

Discover Forensic Science @ IUPUI School of Science

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Transcript

[J. Goodpaster] The definition of forensic science is just science applied to the law. So that could be any science, almost literally any science.

[A. Flores] There are people specifically to gather evidence, there's specific people to analyze the evidence, there's different kinds of evidence. Trace evidence which is very small. You have biological evidence, which is analyzing just DNA and body fluids. I think that the people understand that it's one person that does all those jobs, and it's not quite so.

[J. Goodpaster] So within chemistry, it could range from analyzing drugs to looking at trace evidence to doing toxicology, you know bodily fluid analysis. Then within biology of course there's DNA, looking at either nuclear or Mitochondrial DNA. Engineering is involved with accident reconstruction, failure analysis. Then, pathology is of course the autopsy and looking at cause of death. So, within that I would tell a student that there is a lot of opportunities, depending on your scientific area of interest.

[K. Shea] We offer two tracks, the forensic biology and the forensic chemistry. Basically, with regard to the lab, it really just depends on the student's interest, if they, or the type of evidence that they would like to work with.

The biology track would lead a student to work with DNA, blood, body fluids, that type of thing. The chemistry track would lead students to work with drugs, what they call trace evidence; they could also even get into explosives or firearms with the chemistry side of it as well.

[G. Ammerman] IUPUI, we are the home of the first forensics science program in Indiana. We really focus on the science, and we make you a scientist first before a forensic scientist. Once you get that science, then we can actually teach you how to apply that science to forensic evidence or forensic applications.

[A. Sheedy] When I did my internship, I thought it was awesome because I got to tie in everything I've learned in the classroom with real life situations, and it made it make so much more sense than just sitting in the classroom.

[N. Estrada] There's tons of places for us to work, whether you work for a government lab or if you work for a private lab, but there is always something there. As well as, I feel that we're very diverse because we are trained as chemists or biologists.

[J. Siegel] Our students here have to get a broad science background. They don't just get educated in the law, criminal justice, and forensic science. They have to take a great deal of chemistry, biology, physics,

math, computer science. So when they get out of here they can do a lot of different things. To me that's the key, you get the strong science background then there's a lot of things that you can do.

[K. Shea] We also have collectively, over 70 years of experience with our faculty members here. For example, one of our adjunct instructors is the former secret service crime lab director, but also worked for the DEA for 25 years.

[J. Bono] I spent 33 years in a forensic science laboratory environment. I not only can teach the information, or feel like I can share it, but I lived it all those years. I also want to say that in every class I go to, I'm one of the students. I learn as much from the students as they learn from me.

[E. Liszewski] Just what you learn through classroom through books can help only to a certain point, but they can actually tell you what happens specifically in a crime lab. They can describe cases. They can tell you what you will expect when you get to that point in the future.

[J. Bono] John Goodpaster worked at ATF for about five years, and his experience in the investigation of bombings is important. The director of the program, Dr. Jay Siegel, worked in a forensic science laboratory. He was in the, now the Virginia Department of Forensic Sciences.

I spent a long time in the field, and I think, again we have a blend of people who have experience, and there are some other adjuncts, who are currently teaching in the program who worked many years in the forensic science field, so that ability for a program to have people with real world experience involved in sharing information is crucial.

[A. Sheedy] The part that I really like is the faculty are very knowledgeable, and one of the things that I really liked was the class sizes. Once you get to like your sophomore and junior levels, they get really small, so you get to know the students who you're going to be with for the next three years really well.

[N. Estrada] I think it's the fact that it is still a big campus, but I feel like it's a small campus. I still get that small campus feel. I mean, I came from a really small high school so having that one-on-one capability with teachers and even advisors and other faculty is really important to me. I think the one nice thing that I have seen within our program is that they really care.

[J. Goodpaster] So, we represent a unique trichotomy, if you will, of having an academic center, here in the city of Indianapolis. As well as, strong connections to law enforcement, as well as, the private sector. So all of those have combined in one location for a pretty powerful opportunity for students to come and learn.

[J. Siegel] In Indianapolis, we have four, five crime laboratories in a city this size, hardly any other city can boast of that. We have the two public crime laboratories, the Indiana state police, and the Marion county Indianapolis police department lab. But we've also got a forensic engineering lab, a forensic DNA lab, and a forensic toxicology lab, all of whom are leading laboratories. They're not just little cottage industries, these are leading laboratories.

So, you've got this great forensic science going on, you've got the courts here, you've got the police here, you've got the urban atmosphere here. It's the best place to study forensic science.