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Did You Know...

- In 2000, DNA crime labs received about 31,000 subject cases, an increase from almost 21,000 cases in 1999.
- All 50 states now have laws requiring DNA typing of convicted offenders.
- When two objects come in contact with each other they exchange trace evidence. Each time we enter a crime scene, we not only potentially leave some evidence behind, but we also take some with us. This is known as Locard's Principle of Exchange.

*Statistics courtesy
of The National
Criminal Justice
Reference
Service*

What's New at TCNJ...

We are pleased to announce that the Forensic Chemistry Concentration at TCNJ has been established and approved by the College. The program is open to B.S. Chemistry Majors. Completion of the concentration leads to B.S. Chemists who can pursue a wide range of careers and educations, and who also have insights into chemical aspects of the field of Forensic Science. If you are a TCNJ Chemistry Major interested in pursuing the concentration, stop by Dr. Allison's office (C100A) and pick up an information packet or check out our website.

A new internship program began this summer for TCNJ students. Five TCNJ students (biology and chemistry majors) went through a rigorous selection process to intern at the New Jersey State Police Laboratory in Hamilton, NJ. Up to ten students will be chosen for the internship program during the summer of 2005. TCNJ students are encouraged to check LIONSPRO, the college's database of internships and job opportunities, for further information in the spring.

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Looking for an Internship?

Internships allow students to apply what they learn in the classroom, gain valuable experience, and also network and meet professionals in the field. The Oak Ridge National Institute for Science and Education has an online database of internship opportunities at places such as the FBI and the Department of Homeland Security. Internships are available for K-12 students and teachers:

<http://www.ornl.gov/orise/edu/k12.htm>

Undergraduate students seeking internships should check out:

<http://www.ornl.gov/orise/edu/uggrad/ugsponsor.htm>

Graduate students seeking internships should check out:

<http://www.ornl.gov/orise/edu/grad/gradstudents.htm>

The FBI has an extensive internship program including an Honor's Internship Program:

<http://www.fbi.gov/employment/honors.htm>

FBI National Center for the Analysis of Violent Crime Internship:

<http://www.fbijobs.com/ncavc.htm>

What's New at TCNJ...(cont'd)

In summer of 2004, two Chemistry majors had participated in valuable undergraduate research at the College, supported by the MERCK-SURF program. They were Joe Schramm (Prof. Hirsh, advisor) and Matt Repp (Prof. Allison, advisor). Matt's research involved the analysis of ink used for printing on plumbing pipes- specifically the pipes used to make pipe bombs. Both students recently presented their work at a poster session at MERCK in Rahway, NJ as part of the SURF program.

This academic year, four TCNJ Chemistry students are Forensic Science Interns. It a year long paid internship that requires the interns to assist faculty with forensic research and courses. Each intern will also attend the annual meeting of the American Academy of Forensic Science (AAFS) in New Orleans in February 2005.

For Teachers and Students: .

Currently, we have more than 100 people on our mailing list who have expressed interest in forensics at TCNJ. In addition, we get requests daily from people on and off TCNJ's campus for this CSI:EWING newsletter, and we appreciate the interest beyond the campus. If you are a pre-college student or teacher, this section is for you.

Since Forensic Chemists need to have a strong background in Chemistry and Biology, it is important to start early in order to build a foundation of knowledge. If you are interested in the core sciences, take advantage of the classes offered in junior high and high school. It's never too early to start! The basics you learn in these classes will make the transition to college easier. Depending on how well you do in these classes, you may be able to test out of the 100 Level classes in college and begin taking more advanced classes.

Fun ways to incorporate Forensic Science in the Classroom:

<http://www.cyberbee.com/whodunnit/crime.html>

Fun hands-on activities using fingerprints, powders, and teeth impressions

<http://www.teachersfirst.com/lessons/forensics/finger-lesn.html>

Activities to foster the understanding the importance of fingerprints

http://www.courttv.com/forensics_curriculum/

Examine evidence to solve mysteries, and get ideas for labs and classroom projects

<http://www.geocities.com/Athens/Atrium/5924/forensicscienceactivites.htm>

Great ideas for activities using shoe prints, lip prints, fingerprints, chromatography, and handwriting analysis

Hot Websites

Interactive Sites:

<http://www.crimescene.com>

<http://www.accessexcellence.org/AE/mspot/>

The Perfect Murder?

