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Description generated with high confidence

**School of Medical Laboratory Science**

**Student Handbook**

*This handbook is available as a hard copy - mailed upon request.*

Enrolled students are team members of Tampa General Hospital. Team members must abide by the hospital, laboratory, and school policies and procedures.

*Please note that the University of South Florida is in the process of updating the title from Medical Technology to Medical Laboratory Science if you notice inconsistencies throughout the handbook.*

**Medical Laboratory Science**

Medical Laboratory Science offers exciting possibilities for those who want a career in the medical field as a vital part of the health care team. The profession began when physicians found it difficult to manage laboratory duties and devote adequate time to teaching and patients. In an attempt to solve the dilemma, they began training assistants to perform the laboratory examinations; thus evolved the medical technologist now termed medical laboratory scientist.

**NAACLS (National Accrediting Agency for Clinical Laboratory Science) Description of the Medical Laboratory Scientist Profession**

The medical laboratory scientist is qualified by academic and applied science education to provide service and research in clinical laboratory science and related areas in rapidly changing and dynamic healthcare delivery systems. Medical laboratory scientists perform, develop, evaluate, correlate and assure accuracy and validity of laboratory information; direct and supervise clinical laboratory resources and operations; and collaborate in the diagnosis and treatment of patients. The medical laboratory scientist has diverse and multi‐level functions in the principles, methodologies and performance of assays; problem‐solving; troubleshooting techniques; interpretation and evaluation of clinical procedures and results; statistical approaches to data evaluation; principles and practices of quality assurance/quality improvement; and continuous assessment of laboratory services for all major areas practiced in the contemporary clinical laboratory.

Medical laboratory scientists possess the skills necessary for financial, operations, marketing, and human resource management of the clinical laboratory. Medical laboratory scientists practice independently and collaboratively, being responsible for their own actions, as defined by the profession. They have the requisite knowledge and skills to educate laboratory professionals, other health care professionals, and others in laboratory practice as well as the public.

The ability to relate to people, a capacity for calm and reasoned judgment and a demonstration of commitment to the patient are essential qualities. Communications skills extend to consultative interactions with members of the healthcare team, external relations, customer service and patient education.

Medical laboratory scientists demonstrate ethical and moral attitudes and principles that are necessary for gaining and maintaining the confidence of patients, professional associates, and the community.

**Program Overview**

Tampa General Hospital’s School of Medical Laboratory Science, established in 1957, is operated by the Department of Pathology and is fully accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and is a licensed training program by the Florida Department of Health (FDOH). Facilities for the school include didactic materials, audiovisual equipment, educational computer programs, certification study guides, a student library containing the latest editions of appropriate textbooks and more for additional reading and research, a classroom, and the hospital’s laboratory and all of its resources. The hospital’s Medical Library is also available for student use. The hospital’s laboratory is equipped with the most state-of-the art equipment available anywhere and generates hundreds of thousands of patient tests per year.

In addition to the routine lab tests offered in most labs, Tampa General Hospital performs an array of specialty testing including special coagulation, mycology, and the esoteric department with an expansive and ever-expanding menu of molecular biology testing. Dr. Ray Widen established the esoteric department encompassing molecular, flow cytometry, and research and development. The research and development department participates in clinical studies and trials, as well as develop, validate, and implement new cutting edge testing. Students attending Tampa General Hospital’s School of Medical Laboratory Science will be exposed to the latest methodologies and learn from some of the foremost experts in the field of laboratory medicine. Innovation is something TGH prides itself in.

Students shall learn the (pre-analytical) ordering, collecting, processing, (analytical) analyzing of specimens, (post analytical) reporting, and interpretation of results. The first week encompasses orientation including safety and phlebotomy. During the course of the year students will rotate through the clinical laboratory in chemistry, immunology, hematology, coagulation, urinalysis, body fluids, immunohematology, microbiology, flow cytometry, and molecular. In each department students will learn laboratory operations including regulations, principals and methodologies, performing assays, problem solving, trouble shooting techniques, instrumentation, interpretation and evaluation of clinical procedures and results, communicating with other members of the healthcare team, principals and practices of quality assessment, assurance, and improvement, and continuous assessment of laboratory services. Students will also spend time each day in lecture or for an assessment in the various subjects.

**Mission Statement**

As the region’s leading safety net hospital, Tampa General is committed to providing area residents with excellent and compassionate health care ranging from the simplest to the most complex medical services. The vision of TGH is to be the safest and most innovative academic health system in America. As we work toward this vision, our journey is guided by five core values: integrity, compassion, accountability, excellence, and courage. The TGH team works with a shared purpose: We heal. We teach. We innovate. Care for everyone. Everyday. In addition, the School of Medical Laboratory Science is committed to provide its students with most current, clinically relevant theoretical and practical knowledge necessary to practice medical laboratory science. We are driven by the belief that by graduating competent, quality minded, ethical professionals, we will enhance patient safety in the community we serve and perpetuate the highest standards in the field of medical laboratory science.

**Goals**

* To equip our students with the education necessary to be part of a high-performance laboratory team that provides accurate and timely laboratory results to aide in the diagnosis and treatment of disease and maintenance of health.
* To provide students with the skills necessary to succeed in the medical laboratory and allied health field.
* To instill the practice of quality assurance and quality improvement in day to day laboratory performance.
* To provide an atmosphere that promotes courteous and professional communication between co-workers, students, patients and all members of the healthcare team.
* To encourage professional curiosity and instill the value of continuing education for growth and maintenance of professional competence.
* To provide our community with dedicated and highly skilled laboratory professionals.
* To promote ethical behavior as a foundation for leadership and education.
* To inspire our students to educate future laboratorians.
* To instill in our students that patient’s come first in all that we do.

