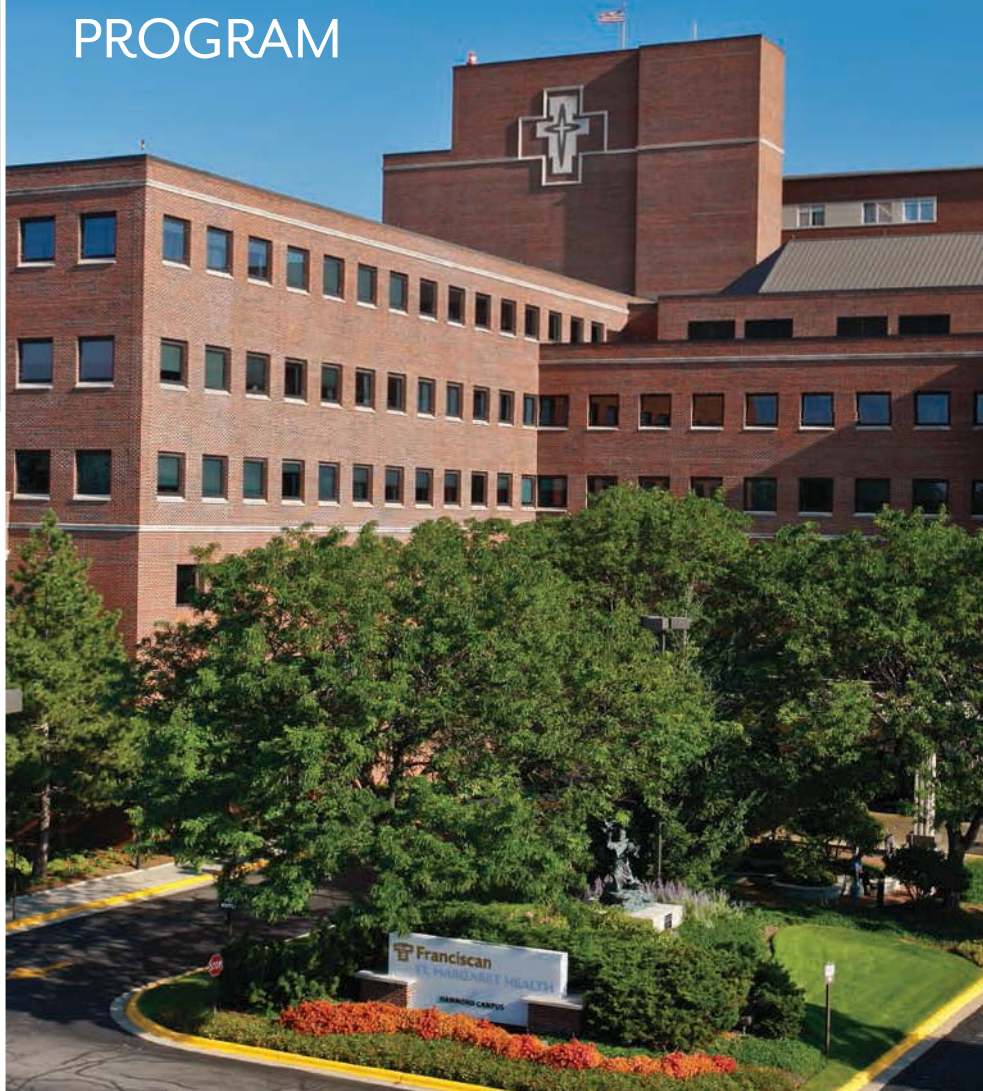


MEDICAL LABORATORY SCIENCE PROGRAM



MEDICAL LABORATORY SCIENCE PROGRAM at Franciscan St. Margaret Health



Franciscan St. Margaret Health

*in conjunction with the **Sisters of St. Francis and PCL/Alverno Clinical Laboratories**, offers a one-year internship program for Medical Laboratory Science (Medical Technology) students providing them with both didactic and clinical training. The program first opened in 1971 and has been in operation ever since. The year of internship begins in August and consists of didactic classroom learning, hands-on training in all areas of the clinical lab and some independent study.*

PROGRAM OBJECTIVE

The objective of the Franciscan St. Margaret Health Medical Laboratory Science Program is to educate competent medical laboratory scientists who have both the clinical and the theoretical knowledge to become viable participants in the allied health care field.

