



Jones Hall

Clinical Laboratory Science

The clinical laboratory scientist (medical technologist) performs numerous scientific laboratory procedures devised to detect subtle changes that occur in disease. Physicians use these tests to determine the diagnosis and treatment of the disease. In fact, it is estimated that 85% of all information that physicians utilize in diagnosis and treatment is attained through clinical laboratory analysis.

Employment Opportunities

Clinical laboratory science (CLS) graduates have employment opportunities in clinics, hospital, private and pharmaceutical laboratories, public health facilities, management, research, education, and sales. Through the Office of Career Services, clinical laboratory scientists graduating from YSU typically have the opportunity to interview on campus with numerous prospective employers. The placement rate for YSU CLS graduates has been 100% for the past several years and there is currently a 10–15% national vacancy rate for clinical laboratory scientists. Annual starting salaries generally meet or exceed the national average for graduating clinical laboratory scientists.

The following career paths are available to CLS graduates:

- Education
- Laboratories
 - Clinical Chemistry
 - Clinical Hematology
 - Clinical Immunology
 - Clinical Microbiology
 - Clinical Mycology
 - Clinical Parasitology
 - Immunohematology
 - Management
 - Urinalysis
 - Virology
- Public Health Facilities
- Research

- Technical Sales
- Molecular Diagnostics
- Bioterrorism
- Infectious Disease

Degree Options

As a student majoring in clinical laboratory science, you will earn the Bachelor of Science in Applied Science (BSAS) degree. The course of study at the undergraduate level is offered through the Department of Health Professions and is a “three plus one” program with students completing a pre-professional phase of clinical laboratory technology courses during the first three years. The final year of the program is completed in an accredited CLS/MT hospital program. Upon receipt of the baccalaureate degree, graduates are prepared for study on the Master and Doctoral levels in medicine, clinical chemistry, and biology or for employment in the aforementioned professions. Further, a fast track option exists for those students who have completed coursework or who have attained degrees in biology or chemistry.

Accreditation

The clinical laboratory science program of the Bitonte College of Health and Human Services is affiliated with several MT/CLS programs that are professionally accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The program meets the standards developed by the American Society of Clinical Pathologists (ASCP) and the American Society of Clinical Laboratory Science (ASCLS).

Facilities

Cushwa Hall is home to the clinical laboratory science program and houses classrooms, conference rooms, and two laboratories including a fully equipped laboratory that provides the opportunity for laboratory education that utilizes automated and semi-automated technologies. Computer assisted learning and distance learning are also incorporated into the curriculum.

Faculty

YSU maintains a faculty-student ratio of 1:19, among the lowest of the state-affiliated universities in Ohio.

The program retains its tradition as a small school in maintaining close contact between its students and faculty. The CLS program is staffed by experienced teaching professionals who have expertise in the theory and practice of the laboratory profession. Faculty or academic advisors advise all CLS students each semester.

There is a faculty-student ratio of approximately 1:15 in CLS classes. In the clinical setting, there is generally a 1:1 faculty-student ratio.

Professional and Honorary Societies

Outstanding clinical laboratory science students may be elected to campus chapters of Lambda Tau (national medical technicians honorary society) and Phi Kappa Phi (honorary society for all disciplines).

Curriculum Overview

Year 1

Introduction to Clinical Laboratory Science and Laboratory
General Chemistry 1 with Laboratory

Principles of Biology 1 with Laboratory
General Chemistry 2 with Laboratory
Principles of Biology 2 with Laboratory

Year 2

Organic Chemistry 1 with Laboratory
Microbiology with Laboratory
Organic Chemistry 2 with Laboratory
Urinalysis and Laboratory
Immunohematology and Laboratory

Year 3

Clinical Chemistry 2 and Laboratory
Clinical Hematology and Laboratory
Diagnostic Microbiology and Laboratory
Biochemistry 1 with Laboratory
Clinical Immunology & Laboratory
Molecular Biology of the Gene with Lab
Clinical Experience 1

Year 4

Clinical Experience 2
Clinical Experience 3

For more information about this program, go to

<http://bchhs.ysu.edu/dhp/dhp.html>



To obtain the Undergraduate Admissions and Financial Aid Application and/or a copy of the current Undergraduate Bulletin, please contact the Office of Admissions at:

Telephone: (877) 468-6978 330-941-2000 TDD: 330-941-1564 Fax: 330-941-3674 E-mail: enroll@ysu.edu

The Office of Admissions is open Monday and Thursday, 8:00 a.m. to 6:00 p.m., and Tuesday, Wednesday, and Friday, 8 a.m. to 5 p.m. The Office is also open every other Saturday from 9 a.m. to noon, except on holiday weekends and during term breaks