<http://www.pbs.org/wgbh/nova/sheppard/>

CSI- Factual or Hollywood?

<http://www.angelfire.com/jazz/jboze3131/csifacts.htm>

Free Opportunities: .

There are several journals and magazines that are free upon request. There are also clubs, organizations, and societies that are free to students. These can be great sources of information for school projects, or just to help you think about career options. The web sites listed here may be a good place to start:

<http://www.forensicmag.com>

http://www.psychwatch.com/forensic_page.htm

www.medwebplus.com/subject/Forensic_Medicine/Publications

www.documents-examiner.com/newsletters.htm

.:TCNJ students- check the online databases that link through the library's homepage to find scholarly articles and peer-reviewed journals. You get free access and you can often print out a full text version of the article in PDF or HTML format. If the library does not own the journal the article is from, fill out an Inter-Library Loan request form and the library will get the article for you.

Looking for a Position in Forensic Science?

American Society of Crime Laboratory Directors:

<http://www.asclcd.org/employment.html>

Northeastern Association of Forensic Scientists:

<http://www.neafs.org/employ.htm>

American Academy of Forensic Sciences:

http://www.aafs.org/?section_id=employment&page_id=current_openings

Division of Criminal Justice:

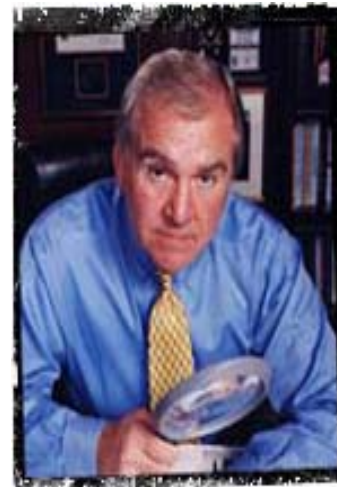
<http://www.state.nj.us/lps/dcj/jobs.htm>

International Association for Identification:

<http://www.theiai.org/jobs/index.html>

Federal Bureau of Investigation- Special Agent Job Vacancy:

<https://www.fbijobs.com/>



John Douglas, retired FBI Criminal Profiler. During his career, Douglass hunted many serial killers that plagued the citizens of the United States.

Careers in Forensic Science: CRIMINALIST

If you are interested in a career in the Forensic Sciences, many choices await you. The American Academy of Forensic Science, the largest forensic science organization in the world, classifies its members into ten major groups. In this section of this and subsequent newsletters, areas of interest will be presented. Here we present the job of CRIMINALIST.

WHO are Criminalists and WHAT do they do?

Criminalists analyze, compare, identify and examine physical evidence by objectively applying scientific techniques. This evidence can be as small as a molecule or as big as a house. Criminalists are experts in the analysis of hair, fibers, blood, body fluids and stains, alcohol, drugs, paint, glass and soil. The position requires a combination of analytical skills and practical experience. A very important part of the job is in interpreting the results in pursuit of the truth.

Criminalists (cont'd)

This may involve reconstruction of a crime scene. As expert witnesses, Criminalists frequently serve an important role in communicating results that are frequently technical in nature to non-scientists, such as judges and juries.

WHERE can you find a Criminalist?

Criminalists can be found in state, federal and private laboratories. Some also work in conjunction with medical examiners/coroners.

HOW can I become a Criminalist?

The minimum requirement is usually a bachelor's degrees in one of the basic sciences- Chemistry, Biology, Physics or a related science. In the future, a master's degree may be required. At least 24 semester hours of either Chemistry or Biology are required, and math courses are necessary. The title of the degree is not as important as the courses taken. Criminalists stay active in their discipline by continuing to take courses throughout their careers. Criminalists may become certified by the American Board of Criminalists.

For more information on Criminalistics, visit:

<http://www.crimeandclues.com/>

Search through the United States Department of Labor website for more information regarding job descriptions, salary, workplace environment, education, and job outlook for almost every career in every discipline imaginable.

<http://www.dol.gov/>

This newsletter has been brought to you by Dr. John Allison, Director of Forensic Chemistry and Stacey Kohler, Administrative Assistant. Please feel free to contact us through e-mail if you have any additional questions.

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