

The science of medicine — the heart of patient care.

Clinical laboratory science is an essential part of the care patients receive every day. Without the necessary lab tests provided by medical technologists, doctors could not provide the best care for their patients.

At the Franciscan Health Clinical Laboratory Science (CLS) Program in Indianapolis, we combine the heart of the Catholic health system with the science of today's complex laboratory needs.

Our students work alongside our faculty and staff to serve patients' medical needs, from routine tests to preparing for complex medical procedures.

#### CLINICAL LABORATORY SCIENCE PROGRAM

Established in 1967, the Franciscan Health Clinical Laboratory Science Program (formerly the St. Francis School of Medical Technology) prepares professional medical technologists with the theoretical and practical training to serve as active members of the health care team in clinical laboratory science. The program holds active and current accreditation status by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).

Students are trained primarily at the Indianapolis hospital but may travel to the Mooresville campus and other sites within the Franciscan Alliance system. Facilities include a student laboratory and a classroom, equipped with audiovisual capabilities and a library with the latest editions of appropriate texts for reading and research. In addition, a hospital medical library provides books from sources through the Library Loan System.

Approximately 1.7 million clinical laboratory tests are performed each year by a laboratory staff of more than 150 professionals, who respond to the needs of the hospital 24 hours a day.

# **PROFESSIONAL CERTIFICATION**

The American Society for Clinical Pathology Board of Certification (BOC) offers certification exams year round. This agency offers the credential of MLS (ASCP)CM and administers a certification maintenance program for graduates. Please refer to the ASCP website at www.ascp.org for additional information.

NAACLS asks clinical programs to make available outcomes for the past three years. Our CLS program is pleased with a 100% graduation rate for those students entering the final half of the clinical program, 100% first time pass rate on the external ASCP-BOC exam, and a 100% employment rate prior to graduation for those who sought positions. Attrition before entering the final portion of the program is 5%. Our final comprehensive exam prepares our students to score well on the exam and perform well in the laboratory. Further information concerning outcomes and benchmarks can be found on the NAACLS website at www.naacls.org.

## INTERVIEW AND ADMISSION CRITERIA

Admission is based upon a combination of requirements arranged between the clinical affiliates and Franciscan Health. These include academic and essential functional qualifications, as well as a professional attitude. Program officials evaluate the submitted application materials and overall academic performance to determine interview eligibility. Transcripts are evaluated not only for required GPAs but also for the quality of coursework and number of retakes. If it is determined that the performance is not acceptable, the student will be notified that an interview will not be offered. Deadline for submission of application materials is December 1.



Academic Performance: Both cumulative and science grade point averages must be at least 2.7 on a 4.0 scale. The science GPA is calculated using all classes taken in human biology, chemistry and math, including retakes. This level of academic performance is necessary to be considered as competitive.

Professional Qualities: Maturity, motivation, adaptability and time management

Interpersonal Skills: Letters of personal reference and interview

Other Criteria: Extracurricular activities, responsibilities and interest in the Clinical Laboratory Science Program

Students in a 3-plus-1 program at institutions affiliated with the Franciscan Health Clinical Laboratory Science Program must be eligible for a bachelor's degree from that college or university after satisfactorily completing their clinical year.

## Students with Bachelors degrees or 4+1 are given preference from these affiliated schools.

Ball State UniversityMarian UniversityUniversity of EvansvilleFranklin CollegeMiami UniversityUniversity of IndianapolisIndiana State UniversityPurdue UniversityUniversity of St. Francis

Manchester University

Students holding a bachelor's degree from a college or university not affiliated with the Franciscan Health Clinical Laboratory Science Program will be considered for admission.

Students with credits from foreign colleges and universities must have their transcripts evaluated by an agency acceptable to the Board of Certification of the American Society of Clinical Pathologists.

The Franciscan Health CLS Program does not offer advanced placement opportunities.



All students accepted into the Franciscan Health CLS Program must have pre-placement screening performed at no charge to them which includes immune status testing, a drug screen, TB testing and a background check. Proof of personal health insurance is also required.

There may be part time positions available in support positions within the laboratory. Students accepting these positions will also participate in Alverno Clinical Laboratory's orientation prior to the start of the clinical program.

