

# Young Forensic Scientists Forum Newsletter

## Alternative Careers and Education in the Forensic Sciences

We are all familiar with the traditional careers in forensics such as criminalists, crime scene investigators, and toxicologists. However, there are many other unique careers which have a foundation in forensic science. These jobs require special education and training but offer distinctive alternatives to traditional forensic careers. The *YFSF Newsletter* will periodically feature a few of these positions. The AAFS also maintains a website on forensic careers.

*Disclaimer: Websites are provided for informational purposes only. By listing these links the Young Forensic Scientist Forum does not intend to endorse or support these entities.*

### Wildlife/Veterinary Forensics

Often criminal cases involve animal evidence. Wildlife or Veterinary forensic scientists specialize in animal evidence by categorizing skin, hair, and blood samples. Careers in this field also involve specialized work in identifying cases of animal abuse, theft, or mauling. Specialization in this area requires a basic knowledge of evidence collection/preservation, microscopy, genetics, and serology. For additional information: University of California, Davis Veterinary Forensic Laboratory; <http://www.vgl.ucdavis.edu/forensics/>.

### Forensic Engineering

Forensic Engineers specialize in many types of civil and criminal cases. When a building collapses and there is a question of structural integrity or design defects, a forensic engineer may be called to review the case. Also, forensic engineers work in crash cases involving autos and aircrafts. Anything built could have a potential defect resulting in injury and cases are often directed to engineers with a forensic background. Specialization in this area requires extensive education in the engineering sciences and knowledge of forensic principles. For additional information: National Academy of Forensic Engineers (NAFE)®; <http://www.nafe.org/>.

### Forensic Nursing

A forensic nurse can work in many roles. Many large county coroners' offices employ a forensic nurse to assist in medicolegal death investigations. Forensic nurses may also specialize in abuse cases learning how to properly collect evidence, evaluate/treat a patient, and testify in court. A forensic nurse may also serve in a criminal psychiatric ward. Specialization in this area requires a degree in nursing and additional education in the area of forensic nursing. For additional information: International Association of Forensic Nurses; <http://www.iafn.org/>.

### Forensic Accountant

A forensic accountant is a specialized accountant called to review cases of financial crime. They will be called to do forensic audits and support the investigative team in white collar crimes such as insurance/medical fraud, business fraud, and tax evasion. Specialization in this area requires a degree in accounting, CPA licensing and additional education in forensic accounting. For additional information: <http://www.acfe.com/>.

## The Internship Corner

Internships in the Forensic Sciences, featuring opportunities with government organizations

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### Central Intelligence Agency

Undergraduate and Graduate Internships

- Applications for summer 2008 employment will be accepted until November 1, 2007
- Applications for winter, spring, and fall employment should be sent 6-9 months before the desired start date
- <https://www.cia.gov/careers/student.html>

### Federal Bureau of Investigation

Honors Internship

- Application Deadline October 10, 2007
- <http://www.fbijobs.gov/231.asp>

## YFSF Newsletter cont.

Research Participation at the Federal Bureau of Investigation,  
Counterterrorism/Forensic Science Research Unit

- Applications accepted year-round
- <http://see.orau.org/ProgramDescription.aspx?Program=10063>

Federal Law Enforcement Training Center  
(Office of Homeland Security)

College Intern Program

- Applications accepted year-round, with deadlines throughout the year
- <http://www.fletc.gov/student-information/college-intern-program>

United States Secret Service

Work-Study Program

- Applications only accepted for current job openings
- [http://www.treas.gov/usss/opportunities\\_co-op.shtml](http://www.treas.gov/usss/opportunities_co-op.shtml)

US Bureau of Alcohol, Tobacco and Firearms

Student Temporary Employment Program

Student Career Experience Program (SCEP) (Formerly Co-op Program)

College Work-Study Program

- Application deadlines vary
- <http://www.atf.treas.gov/jobs/links/studentprog.htm>

## My Journey Through Forensic Science

I knew that I wanted to work in Forensic Science from the moment I read my first Nancy Drew book. In 1999, I read that West Virginia University (just 2.5 hours from my hometown) was starting a new major in Forensic Sciences. My fate was set. It has been a short journey so far, but it is one that I would like to share.