ACCREDITATION

The program is accredited by National Accrediting Agency for Clinical Laboratory Science (NAACLS)

5600 N. River Road • Suite 720
Rosemont, IL 60018-5119
(773) 714-8880 (phone) • (773) 714-8886 (fax)
naaccls.org

THE CLINICAL LABORATORY

The laboratory team includes pathologists, technologists, specialists, technicians, phlebotomists and support services. Together they determine the presence or absence of disease and monitor the success or progress in the treatment of diseases. They continually work together to provide high-quality health care to all they serve.

Modern medical practice depends on tests performed accurately in the laboratory. Today's field of medical laboratory science includes many new areas of technical specialization. New tests are continually developed and refined each year, keeping laboratory services in demand. Population growth, expanded medical research, emergence of new pathogens, a changing patient demographic and the increased use of diagnostic tests in preventive care all contribute to the ongoing need for sophisticated laboratory testing.

LABORATORY ADMINISTRATION

Program Director:

Rosemary Duda, MS, MT (ASCP) SM, I

A complete listing of the faculty is provided in the student handbook and is available upon request.



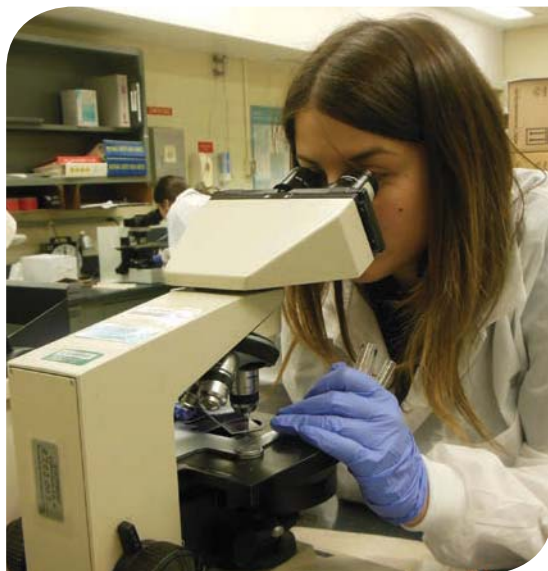
ADMISSION REQUIREMENTS

Students who satisfactorily complete at least three years (90 semester hours or 135 quarter hours) of college from an affiliated institution may apply for admission. Students who possess a baccalaureate degree may also apply.

Foreign students must pass the Educational Testing Standard's English proficiency examination (TOEFL) or an equivalent exam. Students who do not have a bachelor's degree from an American institution must have their transcripts reviewed by a recognized evaluation agency in order to verify equivalency. A list of such agencies is available from ASCP Board of Registry (visit ascp.org or call 800-267-2727).

The preclinical college credit hours must include the following minimum requirements in accordance with the NAACLS standards. Survey courses do not qualify as fulfillment of the prerequisites. Remedial math courses will not satisfy the mathematics requirement.

- **Chemistry:** A minimum of 16 semester hours or 24 quarter hours acceptable toward a major in chemistry. General chemistry, organic and/or biochemistry must be included. (It is also strongly recommended that students take at least one semester of quantitative analysis.)
- **Biology:** A minimum of 16 semester hours or 24 quarter hours acceptable toward a major in biological science or medical technology. Course work must include microbiology with a lab and immunology. The 16 hours of biology must be in human biology (not botany, entomology, etc.).
- **Mathematics:** At least three semester hours of college-level math.



Courses in anatomy, genetics, medical terminology, physiology, statistics and computer science are strongly recommended.

