Interpreting the evidence

Arthur Young, a forensic chemist, works at a DNA workstation at the Acadiana Crime Lab.

Technicians at Acadiana Crime Lab work behind the scenes

Patrick Courregeres
Staff Writer

NEW IBERIA — The technicians at the Acadiana Crime Laboratory spend their days poring over evidence but never solve any crimes.

That isn’t exactly their line.

The biologists, chemists and other technicians at the New Iberia lab work more as interpreters.

“Our role is really to give a voice to a silent witness,” said crime lab director David Epstein.

The physical evidence has something to say, but it doesn’t have a voice. “That’s kind of our job,” Epstein said.

Law enforcement agencies in the eight parishes the crime lab serves gather the evidence to piece together crimes, and the crime lab’s job is often to tell the investigators what they have noticed.

The work of the crime lab technicians makes the job of prosecutors easier, said Bob Vines, an assistant district attorney with the 16th Judicial District.

“They allow us to close the gaps and bring together a lot of testimony,” he said. “A lot of times their testimony can make or break a case.”

Body fluids, clothes, fibers and glass fragments may all have a story to tell a listener trained and equipped to understand.

“Our role is to interpret evidence that the police are not prepared to interpret,” Epstein said.

Police officers are trained to locate and lift fingerprints and photograph crime scenes, but usually do not have the equipment or training for the in-depth analysis often required in criminal cases, he said.

“They have all these tools, but they’re not biologists. They’re not chemists,” Epstein said.

The crime lab technicians sequence information out of the physical evidence, and a little evidence can provide a lot of work.

“If we’re presented with a shooting victim’s shirt, it’s going to have biological stains, because they’ve been shot, and we have to document that,” Epstein said.

“One paper bag with a shirt in it could take us one or two days, and we may have to testify.”

A typical homicide case could bring upwards of 20 separate pieces of evidence for technicians to work on, he said.

“We have to look at every one of them,” Epstein said.

Vines said he needed the analysis of the crime lab for blood, firearm trajectory and hair and fiber tracks in a single recent homicide case.

“It’s incredible, the things they can do with evidence,” he said.

How the technicians look at the evidence depends on what kind of evidence investigators bring in.

The Acadiana Crime Lab has three basic divisions: Chemistry, Biology and Physical Evidence.

Detectors in this province of that body

The lab investigates all violent crimes in New Iberia Parish and works to identify the person or persons responsible.

“The lab sees about 200 to 300 cases in the lab each year,” he said.

That’s about 20 law enforcement agencies in Acadiana, including the parish’s Sheriff’s Office, and the sheriffs of Lafourche, St. Martin, St. Mary and Vermilion parishes.

The technicians are on pace to process about 10 cases this year, Epstein said.

This lab volume is tremendous, said Sheriff John Skipper.

The Iberia Parish Sheriff’s office conducted about 250 to 300 cases in the lab each year, he said.

Our goal in drugs is to get a drug case around in about three weeks,” Epstein said.

That projection all depends on the work of the lab in identifying drugs.

To every case, a message goes out in their evidence,” he said. “It’s a message that we’re not going to let them escape.”

A single case can be processed in a matter of minutes, but the sheer number of cases maintains about three workbench hours, Epstein said.

“The more we process, the more cases we can process,” he said.

For the first time, that may be a good thing, he said.

“Process cases more, get them to court faster.”
Lab

log the lab labored under before picking up a third chemist last year, he said.

Getting the tests done and reports out quickly is important for prosecution of cases, Epstein said.

"Very few judges will accept a guilty plea on a narcotics case without a test," he said.

**Biology**

The lab's biology section works mainly with DNA analysis, and with occasional species identification to help the Department of Wildlife and Fisheries nab out-of-season hunters.

The biologists take DNA samples from body fluids such as blood or semen.

Getting a clean sample can be difficult, and body fluids of two people can be mixed in violent crimes, Epstein said.

"When it's clean, it's the next best thing to a fingerprint," he said.

Fingerprints are still the simplest, more effective form of identification, Epstein said.

"Statisticians throughout the world are still arguing how unique DNA is," he said.

The chance of two people turning up with the same DNA under the sampling system the crime lab uses is about one in a trillion or higher, Epstein said.

Theoretically, it can happen, but they haven't found two people with the same DNA, he said.

The only exception to that rule is identical twins, who generally have identical DNA, Epstein said.

**Physical evidence**

While biologists and chemists work within fairly narrow confines of tasks, physical evidence is the grab bag of the lab.

"It's kind of everything else," Epstein said.

That can include gun and ammunition identification, tool marks, impressions in soft ground and trace comparisons.

Trace comparisons are the identification of small bits of evidence such as hair fibers, glass or paint.

Hebert said his office often calls on the lab for its expertise in microscopic fiber analysis.

"On any major case we have, more times than not, we get the crime lab to help," he said.

The technicians work with cartridge casings, shotgun shells, metals cut with snips and guns with serial numbers ground off, Epstein said.

"They can take a casing and compare it to a gun, and tell you whether that casing was ejected from that particular gun," Vines said.

Dave Hutchins, an assistant district attorney with the 13th Judicial District, said he has worked with the crime lab for years and commends it for the quality of the technicians' work.

"In homicide cases, quite often, their ballistics work is absolutely essential," he said.

On several occasions, he said, detectives and technicians occasionally deal with is determining whether a vehicle's headlights were on during an accident, Epstein said.

A hot filament, the wire that heats up to create light, is more stable and believable than a cold break, in a sudden impact, Epstein said.

Law enforcement agencies ask the lab to deal with such cases only three or four times a year, mostly cases involving multiple victims, he said.

The lab's cases are inconclusive, but Epstein recalled one case in which analysis of lights saved a driver from a vehicular homicide charge.

**Lab overview**

The evidence processed at the Acadia Crime Lab can be used to clear, as well as convict.

"The faster we can get the results, the faster the suspect can be exonerated," Epstein said.

"The faster someone's cleared, the faster they can get back on the case."

The 13 people working at the lab do so to get their results out in an understandable form as quickly as possible, he said.

"They like any other government agency don't want to use more people," Epstein said.

The lab is overseen by a commission made up of the sheriffs, district attorneys and one council representative from each of the parishes it serves.

Funds for the lab's about $850,000 annual budget come from a $10 share of court costs in the parishes it serves for moving violations, such as speeding, and non-felon criminal acts, such as disturbing the peace.

The lab also gets a $50 cut of court costs in the eight parishes for each DWI and drug offense, Epstein said.

The lab is independent of law enforcement agencies, and therefore not inclined to back any particular agency, he said.

"If you had to say what side the lab is on, we're on the side of the evidence," Epstein said.