# **COURSE REQUIREMENTS**

To enter the Franciscan Health Clinical Laboratory Science program in Indianapolis, each student must have a bachelor's degree or be degree-eligible upon completion of the clinical year. Prerequisites for the program include the following, all of which must be completed with a minimum grade of C- in each class:

Chemistry: 16 semester hours of credit, including organic and/or biological chemistry

Biological Science: 16 semester hours of credit, including microbiology, with a lab and immunology

Mathematics: At least one course in college-level mathematics

Students who meet the minimum prerequisites seven or more years prior to application must update their academic preparation. Please contact the Program Director to discuss available options.

# **FUNCTIONAL REQUIREMENTS**

In addition to academic qualifications, students must meet the physical and behavioral standards of the clinical year, with or without assistive devices. These essential functional requirements include:

Vision: Students should be able to discriminate shades of color and have enough visual acuity to discern shapes and sizes microscopically.

Communication: This includes oral, auditory and written skills. Students should demonstrate effective Englishlanguage skills.

Fine and Gross Motor Skills: Students should possess enough manual dexterity and sense of touch to be able to palpate veins to perform venipunctures, manipulate specimens and instruments and streak an agar plate without tearing the surface of the agar. Candidates should be able to lift and move objects, such as racks of test tubes from one counter to another.

Behavioral Attributes: Students must possess integrity, be responsible, show respect for themselves and others, work independently, show attention to detail and demonstrate a capacity for calm and reasoned judgment.

#### **CURRICULUM**

Franciscan Health defines the knowledge and technical standards for its students. Written and practical exams and evaluations are given throughout the curriculum. Progression in the program is determined by meeting program objectives and standards, and consistent interaction with the faculty ensures the student is informed of their progress.

Students participate in integrated lectures and laboratory exercises carried out in the student laboratory.

Lectures are followed by related laboratory procedures. Scheduled rotations through the following departments stress laboratory skills and instrument procedure and troubleshooting techniques:

Chemistry Hematology Microbiology
Clinical Microscopy Immunology/Serology Immunohematology

To advance the team approach to health care, students interact with a variety of health care professionals in different settings. Students also receive opportunities to observe and have hands-on experiences with technologies and methodologies currently not performed at Franciscan Health.

Students are accepted into the CLS program with the intention that the program will be completed in its entirety on this campus within the designated time frame. All avenues will be investigated to work together to provide for program completion on or near the original completion date in the event of any interruption in the delivery of instruction.

Program Mission Statement: The Clinical Laboratory Science Program is dedicated to the purpose of preparing well trained professional medical laboratory scientists with the theoretical and practical training to serve as active members of the healthcare team in the clinical laboratory.

#### **COURSE DESCRIPTIONS**

Immunohematology (4 hours): Learn the theory and practice of preparing blood for transfusion. Students learn to group, type and cross-match blood for transfusions and to detect and identify the antibodies or other causes of incompatible transfusions. Students also observe blood donor and component processing at an affiliated blood center.

Chemistry (4 hours): Emphasis is placed on learning the theory and practice of clinical biochemistry and pathophysiology. Theory is presented through formal and informal lectures. Investigation and testing of analytes as well as body systems and disease processes.

Hematology (5 hours): The study of cells and coagulation factors and the functions of blood and blood-forming organs is included in this course. Normal cells and diseases involving normal cell distribution as well as clinical diseases such as anemias and leukemias are investigated as well as testing methodologies to diagnose these conditions.

Microbiology (5 hours): Emphasis is placed on the techniques of isolation, cultural characteristics and identification of bacteria. Theory includes determination of normal flora versus possible pathogens depending upon the site being cultured. Fungi, viruses and parasites of clinical importance are covered. Antibiotic sensitivity testing is included as well as infection control procedures.

Immunology/Serology (2 hours): Theory and methods are taught for detecting antigens, antibodies and other serum substances related to infectious diseases. Normal and altered immune responses to diseases and other clinical conditions are included.

Clinical Microscopy (2 hours): This course includes physiology of renal function and the significance of cellular and chemical constituents of urine. Microscopic evaluation of other significant body fluids and clinical diagnosis are covered.

