

## Major of the Month: Forensic Chemistry

### Career Information: Forensic Chemistry

Is your favorite T.V. show *CSI* or *Without A Trace*? Do you love chemistry? Then maybe LSSU's newest program in Forensic Chemistry is for you. According to Dr. Barbara Keller and Dr. Judy Westrick, who were instrumental in developing this program, this is a one-of-a-kind program in Michigan. In fact there are only twelve schools in the United States that offer training in forensic chemistry at the undergraduate level.

Dr. Judy Westrick, the program coordinator and professor of chemistry at LSSU, stresses the hands-on experience that our students receive. Classroom experience includes running analytical instrumentation, crime scene DNA, fingerprint study, and explosives sampling. The primary focus of Lake State's program is analysis of samples.

Dr. Westrick also plans to host seminars for local experts and police, and LSSU's students

would be invited to participate. One of these workshops will be conducted by Christine Osborne on grave excavation. Another planned workshop will investigate detecting explosives using LC/MS systems, with Stuart Oehrle, Senior Field Chemist from Waters Corp.

Due to the war on terrorism, state and federal jobs are expanding. According to Dr. Keller, Homeland Security has increased the number of samplings examined at our borders.



Dr. Judy Westrick &  
Dr. Barbara Keller,  
Chemistry Department

Forensic chemists are needed to examine the chemistry of drugs, explosives and warfare agents. Many samples



Chemistry student in  
LSSU Chemistry Lab

that were previously tested by biologists are now also tested by chemists.

Because of these recent trends and the fact that LSSU has the only Forensic Chemistry degree in Michigan, there are career opportunities for our graduates. Dr. Keller also stresses that our grads are receiving a chemistry degree and therefore are also able to apply for jobs as chemists in other industries.

For additional information on the Forensic Chemistry program contact Dr. Barbara Keller, 906-635-2438 or Dr. Judy Westrick, 906-635-2438.

**WORK DESCRIPTION:** A professional chemist who analyzes evidence that is brought in from crime scenes and reaches a conclusion based on tests run on that piece of evidence. **EDUCATION AND TRAINING:** Strong background in chemistry, instrumental analysis, and a good grounding in criminalistics are vital. LSSU's program includes 39 credits of Chemistry and 16 credits of Criminal Justice.

**PERSONAL CHARACTERISTICS:** Versatility and patience are the most often cited qualities. Forensic chemists must be able to spend hours rigorously applying analytical techniques to evidence and then defending their work in a court of law. Integrity is also an important characteristic, as the forensic chemist's position may try to be swayed in a case.

**JOB OUTLOOK:** The forensic science field is guardedly optimistic about job prospects for the future. Greater interest in the use of DNA analysis is expected to create more jobs.

**SALARY RANGE:** Start in the mid \$30,000s, with the median salary at \$50,000. Chemists at the high end are paid around \$75,000 per year.

Information from the American  
Chemical Society

# Why Study Biology?

If you are concerned about protecting our natural heritage for future generations, if you want to help educate the next generation of students or the general public, if you want to protect the health of our communities, biology may be the field for you. It's not for everyone. You'll need to be willing to work hard. You'll need a natural curiosity about the way the world works and a desire to work with living things.

Students graduating with a degree in biology from Lake Superior State University are prepared for a variety of positions or for further study in graduate or professional schools.

Our alumni are in positions with natural resource management agencies (for example, Michigan DNR, US Fish & Wildlife Service), environmental consulting companies, and research labs at universities and private companies. Other graduates are engaged in K-12 teaching or are in educational positions at nature centers

or parks. Others are doctors, dentists, clinical lab scientists and technicians or other clinical health and public health professionals.

Pre-professional studies are an important part of the biology program at LSSU. This program prepares students for entrance into medical, dental, veterinary, optometry, chiropractic, and podiatry schools.

Students work with a pre-professional advisor to custom-tailor their education. Every year we receive letters from our former students telling us how well prepared they are for their graduate studies as a result of their education at LSSU.

LSSU's program prepares you well by letting you work closely with faculty and other students in an enquiry-based atmosphere that combines theory/concepts and practical hands-on experience.

by: Dr. Gregory Zimmerman, Chair of School of Biological Sciences.

**LSSU offers a wide array of science programs for students to pursue a career or prepare for graduate studies.**

## UPCOMING EVENTS Career Awareness Week

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| Monday 10/4   | <b>OPEN HOUSE</b><br>Come and check out our new location  | 2-4pm (LBR119A)   |
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| Tuesday 10/5  | <b>WORKSHOPS</b><br>Interviewing Techniques<br>Successful Job Search Strategies<br>Resume Writing Workshop  | 9-9:30am & 3:30-4pm (LBR119A)<br>9:30-10am & 2-2:30pm (LBR119A)<br>10-11am & 2:30-3:30pm(LBR119A) |
| Wednesday 10/6  | <b>CAREER EXPLORATION</b><br>Helping you through the career decision-making process   | 9:30-10am & 1:30-2pm (LBR119A)  |
| Thursday: 10/7  | <b>CAREER FAIR</b><br>Showcasing recruiters from over 40 companies. Also, LSSU academic departments will be there to answer your career questions | 2-5pm (Cisler Center)   |
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## COUNSELOR'S



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I would like to personally invite you to come see us in our new Career Services area in the lower level of the Library. Our office provides services for those students who may be undecided about what major to choose or even concerned about what careers are available to college graduates. If you are a liberal arts or undecided student, or even a junior or senior unsure if you are in the right degree program, we have assessment tools which can help guide you in the right direction.

Most students are not exposed to many career options and seem to gravitate to jobs with which they are most familiar. They begin college and are expected to declare a major area of study. With college costs rising, no one wants to pay tuition dollars to "try-on" different degree programs.

Career Services can help our undecided students gain a sense of equilibrium. Our Career Exploration Packet is available to all students. Just stop down and begin at any time. You will be given a series of interest inventories, personality assessments, and a measure of academic capacity. Once this process is complete, you meet with a counselor and the results are interpreted. This will help to narrow your career search option.

Visit us to investigate your career potential!  
-Mary Jo Meehan, LPC



### Career Services

A division of Academic Services  
Lake Superior State University  
Library 119A  
(across from the Learning Center)  
906-635-2733  
[www.lssu.edu/counseling](http://www.lssu.edu/counseling)  
Hours: Monday-Thursday 8am-6pm  
Friday 8am-5pm