Applicants must possess a minimum overall GPA of 2.7 on a 4.0 scale to be considered. Applicants must also possess a minimum science GPA of 2.7 on a 4.0 scale.

It is highly recommended that applicants who have met the requirements seven or more years before application update their academic preparation. The program director will have more information on what classes should be updated.

APPLICATION

Students should apply for entry into the program no later than December 1 of the year before the clinical program begins. Application filing includes:

- Processing fee of \$20
- Completed application form
- High school transcripts to include record of SAT and/or ACT scores
- All college transcripts
- A short paragraph stating your reasons for choosing the Medical Laboratory Science (Medical Technology) field

An interview must be conducted in order for a student to be considered for a candidate for internship. A personal interview with the program director is scheduled after the student application is processed.

Interviews are granted based on the discretion of the program director and the application committee. Submitted materials will be evaluated to determine overall and science GPA, retakes and course withdrawals. Letters of reference will also be evaluated and scored by the program director to determine if an interview will be granted. Not every applicant may be granted an interview. Criteria that may exclude an interview can be: withdrawals from science courses, retakes in science courses, grades below a C or 2.0 in any given core course to include Microbiology, Immunology, Organic and Biochemistry. Interviews will be set upon the availability of the program director. If an applicant is not available to interview at the time set by the program director, it is up to the program director whether another interview time will be granted. If a candidate does not show for an interview, no other interview date will be granted.

The student must contact the program director to schedule an interview.

Students should apply for entry into the program no later than December 1 of the year before the clinical program begins.

Students are required to take advantage of the hospital's liability insurance program.

Interviews are normally conducted in October, November and December. Interviews can be set by contacting the program director via email or the phone number listed on the following page.

All application materials, including high school and college transcripts, letter of intent, application form, and \$20 application fee, must be received by the program director by December 1 in order to be eligible for consideration. All completed application and transcripts should be mailed to the program director at the address listed below.

Completed applications and transcripts should be sent to:

Rosemary Duda

Medical Laboratory Science Program Director
Franciscan St. Margaret Health
5454 Hohman Ave.
Hammond, IN 46320
(219) 932-2300 ext. 34199
Rosemary.Duda@FranciscanAlliance.org

SELECTION CRITERIA AND ACCEPTANCE

Factors considered in student selection include: high school and college grades (with science and math grades weighted heavily), pre-college test scores (such as SAT, ACT), personal interview, evaluations from college instructors, personal references, and any related work experience. Student selection is not based on race, creed, color, religion, national origin, age, sex or physical or mental handicap.

The program director will notify candidates of acceptance, usually in January. New students will then be notified when classes begin. Every new student must

receive a physical examination before the start date of the internship. Physical forms will be provided to each accepted student. All accepted students are hired into the laboratory as non-salaried PRN employees and are required to comply with all hospital and laboratory rules and regulations regarding pre-screening employee background and drug testing. They are also required to comply with all policies and procedures set forth in the employee handbook to include any health, safety, employment and infection control policies.

Because all students are hired as non-salaried employees, all those who are accepted into the program – including international students – must be eligible to work in the U.S.



FEES

Franciscan St. Margaret Health charges or is reimbursed a tuition fee from the tuition students pay to the degree-granting institution. Students will be notified of the amount from either the program director or the academic director. Students are expected to purchase required textbooks, pay assessed lab fees, liability insurance costs, and supply uniforms and shoes. They are also responsible for the laundering and care of their own uniforms.

Tuition for 4+1 students is currently \$3,000 for the year. This is subject to change without notice. Any 4+1 student is expected to pay one-half of the tuition when class begins. Any outstanding tuition must be paid by December 1 that same year. All book fees must be paid within the first 30 days of class.

Students are required to take advantage of the hospital's liability insurance program. Information is provided during the interview process. The program director will provide all accepted students with the appropriate application forms.

Students are responsible for their own living quarters, meals and transportation to and from personal residences, the hospital, the core lab and any enrichment sites.