Lab Skills I (1 hour): Introduction to the role of the clinical laboratory scientist as member of the health care team is explored. Basic lab math and laboratory techniques are presented and performed. Phlebotomy experience and patient interaction skills are presented.

Lab Skills II (3 hours): Principles of research and investigative techniques are presented. Lectures, group projects, mini-teaching presentations and panel discussions introduce the student to basic concepts of management and educational theory. Students are exposed to interviewing, resume writing, job evaluation, and opportunities for clinical laboratory scientists. Using written case studies to correlate laboratory tests with disease states, students use their problem-solving skills to interpret laboratory findings within all areas of the clinical laboratory and correlate the clinical information into a possible disease or diagnosis.

Clinical Practicum (6 hours): This course includes rotations throughout all areas of the clinical laboratory following all pertinent didactic courses. Students learn time management, multi-tasking and team participation as they work alongside clinical laboratory scientists in each section. Basic operation and function of all the instrumentation as well as common trouble-shooting and problem resolution are emphasized. This course primarily focuses on practical skills, but correlation with clinical material is included as well.

#### **CALENDAR**

The clinical year begins in early to mid-July and ends in late May. First semester begins with the first day of class. Second semester begins with first day of classes after winter break. Classes are not scheduled during fall break, winter break, spring break and all observed hospital holidays.

## **POLICIES**

All students admitted to the program will receive copies of the program's policies. They are available to prospective applicants upon request. The Clinical Program only accepts the number of students who can be placed in the laboratory for clinical practicum.

# **TUITION, FEES AND SCHOLARSHIPS**

Students who plan to graduate from affiliated institutions will pay tuition required at those respective institutions. Otherwise, the tuition for the clinical year (\$3,500) will be assessed directly to the student. At least one half should be paid by December 1, with the balance due May 1. Students are required to purchase several textbooks. Textbooks generally cost between \$250 and \$300 for the clinical year.

Scholarships based on financial need and academic merit are offered throughout the year. Information and applications are available from the program director after students enroll.

#### OTHER STUDENT EXPENSES

Daily living expenses are the responsibility of the student. Transportation between clinical sites, when necessary, is the responsibility of the student. Parking is free at all clinical sites. Lab coats and other personal protective equipment are provided. The dress code during the clinical year requires Caribbean blue scrubs that are purchased and maintained by the student. Other services provided to hospital employees are available to students, including counseling services.

### **REFUND POLICY**

A student who officially withdraws from the Franciscan Health Clinical Laboratory Science Program may request a refund on paid tuition according to the school's refund policy. The refund is made within 30 days following the date the student notifies the school in writing of his or her withdrawal, or the date on which the school determines that the student has withdrawn, whichever is earlier.

The policy on determining refunds each semester is:

First Week: 90% Third Week: 60% After Fourth Week: None

Second Week: 80% Fourth Week: 40%

#### **TO LEARN MORE**

National Accrediting Agency for Clinical Laboratory Sciences 5600 N. River Road, Ste. 720 Rosemont, IL 60018 (773) 741-8880 naacls.org

American Society for Clinical Pathology Board of Certification (312) 541-4999 ascp.org Franciscan Health Indianapolis
Clinical Laboratory Science Program
8111 S. Emerson Ave.
Indianapolis, IN 46237
(317) 528-8195
FranciscanHealth.org/CLSIndy

## FRANCISCAN HEALTH

Since its founding by the Sisters of St. Francis of Perpetual Adoration in 1914, Franciscan Health has been a center of spiritual and physical healing in Central Indiana. It has grown to three hospital campuses offering a wide range of medical specialties, including internal medicine, oncology, orthopedics and cardiac and vascular care. It also includes the Plainfield Health Center, immediate care centers, visiting nurse programs, several outpatient facilities and medical practices for more than 180 providers.

Franciscan Health is part of a network of 14 hospitals owned and operated by the Franciscan Alliance, Inc. The goals of this corporate ministry include:

- · compassion for those in need
- · respect for life and the dignity of all persons
- wellness and the prevention of illness

- · restoration to health
- the acceptance of death as the final step toward wholeness

# STATEMENT OF NON-DISCRIMINATION

Franciscan Health does not discriminate on the basis of age, sex, race, color, marital status, religion, disability or national or ethnic origin in administration of its educational, recruitment or admission policies.

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