

CLINICAL LABORATORY SCIENCE

bachelor of science

COLLEGE OF LIBERAL ARTS AND SCIENCES

Medical laboratory scientists, also known as medical technologists, are the behind-the-scenes medical investigators in the health care industry. Using the latest methods and biomedical instruments, these scientists accurately analyze blood, tissue and other body fluids. Seventy percent of all medical decisions are based on the information they provide – information crucial to diagnosing, preventing, and treating diseases. In addition to lab work, medical laboratory scientists may be involved in research, test development, teaching, consulting, and supervision/management.

ADVANTAGE UIS

- **Advanced studies.** This degree prepares students for entry into Ph.D. programs, medical, pharmacy, veterinary, or other post-baccalaureate health professional programs.
- **Senior status.** In your senior year, you will be assigned to complete clinical rotations at major medical centers in central Illinois. Your closure requirement is passing a comprehensive examination covering all aspects of clinical laboratory science. By the time you graduate, you'll know what you're doing. Guaranteed.

What can I do with this degree?

Our graduates are employed as medical laboratory scientists in a wide variety of settings, including hospitals, reference and physician's office laboratories. They are also forensic scientists, lab supervisors, technical specialists, computer and laboratory information specialists, quality improvement and compliance officers, diagnostic, medical and pharmaceutical sales representatives, and faculty, to name a few.

Recent employers:

*Illinois State Police
Quest Diagnostics
SIU School of Medicine
Illinois Department of
Public Health
Memorial Medical Center
Barnes-Jewish Hospital
Eli Lilly & Co. Research Labs
Ohio State University*

Slam dunk. The CLS program has a 100% placement rate of all graduates seeking employment.

Slam dunk II. The CLS Club competes annually against other student teams in the ASCLS Illinois Student Bowl, winning the title in 2007 and taking runner-up honors in 2008.

Wise Words

Dr. Rita Kelnhoffer-Trammell,
assistant professor
SIU School of Medicine

"In my current position in the Department of Internal Medicine, I conduct independent research projects as well as mentor the research projects of orthopedic residents. The CLS program provided me with the solid background I needed to successfully complete my Ph.D. and conduct independent research."

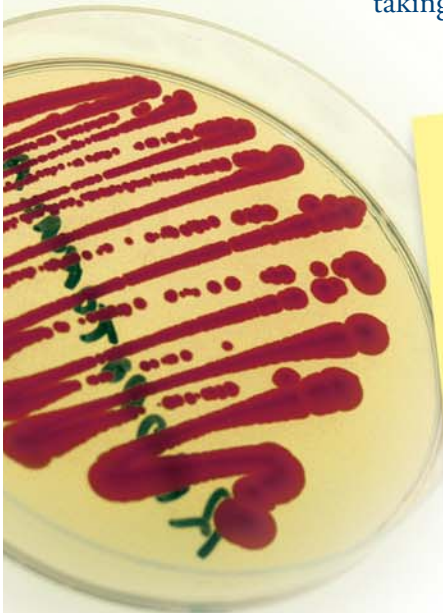
Already a Lab Tech?

You can benefit from something we call MLT to MLS Articulation. Through proficiency testing and planned academic and clinical course work, medical laboratory technicians with associate's degrees can complete the baccalaureate degree without repeating areas in which they are already proficient.

Whodunit?

It's as fascinating in real life as it's portrayed on network television. This major will prepare you for a career in forensic science.

Help solve mysteries in the state crime lab, research offices, the medical examiner's office, and more.



The clinical laboratory science program offers the B.S. degree to students interested in careers in medical laboratory science. Such careers require competence in the performance, analysis, and interpretation of medical laboratory procedures and the ability to function in problem-solving situations. Completion of the program leads to eligibility for certification by the Board of Certification (American Society of Clinical Pathology). The UIS clinical laboratory science program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 N. River Road, Suite 720, Rosemont, IL 60018, (773) 714-8880.