CREDIT

Students enrolled in a 3+1 program will receive academic credit for both the clinical and the didactic portions of the internship from their degree-granting institution. The program director, as well as the academic advisor, will be able to provide the student with the number of credit hours granted for each course. For students who need to pass the program in order to receive a bachelor's degree, six-month and final grade reports will be mailed to the appropriate academic institution.



Students are responsible for their own living quarters, meals and transportation to and from personal residences, the hospital, lab and sites.

Students seeking financial aid are encouraged to contact their college or university for assistance.



CONDUCT

Students must adhere to the rules and regulations of both Franciscan St. Margaret Health and PCL/Alverno. The program's initial 12 weeks are considered a probationary period for all students. Students are expected to adhere to all policies regarding conduct, dress code, safety, and confidentiality for the entire time they are in the internship program.

REASONS FOR DISMISSAL OR PROBATION

Students are on probation during their first 12 weeks. During this time, any student who fails to maintain a 2.0 GPA in either the clinical or didactic area will be dismissed. After that time, any student who fails to maintain a 2.0 GPA will be counseled and placed on academic probation. Failure to improve the GPA is cause for dismissal.

Causes for dismissal concerning conduct include drinking, intoxication, gambling or drug abuse on hospital or laboratory premises; falsification in areas of responsibility; excessive absenteeism or tardiness; acts of insubordination; cheating; any act that may endanger others; HIPAA violations and the use of another person's badge to clock in or out for attendance.

Students dismissed for either failing grades or conduct will not be permitted to re-enter the program.

APPEALS PROCESS

Any dismissal may be appealed to the Appeals Committee. A committee consisting of the program director, the director of education, other Allied health students and two faculty members each, from the hospital and the academic institution, will determine the course of action if a grievance is filed and cannot be resolved between the program director and the student. A complete appeals process is outlined in the student handbook.

FINANCIAL AID

Franciscan St. Margaret Health does not lend financial aid to any student enrolled in the internship program. Students seeking financial aid are encouraged to contact their college or university for assistance.

REFUND POLICY

The refund deadline is three months after the start of class. Franciscan St. Margaret Health will reimburse 75 percent of any tuition paid if a student withdraws within the first 4 weeks of class. It will reimburse 50 percent of any tuition if withdrawal is within the first 8 weeks of class and 25 percent if withdrawal is within the first 12 weeks of class. There is no refund available for the cost of books. If a student does decide to withdraw from class within the first 12 weeks of class, he or she is still responsible for paying the entire cost of books. Students who are dismissed either for failing grades or conduct after the first 12 weeks will receive no refund. Refunds of tuition paid by the student to an affiliated university or college will conform to that institution's policy.



During the course of didactic and clinical training, written and practical exams will be given at frequent intervals.

INSTRUCTION

Students normally begin the program in early August and attend class through the following June. Classes are currently conducted Monday through Friday from 7 a.m. to 3:30 p.m. Students will be notified by the program director if these hours change. Two days a week are devoted to didactic instruction. The program's didactic portion includes approximately 300 one-hour lectures presented by a qualified faculty of certified technologists, managers, supervisors and other specialists. Normal scheduling consists of eight to ten lectures per week.

Scheduled rotations through the various laboratory sections include training in:

- | | |
|--------------------|-----------------------|
| ■ Microbiology | ■ Serology/Immunology |
| ■ Chemistry | ■ Urinalysis |
| ■ Hematology | ■ Molecular Biology |
| ■ Immunohematology | ■ Phlebotomy |

During the course of both didactic and clinical training, written and practical exams will be given at frequent intervals.

Instruction takes place at two primary facilities: Franciscan St. Margaret Health's Hammond Campus at 5454 Hohman Ave. in Hammond, and at PCL/Alverno Clinical Laboratories, the core facility at 2434 Interstate Plaza (located off Indianapolis Boulevard) in Hammond. Between the two sites, approximately 4 million lab tests are performed each year.