**General Objectives and Competencies**

**Program Objectives for the Cognitive and Psychomotor domains.**

Specific cognitive objectives and checklists for psychomotor skills for each rotation will be found in the rotation syllabi. Specific objectives for each series of lectures will be provided.

**Program Objectives for the Affective Domain**

During the course of the program, the student will:

* Adhere to and respect safety policies and procedures.
* Adhere to and respect school, laboratory, and hospital policies and procedures.
* Exhibit empathy for others.
* Respect and relate well with other members of the healthcare team and to patients.
* Demonstrate professional communication skills with everyone.
* Initiate pursuing more opportunities to gain clinical and professional experience.
* Demonstrate a desire to achieve objectives and internalize program goals.
* Demonstrate integrity by doing the right thing.
* Exhibit professionalism.
* Accepts ownership for the outcomes resulting from their choices, behaviors, and actions.
* Practice upholding and protecting the privacy of patients and all other confidential information.
* Demonstrate interacting with dignity and respect
* Cooperate, maintain a positive attitude, and is attentive to instructors.
* Accepts constructive criticism.
* Exhibits emotional control.
* Follows instructions.
* Demonstrate ethical behavior.

**Competency Statement**

The role of the Medical Laboratory Scientist is that of a broad based health professional. Upon completion of the Medical Laboratory Science program, the student will have achieved career entry competence in:

* Pre-analytical, analytical, and post analytical components of testing
* Orders, patient preparation, and proper identification
* Specimen collection, processing, and handling.
* General laboratory operations including safety, management, and governmental regulations and

standards.

* Supervising technicians, students, and other clinical laboratory support personnel
* Following policies and understanding testing procedures and methodologies
* Applying statistical approaches to data evaluation
* Understanding the aspects of quality assurance including quality control, proficiency testing, and

staff competency

* Interpreting, correlating, analyzing, and reporting test results.
* Record and specimen retention
* Maintaining, troubleshooting, and problem-solving including issues with inaccurate results and

instrumentation.

* Providing an atmosphere that promotes courteous and professional communication with the

patients, the public, and all members of the healthcare team.

* Professionalism
* Processes of updating and validating new assays.
* Continued professional development.
* Performing routine, non-routine, more difficult and complex testing.
* Serving as a consultant in test selection and result interpretation.
* Methods to train and educate.
* Clinical research and new assays
* Principals and practices of laboratory leadership

**Admission Requirements**

Tampa General Hospital maintains an affiliation agreement with the University of South Florida to provide the clinical internship portion of a baccalaureate degree in Medical Laboratory Science (Medical Technology). To be eligible for admission to our program, students from our academic affiliate must have completed all the required prerequisite coursework toward the baccalaureate degree. (Defined as required courses for the Medical Technology Internship.) We provide the senior year of a baccalaureate degree only for those students from the University of South Florida with a conditional letter of eligibility. Non-affiliated students must have completed all the required prerequisite coursework and possess a baccalaureate degree from an accredited college or university. Please note, we are unable to offer advanced placement.

Medical Laboratory Science students must possess the ability to perform certain tasks – please refer to the essential functions.

**Prerequisite Coursework**

**Biological Sciences** - A minimum of 16 semester hours or 24 quarter hours of biological sciences form a regionally accredited college/university. **Including microbiology and immunology.**

Recommended courses include: Medical Microbiology, Parasitology, Mycology, and Virology. Survey courses are not acceptable.

**Chemistry:** A minimum of 16 semester hours (24 quarter hours) of chemistry from a regionally accredited college/university including organic or biochemistry.

Recommended courses include: Physics, General Chemistry, Organic Chemistry, and Biochemistry.

**Mathematics** - One (1) semester or one (1) quarter of College Mathematics. Recommended courses include: Algebra, Calculus, and/or Statistics.

To be considered, an overall grade point average of 2.7 (out of 4.0) or better and a science grade point average of > 2.7 (out of 4.0) is recommended. A grade of “C” or higher in each required science course is recommended in order to be competitive in the application process. Per USF course catalog for Medical Technology “students admitted to a clinical program in recent years have had a mean GPA of 3.3 or higher.” Applicants with foreign degrees must have their transcripts evaluated by an acceptable agency. Contact the program director for details.

Each applicant will be considered on an individual basis. Please note: Tampa General Hospital complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex. Tampa General Hospital does not exclude people or treat them differently because of race, color, national origin, age, disability, sex, sexual orientation, gender identity or expression or source of payment.

University of South Florida student’s attaining a baccalaureate degree of Medical Technology please refer to required courses for the Medical Technology Internship. (which can be found <http://chemistry.usf.edu/undergraduate/majors/medical/> )

**Application & Selection Process**

The deadline is Dec. 31st prior to the July/August of class beginning. A complete application includes items listed below. Those applications not completed prior to the deadline will not be considered. It is the applicant’s responsibility to see that all required materials are forwarded as necessary.

1. Documents may be submitted to: Tampa General Hospital

School of Medical Laboratory Science: Attn Michelle Brilhart

P.O Box 1289

Tampa, Fl 33601

Or documents may be emailed to [mbrilhart@tgh.org](mailto:mbrilhart@tgh.org) but, you must follow up to ensure they are received.

