specific problems Smith cited in last week's report beyond inadequate training, but she said his analysis was alarming enough that she concluded all activity must be suspended in the unit.

O'Toole blamed many of the problems in the unit on the department itself and not rogue officers within it.

"It's important that I say there are some people working in latent prints -- put McLaughlin and LeBlanc aside -- who have really tried hard," O'Toole said. "I understand some have gone and paid on their own for training. There are some people who, the department failed them. They didn't receive appropriate training."

James Starrs, a fingerprinting analyst and teacher of forensic science and law at George Washington University, said the problems in the unit are entrenched.

"I have never seen anything but problems with the Boston fingerprint lab," Starrs said. "I've never seen quality work from them . . . They're police sergeants, not scientists doing the work. That's a serious problem, because they don't have the scientific standards to abide by."

Starrs said he worked for Cowans's defense team and is now consulting on the retrial of Terry Patterson, who is appealing his conviction in a Boston police detective's killing.

On Tuesday, a Suffolk Superior Court judge denied Patterson's motion to suppress fingerprint evidence that was used to convict him in 1995. His prior conviction in the murder of John Mulligan, who was shot five times in the face as he sat in his car at a Roslindale shopping mall, was overturned because of ineffective counsel.

Starrs said judges and juries place too much faith in fingerprints. "You can see a sneer on the judges' faces about challenging fingerprints -- next thing, it'll be motherhood and apple pie," he said.

O'Toole said she is eager to fix the department's fingerprint problems as part of her plans for change, which also include how police conduct suspect lineups and record confessions.

"It's the whole issue of identification procedures; it's extremely important," O'Toole said. "And it follows on these wrongful convictions that happened in the '80s and '90s."

Suzanne Smalley can be reached at ssmalley@globe.com.

MINUTES OF AUGUST MEETING

DATE: August 14, 2004
LOCATION: Steven's Steak House, City of Commerce
HOSTS: Susan Garcia and Craig Johnson
SECRETARY: Gina Russell-Durgin
SPEAKER: Josh Everts of Trancit Software
PROGRAM: Crime Scene PD and Easy Street Draw software
CALL TO ORDER: Business meeting, 2020 hours by President Ed Palma.

ATTENDANCE:

PAST PRESIDENTS: Dell Freeman (1973), Alan McRoberts (1991), Jim Lawson (1995), Bill Leo (1996), Clint Fullen (1998), George Durgin (2003).

Members and guests: not reported

OLD BUSINESS:

June minutes accepted as published

Second Readings:

Melan Hoang
Anna Madrid
Teresa Chin Romo
Christine Stickley
Deborah Stivers
Cindy Edison
Rick Michelson

Motion to accept: Lisa DiMeo
Second: Susan Garcia

Swear Ins by Past President Bill Leo

Clint Harris, San Diego Sheriff's Dept.
Charles Garcia, Los Angeles Sheriff's Dept.

NEW BUSINESS:

First Readings for Active Membership:

Brian James, Los Angeles Sheriff's Dept.
recommended by Michael Robinson
Georgina Scott, Los Angeles Sheriff's Dept.
recommended by Craig Johnson
Krishna Patel, Culver City Police Dept.
recommended by Elaine Sena-Brown
Sandra Ladd, Long Beach Police Dept.
recommended by Susan Garcia

Introduction of New Associate and Student Members

Anaizza Gonzales (Student)

ANNOUNCEMENTS:

Next meeting is SCAFO 13th Annual Training Seminar

ATTENDANCE DRAWING:

Lomita Armendariz

DOOR PRIZES:

Donated by Trancite Crime Scene Software, Craig and Caryn Johnson, Susan Garcia, and Rob Cheeseman.

MOTION TO ADJOURN:

Amy Adams
Second: Gina Russell-Durgin

Meeting Adjourned: 2100 hours

MINUTES OF OCTOBER MEETING

DATE: October 2, 2004
LOCATION: Embassy Suites Conference Center, Covina
HOST: Edward Palma
SECRETARY: Gina Russell-Durgin
PROGRAM: 13th Annual SCAFO Training Seminar held October 1 & 2, 2004
CALL TO ORDER: Business meeting, 1245 hours by President Ed Palma.

ATTENDANCE:

PAST PRESIDENTS: Alan McRoberts (1991), Mary Nolte (1993), Clark Fogg (1994), Bill Leo (1996), Clint Fullen (1998), Steve Tillmann (2002), George Durgin (2003).