Students may also spend some enrichment time at one of the other Franciscan Alliance hospital sites. Students are required to provide their own transportation between facilities on any given day.

Upon successful completion of the internship program, students are awarded a certificate of completion, which is not contingent upon the passing of any national certifying exam.

Upon successful completion of the program, students are eligible for, and expected to take, a certification examination offered by a recognized agency.



COURSE DESCRIPTIONS

Immunohematology: Topics include the basic principles of the immune system as it relates to red cells and the inheritance of blood groups. All the major blood groups systems are taught and students learn how to group, type and crossmatch blood for transfusions. They also learn compatibility testing, antibody identification, donor requirements and blood component preparation and therapy.

Chemistry: The theory of clinical biochemistry and how it affects the body are taught in this discipline. Students perform various procedures on automated machines that include electrolyte testing, protein determination, organ function and enzymology. They are also versed in electrophoresis, toxicology and therapeutic drug monitoring.

Microbiology: Pathogenicity as well as isolation and cultivation of microorganisms, including bacteriology, virology and parasitology, are studied. Also, basic cultivation and isolation techniques, including media usage, are taught. Emphasis is placed on correlation of disease states with pathogens through the use of case studies. Biochemical and susceptibility patterns of bacteria are also emphasized.

Hematology: Composition and function of blood and blood components is studied. Principles of various hematology procedures and in-depth coverage of anemias, leukemias, and other blood dyscrasias are emphasized. Students perform manual and automated procedures to identify, count and differentiate cellular components and coagulation factors. Hematology study includes molecular biology, including basic principles of technique and usage. Recognition of both normal and abnormal cells in all cell lines is also taught.

Urinalysis: Emphasis is placed on renal physiology, including kidney function in health and disease. Microscopic examination of urine and other body fluids is taught with emphasis on cellular components and their presence in disease states. Chemical and physical testing of fluids is also studied.



Upon successful completion of the program, students are eligible for, and expected to take, a certification examination offered by a recognized agency.

Documentation or proof of various immunization and antibody titers may be required.

Immunology/Serology: Topics include the basic theoretical concept of the body's immune system and how it works in both healthy and compromised patients. B and T cell development is taught as well as techniques used to determine the presence of antigens, antibodies and other components of the immune system. Case studies are presented to determine the body's reaction to different antigenic challenges. Molecular biology, including cell markers and how they are used to determine the presence/absence of disease, is discussed.



Molecular Biology: Topics include the basic principles of PCR and flow cytometry. The use of immunophenotyping to aid in the diagnosis of leukemia and lymphomas is discussed. Scatter plots and case studies are presented to enforce concepts and enhance student's understanding of the role of molecular biology in the diagnosis of disease.

Special Topics: This portion of the curriculum encompasses several components. Management lectures cover topics such as professionalism, ethics, regulatory issues, reimbursements, research design,

budgeting, point of care, HIPAA, quality assurance, LIS and personnel standards, to name a few. Education lectures cover topics such as writing and following objectives and the basic techniques of teaching and learning. Each student is also expected to present one lecture on a relevant, newsworthy, medical topic that is approved by the program director.

CREDITS

Each affiliated university is responsible for granting credits to contracted students and for assigning credit hours to courses. Each university or college may differ slightly in the number of credit hours assigned to each course. A list of granted credit hours for each contracted university is available through the program director and the university or college.

The Franciscan St. Margaret Health MLS Program is affiliated with these universities and colleges for the 3+1 program:

Ball State University	Purdue University-Calumet Campus
Eastern Illinois University	Purdue University-Lafayette Campus
Indiana State University	Saint Joseph's College
Indiana Wesleyan University	University of St. Francis-Joliet, IL
Manchester University	

Acceptance preference is given to students from an affiliated university or college.

ADVANCED PLACEMENT

Franciscan St. Margaret Health's Medical Laboratory Science Program does not grant advanced placement for any student coming into the internship program.

ATTENDANCE

Attendance and tardiness policies are outlined in the student handbook. Students must attend all weeks of clinical training. Any questions concerning attendance should be directed to the program director.