1. Complete the application form found: <https://www.tgh.org/health-professionals/school-medical-laboratory-science/application-selection-process>
2. Request that an official transcript from all colleges and universities be submitted directly to TGH. Transcripts of all college credits must be submitted by the universities bearing the college seal. Transcripts submitted by students will not be accepted. Applicants with foreign degrees must have their transcripts evaluated by an acceptable agency. Contact the program director for details.
3. At least two letters of recommendation must be submitted from the source, if professors preferably science related.
4. A $25.00 application fee. Must be check or money order payable to Tampa General Hospital Foundation *with School of MLS in the memo*. We are unable to accept cash.

After acceptance Team Member Health must clear that you are able to perform the essential functions defined by the Americans with Disabilities Acts Jobs Demand List (listed under section “Essential Functions”)

Factors of consideration in the selection process include GPA (science & overall), recommendations, volunteer service, work experience, number of repeated classes, grades of D and F, and the interview. Only select students will be offered an interview. Interviews are conducted by a minimum of three members of the selection committee.

The selection committee consists of the program director, faculty, and or members of the advisory committee. The interview is used as a means to assess each applicant’s motivation, goals, communication skills, professional conduct, interpersonal skills, and a realistic concept of commitment to the medical laboratory science profession.

After all applications are reviewed and the selected applicants have been interviewed, the selection committee chooses six of the best candidates for initial admission and creates a pool of alternate candidates. In the case of equal applicant status, applicants from the affiliated universities are considered first. On March 1st applicants are notified of acceptance.

After acceptance, students are required to complete a required health screening and urine drug screening through Team Member Health prior to orientation. Tampa General Hospital must abide by legal vaccination requirements which applies to students - please reach out to the program director with inquires, questions, or concerns . Students who fail the health and/or drug screening will be dismissed from the program. Tampa General Hospital complies with applicable Federal civil rights laws and does not discriminate on the basis of race, color, national origin, age, disability, or sex. Tampa General Hospital does not exclude people or treat them differently because of race, color, national origin, age, disability, sex, sexual orientation, gender identity or expression or source of payment.

**Attendance & Time Off**

**Holidays and Vacations:**

Students will only be entitled to official hospital holidays in the same manner as they apply to laboratory personnel. Holidays include Labor Day, Memorial Day, Fourth of July, Thanksgiving, Christmas, and New Years. Students are also given a two-week winter break and a one week spring break. (please understand common terms for the dates where used)

**General Time Off**

In addition, students are allotted a maximum of 5 days (40 hours) of general time to be used as sick time or scheduled leave. For scheduled time off, a written request must be submitted and approved by clinical rotation’s designated faculty and the program director. Any missed time beyond the allotted 5 days must be made up (in the department that was affected) prior to graduation in order to graduate or receive a certificate. Due to the nature and schedule of our program we may not be able to accommodate extended periods of make-up time. Attendance will be carefully monitored and tardy time or leaving early will be deducted from the allotted 5 days. In the event a student is unable to complete an 8 hour shift anything less than 6 hours is considered an absence. Students are expected to be in their assigned rotation and ready at the start time specified for that rotation. This is in keeping with our mission to graduate professional laboratory personnel. Should an unscheduled absence, or “calling out” become necessary, please notify the laboratory by calling (813) 844 7284 (844-PATH) before you are scheduled to report. Identify yourself as a student, and ask to be transferred to the “person in charge”, supervisor, or faculty of the assigned rotation and report your absence. A message must be left with the program director at (813) 844 - 7098. A copy of your message will be posted with the program director and the rotation department in which you are scheduled. You MUST call in any time you will be absent unless prior approval was obtained. The same protocol is applies to tardiness >15 minutes.

In the event of a hurricane students are only expected during normal operation. Missed days will be made up at the discretion of the program director and faculty.

Students must abide by Tampa General Hospital’s policy pertaining to tardiness. Per TGH policy tardiness is defined: team members are considered tardy if they are not at their work area, in uniform, and prepared to work at the start of the scheduled time.

Disciplinary action results first in verbal warning, followed by a written warning, and lastly possible expulsion from the program upon discretion of the program director and faculty, please refer to dismissal section.

**Breaks and Lunches**

During the day, students will be allowed a break during the morning and/or afternoon depending on the department. Students are to follow the break protocol of the department. Students must meet with designated faculty at the beginning of the rotation to find out their time allotments. When leaving the department for any reason, you must inform your instructor(s). Punctuality is expected and students should abide by the time allotment. Abuse of breaks will result in disciplinary action. As Tampa General Hospital Team Members; professionalism is expected in areas outside of the laboratory and on hospital grounds. Students are ***NOT*** permitted to break in guest waiting areas. Delinquency will result in an immediate written warning.

NOTE: EATING AND DRINKING ARE STRICTLY PROHIBITED IN THE TECHNICAL AREAS OF THE LABORATORY. Smoking is prohibited on the hospital grounds except for outside reserved smoking areas.

**Certification & Licensure**

Upon successful completion of the clinical internship, students are granted a certificate from the hospital (university-affiliated students are also granted credits and/or a baccalaureate degree from the university in Medical Laboratory Science.) They are then eligible to take national certification exams offered by the American Society of Clinical Pathologists (ASCP), or the American Association of Bioanalysts (AAB.) Students must pass one of said certification exams to meet employment requirements in Florida. The Florida Department of Health requires licensure as a Medical Laboratory Scientist. Once certified students are then eligible to apply for licensure as a Medical Laboratory Scientist in the State of Florida. Awarding the certificate is not contingent upon external licensure or passing certification examination.