Members and guests: not reported

OLD BUSINESS:

Second Readings:

Kristian Arojada
Karen France
Sandra Ladd
Robert Pryor
Sonya Villa

Motion to accept: George Durgin
Second: Rodgriqo Viesca

Swear Ins by Past President Bob Goss

Jesus Baez, Los Angeles Police Dept.
Stacey DeLellis, Dept. of Homeland Security
Cindy Edison, Glendale Police Dept.
Melan Hoang, Los Angeles Sheriff's Dept.
Anna Madrid, Los Angeles Police Dept.
Christine Stickley, Downey Police Dept.
Deborah Stivers, Glendale Police Dept.

NEW BUSINESS:

First Readings for Active Membership:

Margaret Adams, San Bernardino Police Dept.
recommended by Bob Goss
Cynthia Andrus, Long Beach Police Dept.
recommended by Deborah Kruele
Michelle Atta, Bellflower Police Dept.
recommended by Craig Johnson
Vanessa Scholtzman, Pasadena Police Dept.
recommended by Adam Houg
Steven Thomas, Los Angeles Sheriff's Dept.
recommended by Bill Leo
Robert Woods, San Bernardino Police Dept.
recommended by Bob Goss

Introduction of New Associate and Student Members

Erin O'Neal (Student)
Jennifer Allen (Public Defender's Office Intern)

ANNOUNCEMENTS:

Next meeting December 4 in Mission Viejo

ATTENDANCE DRAWING:

Landon Lee

DOOR PRIZES:

Donated by Armour Holding, Dick Warrington, Lynn Peavey, Mary Nolte, Burbank PD, LAPD, LASD.

MOTION TO ADJOURN:

Amy Adams
Second: Craig Johnson

Meeting Adjourned: 1309 hours

President's Message

On October 2, the regular SCAFO business meeting was held in conjunction with the 13th Annual Forensic Training Seminar that began on Friday, the first of October. The meeting was held in the adjoining room next to the large conference room at the Embassy Suites, Covina, California. The program for this meeting was to introduce the nominations for the 2005 Executive Board.

Nominations for the following offices, President, First Vice President, Second Vice President, Secretary, Sergeant of Arms, two Director positions were voted and accepted by the membership as follows:

President: Dennis Uyeda
Calif. Dept. of Justice
1st Vice President: Susan Garcia
Los Angeles Sheriff's Dept.
2nd Vice President: Gina Russell Durgin
Escondido Police Dept.
Secretary: Mari Johnson
Los Angeles Sheriff's Dept.
Sergeant of Arms: Craig Johnson
Los Angeles Sheriff's Dept.
Directors:
Marvin Spreyne
Riverside District Attorney's Office
Susannah Baker
Los Angeles Sheriff's Dept.
Chuck Russell
San Diego Sheriff's Dept.
Treasurer (two year term)
Lisa DiMeo (retired)
San Diego Sheriff's Department.

Congratulations! At the December 4 meeting come out and meet and support your 2005 Board. The December meeting is hosted by Dennis Uyeda and will be held at the Boathouse on the lake Mission Viejo, California.

Well, my year as your 2004 SCAFO President is almost up. Personally as SCAFO President it has been wonderful exciting experience. As your ambassador for this past year, you can't imagine the admiration given to SCAFO as a professional organization by the fingerprint community at large. This is demonstrated over and over again when SCAFO reaches out to invite speakers for your annual training conference they readily accept. I believe it is because SCAFO has members who actively participate in the association. For example, just in the bimonthly meetings over 450 members attend in a year and 145 attended both days at this years annual training conference.

Organized since 1937, SCAFO continues to shine primarily I think because of its original purpose for forming in the first place. Which I will repeat here under Article I of the Constitution and By! Laws:

- To raise the standard and promote the dignity of the Identification profession.
- To contribute scientific knowledge to law enforcement investigation.

- To assist in the prevention of crime.
- To promote the welfare of the public through identification programs.
- To gain further knowledge of the equipment, facilities, and assistance available or in use by various governmental and law enforcement agencies in Southern California so that each officer may have confidence in being able to obtain the answer to any problem through mutual cooperation.
- To increase the efficiency and accuracy of the work of its individual members by bringing to their attention improvements of methods, techniques, and equipment in the field of identification
- To promote the social and professional relationship of all persons engaged in any type of scientific identification and investigation work.
- To increase the value of our relationship by recognizing and promoting the desirable personal uplift that is derived from good fellowship

Each of us as members has sworn to uphold the values of the association when we became members. Individually each of us has a duty then to review this article to familiarize oneself with it. And ask oneself, "Am I promoting Article 1 and living up to the agreement I swore to do." We all have room for improvement. We all can contribute one way or another to help further our association to a new pinnacle.