Like many students, I had no concept of what forensic science was besides what I had read in books and seen in movies. I hungered for crime scenes and intense courtroom testimony. What I found, during my first two years of college, was one of the most challenging, science based tracks at WVU. In my first two years, I took four Chemistry classes (introductory and organic), three Biology classes, three Calculus classes, two Physics classes, Statistics, Computer Science, Sociology, Psychology, and ONE Introduction to Forensic Sciences class. I agonized over my grades, the competitiveness of the application process, and how to dress for my interviews. I wondered how any major could possibly be worth all the work and stress, but I knew that once I started taking the Forensic classes, all the work would be worth it.

My sophomore year, I decided to find out more about my future job. I called up the West Virginia State Police Crime Lab and asked for volunteer and internship opportunities. The 1st Rule of internships is: Don't be afraid to ask. They directed me to a summer program (West Virginia Governor's Internship Program) which places students at summer jobs with a variety of State offices and even pays minimum wage. The 2nd Rule of internships is: Don't expect to get paid, you need the experience. Through a fortunate mix-up, I was mistakenly assigned to assist the Toxicology and Trace Evidence Sections (most forensic science majors are assigned to the Fingerprinting section). The 3rd Rule of internships is: Don't be afraid to try something new. I loved the Toxicology section, the analyses, the instruments, the interpretations, and the

laboratory setting. I called my advisor after two weeks and told him to change my major from the Crime Scene and Fingerprinting track to the Forensic Chemistry track, I had found my calling.

Once I knew that Forensic Chemistry was what I wanted to do, it made school much easier. Even though my classes were challenging (Analytical Chemistry almost broke me!) I knew that if I could just persevere, I would love my job. Fortunately, during my senior year, Dr. Suzanne Bell joined the faculty at WVU and pioneered classes in Applied Instrumental Analysis and Forensic Chemistry. She invited me to stay at WVU and perform doctoral research with her. Sometimes you just have to be in the right place at the right time. Since joining Dr. Bell's group, I have participated in three research projects, published four manuscripts, mentored four undergraduate students, and attended three AAFS Annual Meetings.

At my first AAFS meeting, I attended the Young Forensic Scientists Forum. Once again, I knew that I had found something special. After the meeting, I asked for the President's contact information (remember the 1st Rule, it has a lot of applications!) and e-mailed her a few months later. I was invited to chair the annual YFSF Poster Session under the guidance of the former chair. Being active with YFSF has opened many doors for me and I'm always looking for new members. This year, I recruited two new Poster Session chairs as I will be working on speaker recruitment for the YFSF special session.

Forensic Science educational programs are new and growing. Fortunately many of them are led by exceptional and experienced Forensic Scientists ready to help the next generation. The journey through this field is not easy and requires students to reach out to the forensic community and their mentors in order to make their own opportunities. Don't be afraid to try something new!

If you would like to know more about YFSF, please visit <http://www.aafs.org/yfsf/index.htm>. To find out more about Dr. Bell's research group at WVU, please visit [http://www.wvu.edu/~forensic\\_chem/](http://www.wvu.edu/~forensic_chem/).

—Jennifer W. Mercer, BS

### AAFS Membership Applications

For approval at the AAFS 60th Anniversary Meeting, February 18-23, 2008 in Washington, DC at the Marriott Wardman Park Hotel

Application deadline is October 1, 2007. However, early submission by July 1 is recommended for the following membership categories:

- Associate Member
- Trainee Affiliate
- Student Affiliate

Please inquire with the AAFS regarding applications, requirements, membership classification, and benefits at [www.aafs.org](http://www.aafs.org).