It is the responsibility of each student to make every effort to complete the full internship. For students from affiliated universities, academic credit is awarded ONLY upon completion of the entire course of study. Students must successfully complete the entire internship in order to receive a certificate from Tampa General Hospital’s School of Medical Laboratory Science. For attrition rate calculations the “final half” of the year begins the 28th week.

Tampa General Hospital’s School of Medical Laboratory Science maintains accreditation with the National Accrediting Agency for Clinical Laboratory Science (NAACLS.) The program director is responsible for ensuring standards are met and maintaining accreditation.

**National Accrediting Agency for Clinical Laboratory Science (NAACLS)**

5600 N River Rd.

Suite 720

Rosemont, IL 60018-5119

Phone: (773) 714 8880

Fax: (773) 714-8886

[www.naacls.org](http://www.naacls.org)

**Florida Department of Health**

Department of Health

Board of Clinical Laboratory Personnel  
4052 Bald Cypress Way

Bin #C-07

Tallahassee, FL 32399-3258

Phone: (850) 245-4355

[www.floridasclinicallabs.gov/](http://www.floridasclinicallabs.gov/)

**American Society for Clinical Pathologist (ASCP)**

33 West Monroe

Suite 1600

Chicago, IL 60603

Phone: (800) 267-2727 or 312-541-4999

[www.ascp.org](http://www.ascp.org)

**Cheating**

Cheating is defined as the unauthorized granting or receiving of aid during the prescribed period of a course-graded assessment. Students may not consult notes, books, may not look at the paper of another student, access their phone, nor consult with any other student taking the same test. Integrity is expected with virtual examinations. Rotation assessments are taken at different times throughout the year, and students are on the honor system and expected to keep tests, test questions, answer keys, or any other assessment material confidential. ***Simply stated assessments are not to be shared verbally or physically in any way - on social media or any other computer or phone applications)***

**Penalty for Cheating**

Exchanging assessment information with other students or using prohibited materials during the course of a lecture assessment or during the course of a clinical rotation assessments shall result in a grade of “0" on the assessment(s). It is the Program Director’s discretion to fail the student on the exam or to dismiss the student from the program permanently.

**Code of Conduct**

Students must review and abide by Tampa General Hospital’s policies, procedures, professionalism, and values reviewed during orientation which includes code of conduct. TGH values encompass integrity, compassion, accountability, excellence, and courage. Personal conduct is expected to reflect TGH standards at all times at all TGH locations.

Students should use extreme caution when posting on social media. Please refer to TGH’s policy: Team Member Use of Social Media.

**Curriculum and Course Descriptions**

A maximum of six students are accepted each year. The 51 week internship is approximately 35 - 40 hours per week, Monday through Friday; majority of rotation times vary from 6am – 4:30 pm. There are a few second shift rotations but, when times vary you will have advanced notice. The program begins the first week of August which is now starting in July.

The internship encompasses clinical rotations, lectures, and other various learning experiences. Clinical placement is always guaranteed for our students. One-on-one practical and theoretical instruction by qualified medical laboratory scientist is delivered as each student rotates through the areas of the laboratory. Theoretical knowledge is also delivered through a lecture series with a 1:10 ratio at most. Students are assessed on the cognitive, psychomotor, and affective domains. To be eligible for certification as a medical laboratory scientist at the end of the year, a minimum passing score of 70% (C) must be maintained. Academic credit is granted by the affiliated university.

The average day shall consist of 8 hours Monday through Friday. Students break for lunch at 12:30 and have lecture or lecture exams each day 1-2:30. A master syllabus will be provided at the beginning of the program detailing lecture, learning experiences, and assessments with dates and times. Each student will rotate through the areas of the laboratory according to their own set schedule. Each rotation is self-contained. Students will receive a rotation syllabus for each area of the laboratory. The syllabus contains objectives, checklists of required skills, and a schedule of assignments and assessments. Practical and written assessments are delivered for each area of the laboratory along with an evaluation of the affective domain. When not in lecture, students are to be in their assigned clinical rotation. Students should not leave early without permission. Most lectures, learning experiences, and clinical rotation occur at Tampa General Hospital’s main campus. You may be asked to travel to the Outpatient or Transplant clinic’s laboratories.

The curriculum includes and Introduction to Medical Laboratory Science, Clinical Urinalysis and Body Fluids, Clinical Immunology / Molecular, Clinical Hematology / Hemostasis, Clinical Microbiology, Clinical Chemistry, Clinical Immunohematology, and Clinical Laboratory Management and Education. Refer to course descriptions below. Students will learn pre-analytical, analytical, and post analytical aspects of the laboratory. Pre-analytical will encompass collecting, processing, and analyzing specimens. Throughout the clinical rotations students will perform testing, the mythologies of the testing, troubleshooting and problem-solving techniques, interpretation and statistical analyzing of results, and quality control. Students will assist with reporting results, calling critical results, and other post analytical aspects throughout the clinical rotations. After demonstrating competency, under the supervision of a qualified team member, students will be permitted to perform procedures.

