

## BostonWorks Career Development and Education

# So You Want to Be...a Crime Scene Investigator

Learn what it really takes to crack the case

**W**atching too much *CSI*? The popular television drama about “crime scene investigators” makes forensic science look dangerous and sexy, but the average criminalist or crime lab analyst (as real-life crime scene investigators are called) is more science geek than gun-toting hot body.

“The biggest misconception out there is what the job really entails,” says Ronald Singer, past president of the American Association of Forensic Scientists. Most of what you see on TV, he says, is “just flat-out fiction.”

For starters, one person doesn’t handle a case all the way through from street level to the lab. The forensic science part of what you see on TV is actually two separate jobs. On-the-scene investigations are typically handled by law enforcement officers with specialized training in evidence collection and crime scene analysis. Anything beyond that is done by criminalists, white-coat-clad scientists who work in laboratories. It can be slow, exacting work.

Just ask Raksmev Derival, an analytical chemist at Calloway Laboratories in Wakefield. “How unrealistically fast those instruments spit out results is what really makes me cringe,” says Derival, who often jokes about *CSI* with her colleagues at

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in Boston. Doris Lewis, coordinator of Suffolk’s forensic science programs, has encountered her share of wide-eyed *CSI* fans. She feels obligated to caution new applicants. “It is a full four-year, rigorous science degree,” she says. “You have to be a very good student. If you have a low GPA, this is not for you.”

At a minimum, criminalists must have a bachelor’s degree in a physical science, preferably biochemistry, and have taken

courses in organic chemistry, biology, and physics. Statistical analysis is also helpful, as are psychology, criminal law, courtroom procedure, and training in expert testimony.

“You have to really like science and math,” says Singer, but even that is not

enough. There’s a lot more to the job. Crime lab analysts must have impeccable communication and presentation skills, as they are often called as expert witnesses to testify in court. They need to know how to communicate with a jury and translate technical material into everyday language. “You need to be well-read, with a broad liberal arts background,” says Singer, adding, “It pays to have a thick skin. You have to enjoy being beat up a lot by lawyers.”

Crime labs everywhere are overloaded. Due to a huge backlog of cases involving DNA testing, there is plenty of work. “It is definitely an expanding job market,” says Lewis. The competition is stiff, however, so it pays to have a solid education and some experience.

According to Singer, criminalists typically start at about \$35,000 annually and can make as much as \$70,000 with advanced training and experience.

If life science isn’t your strength, you might consider another area of forensics, advises Eve Buzawa, head of UMass-



Lowell’s criminal justice program. “We encourage students to look at areas like information technology,” she says. UMass-Lowell offers graduate certificates in forensic criminology, criminal justice technology, and nation/homeland security technology.

Prior to joining Calloway Labs, Derival did an internship at the Boston Police Department Crime Laboratory. For a class project, she learned how to shoot a gun into a simulated human head (execution style) at the Boston Police shooting range, in order to observe the blood spatter patterns that resulted. “Talk about a cool senior project,” Derival says.

She and her scientist friends love to scoff at the TV series, but it seems that even real CSIs find their work pretty hip. ■

This special advertising section was produced under the auspices of the Advertising Department of The Boston Globe and did not involve the reporting or editing staff of The Boston Globe. Editors: Spence & Sanders Communications.