Future crime sleuths can apply here

Forensic science program is being launched at TCNJ

By AMY KUPERINSKY
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EWING — Television shows like "CSI: Crime Scene Investigation" have popularized the role of the intrepid forensic scientist who uses lab expertise to solve baffling cases.

Still, undergraduate forensic training programs in the nation’s colleges and universities are hard to find, according to Thomas Brettell, director of the New Jersey State Police Forensic Science Laboratory Bureau in Hamilton.

"If there are programs like that, they’re very rare," Brettell said.

But the School of Science at The College of New Jersey is taking an unusual step in that direction. Thanks to a $225,000 federal grant, TCNJ is launching a forensic science study program to train students in procedures, including DNA testing.

Professor John Allison directs the new forensic science study program at The College of New Jersey. Allison sees a growing need for trained forensic professionals.
John Allison, former head of the mass spectrometry facility at Michigan State University and professor of chemistry, is the director of the program. He said the federal money will be used to purchase analytical equipment, like microscopes, and to advance student internships at the state police crime lab.

"It seems that about right now, every university is looking to have a forensic science program," Allison said. While the field's legitimacy has been scrutinized and disputed, the need for trained forensic professionals to work on DNA testing, for example, makes the concentration a welcome addition to the chemistry program, Allison said.

"This is a real backing in DNA analysis, thousands of cases per month," he said. "It's an interesting time right now because it's really turning into what is becoming a hard science."

Students graduating from the program will be fully qualified to perform DNA tests and testify in court on such evidence.

Forensic students at TCNJ must complete two courses of forensic chemistry and two in the criminology and justice department, in addition to the usual requirements for chemistry majors, Allison said.

"I think what we're going to have that's unique here in our program is a focus on forensic chemistry," he said. According to Allison, tests like ones used to substantiate drug evidence are routinely used in criminal investigations, yet often the how and why of their application is not articulated.

"There's almost nothing in published literature that explains how the tests work," he said. "So there's a lot of areas I think chemists can explain."

The concentration requires that students complete two to three summer internships with the state police crime lab.

According to Brettell, who will oversee the laboratory internship program, interns will use the bureau's new lab with more than 2,000 square feet of space.

"It's a beautiful new state-of-the-art facility with all types of testing besides DNA evidence," he said. The police lab is one of only four mitochondrial DNA laboratories in the country, Brettell said. The facility handles cases from outside the state as well, in partnership with the FBI, he said.

"If the student completes the three internships, they can take that anywhere in the country," Brettell said.

"The centerpiece is really the internship program," said Gall Simmons, dean of the TCNJ School of Science.

In addition to classroom analytical equipment supported by federal funds, students will use "Criminalistics: An Introduction to Forensic Science," a popular forensic textbook, which was written by Richard Saferstein, a former professor at the college's department of criminology and justice studies, said Allison. Students will be expected to attend a professional forensics meeting, like those of the American Academy of Forensic Sciences, he said.

Approximately five students will be accepted to the major concentration starting this spring. The summer internships begin this summer.

"We're starting small but we're anticipating an even greater amount of students," Simmons said.

Applicants expressed significant interest in the program, Allison said. The college's Department of Career Services announced the concentration at an informational meeting that attracted about 60 students, which shocked them because they didn't have a room big enough," he said.

"We're still deciding what the program actually is," said Allison, who added that it might include the possibility for collaboration with other school departments in interdisciplinary forensics studies. Simms said partnerships with the physics department in areas like ballistics are options for expanding the concentration.

"That's definitely in the cards," Simmons said. "This year is almost a pilot."

The federal funding was supported by Congressmen Chris Smith, R-Washington Township, and Rush Holt, D-Hopewell Township, Simmons said. "I can't tell you how happy I was. At first I thought it was a joke," she said. "One of the lovely things about congressional funding of this variety is that it is very flexible about what we can use it for," she said.

The good news comes at an especially crucial juncture in the school budget. "In these financial times it's very difficult to develop new programs," Simmons said.

Brettell, who previously served as an adjunct professor of forensics at the college's Department of Criminology and Justice Studies, said the forensics concentration has long been in the works.

"Many of my students had wanted a program like this and had been frustrated," he said. "It's really such a satisfaction. I'm looking forward to working with the students in what will be a really good program."

Allison cited Brettell's national reputation as a forensic scientist as incentive for heading up the new concentration at TCNJ.

"It's one of the reasons why I came," he said.

With the undergraduate concentration under way, a masters program in forensics seems a feasible goal, Allison said.

"It's one of the things I would like to initiate," he said.

"I'm hoping," added Brettell. "I've been trying to work with the school towards that end."