Lectures: No more than 7 hours of formal lectures are scheduled per week. Students will be periodically assessed on lecture material and assigned readings. Grades on lecture exams will be included in the calculation of course grades (please see grading section of the handbook). Any student absent on a scheduled lecture exam day must have a valid excuse, and will be expected to schedule a time with the program director to take the exam.

Each rotation is self-contained. Students will receive a rotation syllabus for each area of the laboratory. The syllabus contains objectives, checklists of required skills, and a schedule of assignments and assessments. Practical and written assessments are delivered for each area of the laboratory along with an evaluation of the affective domain. Most lectures, learning experiences, and clinical rotation occur at Tampa General Hospital’s main campus. You may be asked to travel to the Outpatient or Transplant clinic’s laboratories.

**Tampa General Hospital, 1 Tampa General Circle, Tampa, FL 33606**

**TGH Outpatient Clinic 10740 Palm River Rd, Tampa, FL 33619**

**TICL (transplant) 409 Bayshore Blvd 4th Floor**

**MLS 4038: Introduction to Medical Laboratory Science 3 hrs**

An introduction to the clinical laboratory, the hospital, policies and procedures, basic laboratory techniques, quality control, phlebotomy, and hospital and laboratory safety. The student is instructed as to the proper methodology of specimen collection by phlebotomy, including universal precautions, proper labeling, and proper collection containers. Students spend a week rotation with the phlebotomy team and laboratory assistants to cover the preanalytical aspects of the laboratory including collecting and processing specimens.

**MLS 4860: Clinical Urinalysis and Body Fluids 4 hrs**

Theoretical and practical analysis of urine and body fluids. Students begin with specimen collection and processing. The student will read departmental procedures to become familiar with the principals and methodologies. The student is instructed and performs macro and micro techniques used in the analysis of urine and body fluids, qualitative/quantitative analysis of urines and body fluids, and examination of fluids for normal and abnormal elements. Students will assist with quality control, proficiency testing, problem solving, troubleshooting, analyzing and reporting results, performing assays, use of instrumentation including maintenance and reagents, and learn the methodologies. Theoretical urine and body fluid analysis is presented through formal lectures. Both practical and theoretical assessments are administered.

Students will have a 2-week rotation in urinalysis. Students will work 1:1 with a MLS, complete checklists, assignments, written, and practical assessments.

**MLS 4861: Clinical Immunology / Molecular 4 hrs**

Theoretical and practical immunology and molecular. The student begins with specimen collection and processing. The student will read departmental procedures to become familiar with the principals and methodologies. The student is instructed and performs molecular and immunological tests to detect the presence of infectious diseases, serum antibodies, abnormal cell populations, genetic mutations/translocations, and other substances which are related to disease states. Students rotate through immuno chemistry, esoteric, the research laboratory, and flow cytometry. Students will work 1:1 with a MLS and assist with quality control, problem solving, troubleshooting, analyzing and reporting results, performing assays, use of instrumentation including maintenance and reagents, and learn the methodologies. Students learn principles and practices of clinical study design, implementation and dissemination of results. Theory and practice of fluorescent technique is also taught. Theoretical immunology and molecular is presented through formal lectures. Both practical and theoretical assessments are administered.

(Please note the Florida Department of Health will only issue a molecular license to those who take a molecular specialist exam. Our program will prepare you for said examination and is highly recommended to take after passing the ASCP generalist examination. MLS’s hired in our esoteric department are required to have licensure in molecular.)

Students will have a 2-week rotation immuno-chemistry and 4 week rotation in immune-molecular. Students will work 1:1 with a MLS, complete checklists, assignments, written, and practical assessments.

**MLS 4862: Clinical Hematology / Hemostasis 4 hrs**

Theoretical and practical hematology and coagulation. The student begins the clinical rotation with specimen collection and processing. The student will read departmental procedures to become familiar with the principals and methodologies. The student is instructed and reviews cells in the blood and the coagulation factors affecting clot formation. The student is instructed and performs various procedures, both manual and automated, to count, differentiate and identify the various cellular and coagulation elements of the blood. Students will work 1:1 with a MLS and assist with quality control, proficiency testing, problem solving, troubleshooting, analyzing, interpreting and reporting results, performing assays, use of instrumentation including maintenance and reagents, and further learn the methodologies throughout the clinical rotation. Theoretical hematology and coagulation are presented through formal lectures. Both practical and theoretical assessments are administered.

Students will have a six-week rotation in hematology, coagulation, and body fluids. Students will work 1:1 with a MLS , complete checklists, assignments, written, and practical assessments.

**MLS 4863:** **Clinical Microbiology 4 hrs**

Theoretical and practical clinical microbiology, parasitology, and mycology. The student begins with specimen collection and processing. The student will read departmental procedures to become familiar with the principals and methodologies. The student is instructed and performs various techniques for the identification of normal and pathogenic organisms from various body sites. Students will assist with quality control, problem solving, troubleshooting, analyzing and reporting results, performing assays, use of instrumentation including maintenance and reagents, and learn the methodologies. The student is instructed and performs macro and micro techniques used in the analysis of fecal material, preparations for examination, and identification of ova and parasites found in human specimens. Mycology and mycobacterial culture and identification procedures are also performed. Students are assessed with a batch of unknown organisms which they must complete proper procedures to identify. Theoretical microbiology, parasitology and mycology is presented through formal lectures. Both practical and theoretical assessments are administered.