As I move on to Chairman of the Board, I welcome again the opportunity to work closely with the Executive Board to help the Board in any way to bring improvements to the association that will benefit the entire membership. I welcome this challenge as I stated in the beginning of the year that I welcomed the challenge being your SCAFO President for 2004. I especially value are relationship and look forward to reacquainting our relationship in the coming year.

Again, I wish to congratulate are new members sworn at the October meeting. Our training conference this year was another successful one. The speakers were terrific. I hoped they inspired you as much as they did me. I can honestly say I walked away from that conference with more enthusiasm about my profession. Thank you all that had a hand in making the conference run as smooth as it did. If anyone has suggestions for what you would like to see and hear at our next conference in 2005 now is the time to let your Directors know.

Until we met again on Dec 4, 2004;

*Fraternally,
Ed Palma, President*

Message from the Chairman

As 2004 Chairman of the Board it has been my pleasure to serve SCAFO and to be on our Board. As my time on the Board ends and I prepare for a new assignment in Washington, DC, I want to take the time to thank Dennis Uyeda for recruiting me into SCAFO. I also want to thank the many Past Presidents who were mentors and helped me through each of the Board positions. A special thanks to Steve Tillmann who stepped up to bat when I was called to active military duty as a result of 9/11/01 and allowed me to remain as First Vice President as he stepped up to be President in my absence.

As one of the many Board Members who helped plan the 2004 SCAFO Training Seminar, we are all pleased with the many positive comments and success of this year's seminar. October 1 we had 133 participants and on October 2 we had 134 participants. We collected \$14,305 in registration fees and the cost of the seminar was \$9,254.28, leaving us with \$5,050 for future expenses.

Our speakers were terrific and well received. George Reis talked about digital photography trends and the future. Dick Warrington mesmerized everyone showing fingerprint gizmos and gadgets. Dwane Hilderbrand awakened everyone to the importance of footwear identification. David Lloyd provided additional insights into physical developer techniques. Kasey Wertheim challenged us to avoid misidentifications and errors. Our seminar ended with an exceptional panel that empowered us to remain professional and maintain our integrity, which included FBI Assistant Director Richard Garcia, CA DOJ Latent Print Analyst Felita Chapman, San Diego County Chief Deputy District Attorney Genaro Ramirez, and Kasey Wertheim.

As I will be 3,000 miles away, I will still be close at heart with my wife remaining at Escondido P.D. and active on the Board, I look forward to helping where I can, recruiting new members, and reminding everyone to buy one of those collectable SCAFO mugs with the Night Stalker's fingerprint before they are all gone!

Always and fraternally yours,
George Durgin
Chairman of the Board

"Every man owes a part of his time and money to the business or industry in which he is engaged. No man has a moral right to withhold his support from an organization that is striving to improve conditions within his sphere."

For subscription or membership information, or address corrections contact:


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\$60.00 yearly membership

- President Theodore Roosevelt, 1908



**Installation
and
Holiday Meeting
December 4, 2004**

**Boathouse on the Lake
27732 Vista Del Lago
Mission Viejo**

**Reception 1700 hours
Dinner 1800 hours**

**Host
Dennis Uyeda
California Dept. of Justice**

**R.S.V.P. (no later than November 25)
Dennis Uyeda
scafodennis@yahoo.com (916) 227-3314
or
Jim Lawson
(619) 556-1390**



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SCAFO Members:
Get "yourname@scafo.org".
See instructions on the
website's email page.

-- Upcoming Events/Schools/Seminars--

- December 4, 2004 *S.C.A.F.O. Holiday Meeting and Installation*
Dennis Uyeda
CAL-DOJ
- October 4 - 8, 2004 Basic Forensic Ridgeology (David Ashbaugh)
Los Angeles, CA
IAI Regional Education Seminar
- October 26 - 30, 2004 Comparative Science in the Daubert World
Las Vegas, NV
ABFDE
- February 21 - 26, 2005 *Standardization, Training & Professionalism* AAFS 57th Annual Meeting
New Orleans, LA
- May 22 - 26, 2005 *Since 1937* C.S.D.I.A.I.
89th Annual Educational Seminar
San Jose, CA
- March 18 - 20, 2005 Fingerprint Society Lectures
30th Annual Conference
Brighton, Sussex, UK
- August 7 - 13, 2005 International Association for Identification
Dallas, TX

Southern California Association of Fingerprint Officers

An Association for Scientific Investigation and Identification Since 1937