Faculty Wayne Gade, Linda McCown,
Emeritus Faculty William Bloemer, Paula Garrott, James Veselenak
Adjunct Faculty Jennifer England, Robbin Killam, Fritz Lower, Gilma Roncancio-Weemer, Seth Schaffer, Kim Stahl

Entrance Requirements/ Advising

The clinical laboratory science program provides for the continuing education of students who have completed the first two years of lower-division work. Prerequisite courses required for admission include 1) 90 quarter hours or 60 semester hours of lower-division courses; 2) UIS general education requirements, including comparative societies course(s) if at least one general education deficiency exists in humanities or social sciences; 3) two semesters of general chemistry; 4) one semester of organic chemistry; 5) two semesters of biological sciences, preferably at least one semester of anatomy and physiology; 6) one semester of statistics or higher mathematics; and 7) one semester of microbiology with lab. Recommended courses include genetics, cell biology and a second semester of organic chemistry.

Selections are made on a competitive basis from qualified applicants who complete the application process by February 1. Applications received after February 1 will be considered on a first come, first served basis.

Program Features/ Requirements

The clinical laboratory science program requires 63 credit hours of upper-division work. Interdisciplinary and problem-oriented, with emphasis on the basic sciences and standards of contemporary clinical laboratory science, the program includes academic and clinical experiences.

Academic work during the junior year is designed to provide a strong background in biochemistry, microbiology, and immunology. The summer and fall terms of the senior year provide theory and laboratory experience in clinical chemistry, hematology, immunohematology, and hemostasis. During the balance of the senior year, the student's clinical education encompasses rotations through the various clinical specialty areas of affiliated hospital laboratories. Clinical education is coupled with didactic courses offered at UIS.

Since the program includes laboratory work done under professional supervision, the degree candidate not only must satisfy the customary expectations of academic work but also must meet the high-quality standards demanded of a professional medical technologist/clinical laboratory scientist.

UIS Requirements

Students must complete upper division Engaged Citizenship Common Experience requirements for graduation. This includes a U.S. Communities course CLS 411 (3 hr), a Global Awareness course (3 hr), and a Speaker Series (1 hr). Six hours of the CLS clinical rotation courses fulfill the Engagement Experience and the ECCE Elective requirements.

Sample Curriculum/ Program Guide

First semester, junior year	
CHE 433 Physiological Chemistry	4 Hrs.
CHE 322 Laboratory Techniques	1 Hr.
CLS 321 Seminar in Clinical Laboratory Science	2 Hrs.
CLS 447 Medical Mycology/Parasitology/Virology	4 Hrs.
Global Awareness ECCE	3 Hrs.
	Total 14 Hrs.
Second semester, junior year	
CHE 418 Biomolecular Laboratory Methods	3 Hrs.
CLS 448 Introduction to Immunology	4 Hrs.
CLS 405 Introduction to Urinalysis	2 Hrs.

BIO 347 Medical Bacteriology	4 Hrs.
Speaker Series ECCE	1 Hr.
	Total 14 Hrs.
Summer, senior year	
CLS 401 Introduction to Clinical Chemistry	2 Hrs.
CLS 402 Intro to Hematology	2 Hrs.
CLS 403 Introduction to Immunohematology	2 Hrs.
CLS 454 Advanced Concepts in Clinical Chemistry	2 Hrs.
	Total 8 Hrs.
First semester, senior year	
CLS 404 Intro to Hemostasis	1 Hr.
CLS 451 Advanced Concepts in Immunohematology	2 Hrs.
CLS 452 Advanced Concepts in Hematology	2 Hrs.
Clinical Courses (see website)	7-10 Hrs.
	Total 12-15 Hrs.
Second semester, senior year	
CLS 411 ECCE Health Care Management	3 Hrs.
CLS 456 Clinical Correlations	2 Hrs.
Clinical Courses (see website)	7-10 Hrs.
	Total 12-15 Hrs.
	Total 63 Hrs.

Visit our website for more information on

- Admission to the CLS program
- CLS clinical courses
- UIS academic requirements
- MLT to MLS articulation

To view course descriptions

uis.edu/uiscatalog

CONTACT INFORMATION

Clinical Laboratory Science

(217) 206-6589 or cls@uis.edu
Website uis.edu/clinicallabscience

Office of Admissions
(217) 206-4847
or Toll free (888) 977-4847
admissions@uis.edu
uis.edu/admissions

IMPORTANT! — Information effective fall 2009. Subject to change without notice. The information is not to be considered final, nor does it constitute a contract between the student and UIS. See uis.edu/uiscatalog for current program requirements.