Students will have a 11 week rotation in microbiology and a student laboratory for parasitology at the end of the year. Students will work 1:1 with a MLS, complete checklists, assignments, written, and practical assessments.

**MLS 4864: Clinical Chemistry 4 hrs**

Theoretical and practical clinical chemistry. The student begins with specimen collection and processing. The student will read departmental procedures to become familiar with the principals and methodologies. The student is instructed and performs manual and automated procedures analyzing blood and body fluids during the clinical rotation. Students will assist with quality control, proficiency testing, problem solving, troubleshooting, analyzing and reporting results, performing assays, use of instrumentation including maintenance and reagents, and learn the methodologies. Theoretical chemistry is presented through formal lectures. Both practical and theoretical assessments are administered.

Students will have a six-week rotation in chemistry. Students will work 1:1 with a MLS, complete checklists, assignments, written, and practical assessments.

**MLS 4865: Clinical Immunohematology 4 hrs**

Theoretical and practical immunohematology for preparation of blood and blood components for transfusion therapy. Students are exposed to specimen collection and processing. The student is instructed and performs grouping, typing, and cross-matching of blood for transfusions. The student learns to recognize and identify antibodies or other causes of incompatible blood. Students are also involved with donor services for phlebotomy. Theoretical immunohematology is presented through formal lectures. Both practical and theoretical assessments are administered.

**MLS 4866: Clinical Laboratory Management and Education 3 hr**

Theoretical and practical knowledge of management and education. The student is introduced to the concepts of laboratory management, application of safety and governmental regulations and standards as applied to clinical laboratory science, principles and practices of professional conduct and the significance of continuing professional development, communications sufficient to serve the needs of patients, the public and members of the health care team, principles and practices of administration and supervision as applied to clinical laboratory science, and educational methodologies and terminology sufficient to train/educate users and providers of laboratory services. The student shadows the laboratory director and other leadership for a week and gain exposure to the assement of laboratory services.

Theoretical assessments are administered and students are assessed by a paper and student lecture.

Students will have a 1 week rotation with laboratory leadership attending hospital wide meetings and 1:1 sessions with the laboratory director.

(Per USF course catalog the clinical rotation totals 30 credit hours)

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| **MAJOR COURSES:** | **Clinical Rotation** | **Approximate**  **Lecture Hours** |
| PHLEBOTOMY | 1 week | 5 hrs |
| CHEMISTRY | 9 weeks | 40 hrs |
| IMMUNOLOGY / MOLECULAR | 6 weeks | 40 hrs |
| URINALYSIS & BODY FLUIDS | 2 weeks | 10 hrs |
| HEMATOLOGY/HEMOSTASIS (COAG) | 8 weeks | 40 hrs |
| MICROBIOLOGY | 11 weeks | 40 hrs |
| IMMUNOHEMATOLOGY/TRANSFUSION MEDICINE | 8 weeks | 40 hrs |
| LAB OPERATIONS / MANAGEMENT | throughout clinical rotations | 20 hrs |

**Disciplinary Action**

Students are licensed as trainees by the State of Florida, and grounds for disciplinary action against clinical laboratory personnel as stated in Florida Statute 483.825 (listed below) will be grounds for disciplinary and/or legal action against the student.