HEALTH PROGRAM

Students should be in good health upon entering the program. Students are required to have a physical given by their personal physician before entering the program. Documentation or proof of various immunization and antibody titers may be required. If documentation or acceptable titers are not provided, the student will be asked to obtain immunizations in accordance with any pre-employment requirements. Franciscan St. Margaret Health does reserve the right to require all students to participate in a mandatory flu vaccination program set forth by the Franciscan Alliance Corporation unless otherwise noted unsafe for the student to do so by a licensed physician. In that case, students will be required to comply with regulations set forth by the Franciscan Alliance organization when in any areas of patient contact.

Students must provide their own medical and hospitalization insurance coverage while in the program, and must show proof of medical insurance upon admission to the program.



The internship and curriculum require prior satisfactory academic skills, as well as non-academic skills.

ESSENTIAL FUNCTIONS

The Medical Laboratory Science internship and curriculum not only require prior satisfactory academic skills, but also non-academic skills that are essential to meet the program's standards for completion. These essential components entail the cognitive, physical and behavioral abilities that are recognized by the faculty and personnel involved in training the students as important for the development of a professional and competent medical technologist.

The essential functions are as follows:

- The student must have the ability to perform testing procedure on all patient specimens using both macroscopic and microscopic techniques. He/she must be able to distinguish cellular components and differentiate color contrast when viewing different stains.
- The student must have the ability to comprehend material presented during the curriculum, including both didactic and clinical material. The student must have the ability to make reasonable judgments and decisions based upon the information given. He/she must be able to make subjective judgments and decisions knowing that mistakes may compromise patient care.
- The student must have the ability to comprehend and follow all safety precautions and regulations, including those of universal precautions, in accordance with specimen processing and handling.
- The student must have adequate dexterity to handle and operate instruments carefully and safely, to perform venipuncture procedures, to do manual pipetting techniques, to handle glassware and specimens safely, and to load individual tubes onto an autoanalyzer.
- The student must display responsibility in his/her learning environment, including such things as attendance, mode of dress, patient confidentiality and appropriate behavior toward other classmates and instructors. The student must show respect for others and be courteous in both word and deed.
- The student must demonstrate emotional stability and the ability to work efficiently under stressful situations. He/she must be able to work under time constraints, perform tasks repeatedly, if necessary, and concentrate in distracting situations.
- The student must demonstrate the ability to effectively communicate in English, both verbal and written patient information, to the staff and physicians.

- The student must have the ability to lift and move objects of 20 pounds and must be able to move freely from one location to another.
- The student must have a sense of touch and temperature discrimination.

These essentials will be evaluated by the following methods:

1. A complete physical to be completed by a physician
2. Observance and written evaluations by each of the clinical instructors, references and the program director
3. A self evaluation form filled out by the student
4. Safety checklists
5. Color blindness testing

OUTCOME ASSESSMENTS

We look at program outcomes over the last five years. The program at Franciscan St. Margaret Health has a 100 percent graduation rate, 100 percent pass rate on the certification exam, and a 100 percent employment rate prior to graduation for those who sought employment. Our reviews and final exams help to prepare students to perform well on the certification exam.

Many of our recent graduates have advanced to take on leadership roles at Alverno Clinical Laboratories. These positions include general lab supervisor at the core lab, system educational coordinator, and system point of care manager, just to name a few.

SPECIAL NOTE

The contents of this brochure are subject to change without notice and do not guarantee that a student is eligible for admission into the program. Franciscan St. Margaret Health and/or PCL/Alverno Clinical Laboratory is not responsible for any misinterpretation of the program's requirements or for any provision that might arise as a result of errors in preparation of this brochure.

Our Mission

Continuing Christ's Ministry
in our Franciscan Tradition



inspiring health

 **Franciscan**
ST. MARGARET HEALTH

5454 Hohman Avenue
Hammond, Indiana 46320
FranciscanAlliance.org/Hammond

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