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| --- | --- | --- | --- |
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| (1) The following acts constitute grounds for denial of a license or disciplinary action, as specified in s. 456.072(2):  (a) Attempting to obtain, obtaining, or renewing a license or registration under this part by bribery, by fraudulent misrepresentation, or through an error of the department or the board.  (b) Engaging in or attempting to engage in, or representing herself or himself as entitled to perform, any clinical laboratory procedure or category of procedures not authorized pursuant to her or his license.  (c) Demonstrating incompetence or making consistent errors in the performance of clinical laboratory examinations or procedures or erroneous reporting.  (d) Performing a test and rendering a report thereon to a person not authorized by law to receive such services.  (e) Has been convicted or found guilty of, or entered a plea of nolo contendere to, regardless of adjudication, a crime in any jurisdiction which directly relates to the activities of clinical laboratory personnel or involves moral turpitude or fraudulent or dishonest dealing. The record of a conviction certified or authenticated in such form as to be admissible in evidence under the laws of the state shall be admissible as prima facie evidence of such guilt.  (f) Having been adjudged mentally or physically incompetent.  (g) Aiding and abetting in the violation of any provision of this part or the rules adopted hereunder.  (h) Reporting a test result when no laboratory test was performed on a clinical specimen.  (i) Knowingly advertising false services or credentials.  (j) Having a license revoked, suspended, or otherwise acted against, including the denial of licensure, by the licensing authority of another jurisdiction. The licensing authority’s acceptance of a relinquishment of a license, stipulation, consent order, or other settlement, offered in response to or in anticipation of the filing of administrative charges against the licensee, shall be construed as action against the licensee.  (k) Failing to report to the board, in writing, within 30 days that an action under paragraph (e), paragraph (f), or paragraph (j) has been taken against the licensee or one’s license to practice as clinical laboratory personnel in another state, territory, country, or other jurisdiction.  (l) Being unable to perform or report clinical laboratory examinations with reasonable skill and safety to patients by reason of illness or use of alcohol, drugs, narcotics, chemicals, or any other type of material or as a result of any mental or physical condition. In enforcing this paragraph, the department shall have, upon a finding of the State Surgeon General or his or her designee that probable cause exists to believe that the licensee is unable to practice because of the reasons stated in this paragraph, the authority to issue an order to compel a licensee to submit to a mental or physical examination by physicians designated by the department. If the licensee refuses to comply with such order, the department’s order directing such examination may be enforced by filing a petition for enforcement in the circuit court where the licensee resides or does business. The department shall be entitled to the summary procedure provided in s. 51.011. A licensee affected under this paragraph shall at reasonable intervals be afforded an opportunity to demonstrate that he or she can resume competent practice with reasonable skill and safety to patients.  (m) Delegating professional responsibilities to a person when the licensee delegating such responsibilities knows, or has reason to know, that such person is not qualified by training, experience, or licensure to perform them.  (n) Violating a previous order of the board entered in a disciplinary proceeding.  (o) Failing to report to the department a person or other licensee who the licensee knows is in violation of this chapter or the rules of the department or board adopted hereunder. However, a person or other licensee who the licensee knows is unable to perform or report on clinical laboratory examinations with reasonable skill and safety to patients by reason of illness or use of alcohol, drugs, narcotics, chemicals, or any other type of material, or as a result of a mental or physical condition, may be reported to a consultant operating an impaired practitioner program as described in s. 456.076 rather than to the department.  (p) Making or filing a report which the licensee knows to be false, intentionally or negligently failing to file a report or record required by state or federal law, willfully impeding or obstructing such filing or inducing another person to do so, including, but not limited to, impeding an agent of the state from obtaining a report or record for investigative purposes. Such reports or records shall include only those generated in the capacity as a licensed clinical laboratory personnel.  (q) Paying or receiving any commission, bonus, kickback, or rebate, or engaging in any split-fee arrangement in any form whatsoever with a physician, organization, agency, or person, either directly or indirectly for patients referred to providers of health care goods and services including, but not limited to, hospitals, nursing homes, clinical laboratories, ambulatory surgical centers, or pharmacies. The provisions of this paragraph shall not be construed to prevent a clinical laboratory professional from receiving a fee for professional consultation services.  (r) Exercising influence on a patient or client in such a manner as to exploit the patient or client for the financial gain of the licensee or other third party, which shall include, but not be limited to, the promoting, selling, or withholding of services, goods, appliances, referrals, or drugs.  (s) Practicing or offering to practice beyond the scope permitted by law or rule, or accepting or performing professional services or responsibilities which the licensee knows or has reason to know that he or she is not competent to perform.  (t) Misrepresenting or concealing a material fact at any time during any phase of the licensing, investigative, or disciplinary process, procedure, or proceeding.  (u) Improperly interfering with an investigation or any disciplinary proceeding.  (v) Engaging in or attempting to engage in sexual misconduct, causing undue embarrassment or using disparaging language or language of a sexual nature towards a patient, exploiting superior/subordinate, professional/patient, instructor/student relationships for personal gain, sexual gratification, or advantage.  (w) Violating any provision of this chapter or chapter 456, or any rules adopted pursuant thereto.  (2) The board may enter an order denying licensure or imposing any of the penalties in s. 456.072(2) against any applicant for licensure or licensee who is found guilty of violating any provision of subsection (1) of this section or who is found guilty of violating any provision of s. 456.072(1).  (3) In determining the amount of the fine to be levied for a violation, as provided in subsection (1), the following factors shall be considered:  (a) The severity of the violation, including the probability that death or serious harm to the health or safety of any person will result or has resulted, the severity of the actual or potential harm, and the extent to which the provisions of this part were violated.  (b) Actions taken by the licensee to correct the violation or to remedy complaints.  (c) Any previous violation by the licensee.  (d) The financial benefit to the licensee of committing or continuing the violation.  **History.**—s. 32, ch. 92-58; s. 445, ch. 97-103; s. 169, ch. 97-264; s. 152, ch. 99-397; s. 46, ch. 2001-277; s. 22, ch. 2005-240; s. 97, ch. 2008-6; s. 22, ch. 2017-41. |
| **Other Criteria for Unacceptable Performance:**   1. Unprofessional conduct of any kind will subject a student to disciplinary measures which may include dismissal. All students are expected to act in a responsible manner and maintain a professional attitude at all times while on the hospital’s grounds. Self‑discipline and sensitivity to the rights and interests of others are the principal elements of our disciplinary policy. 2. Unacceptable conduct includes persistent and deliberate disregarding of rules and regulations of the program, laboratory, and hospital; disrespect towards instructors, co‑workers, patients, and other students. 3. Each individual is expected to earn his or her certificate on the basis of personal effort. Therefore, any form of academic dishonesty (cheating) will not be tolerated. 4. When a student’s performance is unsatisfactory in a section, usually several of the following criteria are involved since they are inter‑related. If warranted, a Performance Improvement Plan may be instituted to address unsatisfactory performance.   It is considered unacceptable if:   1. After having been taught a procedure and after a “practice period” the student is unable to achieve accurate results using acceptable techniques. 2. After receiving the proper directions and precautions, the student exhibits carelessness in handling specimens, laboratory equipment, or instruments. 3. After receiving instructions and watching demonstrations, the student continually shows   disorganization, in attention to detail, or lack of regard for written protocol.   1. After being given assignments, readings, lectures, and discussions as applicable, the student is unable to demonstrate knowledge of the subject matter and is unable to attain a final average of 70% or greater in each area of the subject (didactic, rotation written exams, rotation practical exams). |

**Disciplinary Action / Dismissal:**

Disciplinary action is warranted should a student not abide by Tampa General Hospital’s policies, the laboratory policies, or the student handbook. The program director and or committee will discuss any unacceptable performance or behavior with the student. The committee is composed of faculty and advisory members. A record of counseling and/or disciplining will be kept in the student’s file. The student will be made aware of any improvements needed at the time of the discussion. Students have the right to appeal disciplinary measures. Disciplinary measures constitute the following:

1st Offense: Verbal warning

2nd Offense: 1st Written warning

3rd Offense: 2nd Written warning

4th Offense: Dismissal from the program

**Appeals and Grievances**

If a student has a concern, complaint, or dissatisfaction they may submit a grievance to the program director. Please refer to TGH’s “Conflict Resolution and Grievance” procedure for guidance. Students who submit grievances will not be interfered with nor retaliated against. The student should first attempt to discuss matters with faculty and then in writing to the program director if an acceptable response is not received. Written responses to any step will be returned to the student with seven calendar days. Should the grievance be directed at the program director; please submit grievance to the laboratory director. The grievance must be submitted within seven calendar days of the occurrence. If the grievance is still unresolved with the program director, a committee composed of the program director (or laboratory director) and other members of the advisory committee will review all information and provide a response. Students have the right to appeal any decisions of the program director, laboratory director, or committee to human resources. Appeals must be submitted in writing within seven calendar days of the last action taken. Decisions of human resources are final.

**Probation and Suspension:**

Students will be placed on probation and observed for a month with each written warning. In the event students do not improve they will be suspended for three to five days and will be required to make-up time prior to graduation. Students may be immediately suspended for serious offenses.

**Dress Code**

**Appearance: A professional appearance is mandatory for all students.**

The laboratory is required to wear designated light grey scrubs with a Tampa General Hospital embroider (may be purchased at Scrubs and Beyond.) Scrubs should be clean, in good repair, and fit properly. Team members are expected to maintain good hygiene. Facial and bodily hair must be clean and well-groomed. Team members must cover tattoos containing disparaging, profane language, or offensive graphic imagery. Shoes must be safe for the work environment and must align with Infection Prevention guidelines. Shoes should be comfortable, rubber soled, fluid resistant and cover the entire foot. Canvas shoes are not appropriate. Please refer to the Team Member Dress Code policy for other requirements.

Scrubs and Beyond

4045 W. Kennedy Blvd

Tampa, FL 33609

813-286-7880

**Laboratory Coats:** Students will be furnished with lab coats to wear as protection while working in the laboratory. These laboratory coats are to be removed before leaving the laboratory and kept out of designated clean areas. They will be laundered for you.

**Health / Emergency**

Should an adverse event occur students may utilize the emergency department but, their personal insurance will be charged. The program director, faculty, and supervisor / manager of the department must be notified of any events.

Guidelines for Exposures to Blood or Body Fluids

TGH Team Member Health Clinic (TMH) will evaluate students who report an exposure to blood or infectious body fluids while training or working at Tampa General Hospital. Exposures to blood or infectious body fluids by needlesticks, sharps, mucous membrane, or skin exposures should be reported to TMHC during office hours or to the TGH Clinical Supervisor after hours.

After an exposure to blood or body fluids, you should:

1. Report the exposure to your instructor AND the department supervisor where your exposure occurred.
2. Post-exposure prophylaxis (PEP) therapy may be recommended if you were exposed to an HIV positive patient or a patient at risk for HIV infection. PEP therapy is most effective if started within three hours of your exposure.
3. *DURING TMH CLINIC OFFICE HOURS*: (M-F 6:30 A.M. to 4:30 P.M) report exposures to Team Member Health Clinic immediately. Your exposure will be evaluated, and blood tests will be done to determine your baseline HIV, HBsAb and HCV status. Team Member Health will order HIV, Hepatitis B and Hepatitis C testing on the source patient.
4. *AFTERHOURS*: report your exposure to the nursing supervisor immediately via the hospital operator.

* DO NOT go to the Emergency room unless you require medical care (i.e., suturing) as exposures are not managed by the Emergency department.
* The nursing supervisor will evaluate your exposure, order testing on the source patient and consult with our Infectious Disease physicians if the source patient is HIV + or unknown.
* Any exposure reported after hours must be reported to Team Member Health Clinic on the next business day so the exposed person can complete required HIV, HBV and HCV testing and complete the follow-up evaluation.

1. Please request a copy of the TGH BBP Exposure Control Plan If you would like to review our policy and procedures.
2. It is the student’s responsibility to notify their affiliated school of their exposure. TMH will notify the residency office at USF for resident exposures.

Please note there are work restriction for certain health conditions and communicable diseases. Please refer to students health guidelines for students which also details the instructions above for exposures to communicable diseases.

**Essential Functions**

The following list of essential functions has been adopted from the ADA (Americans with Disabilities Act) job demands list. Essential functions are the basic duties that a person must be able to perform, with or without reasonable accommodation. They are rated based on their application to the position of “Medical Laboratory Science Student.” Applicants must be aware of these technical standards and review if they are able to perform. Students will be evaluated during the onboarding process.

**PHYSCIAL DEMANDS:**

Constant; several times per day or more:

Strength - sedentary (to 10 lbs.)

Standing

Walking, Flat

Carrying

Reaching - Below Shoulder

Grasp/Release

Fingering

Repetitive Motion - Wrist/Hand

Frequent; daily:

Sitting

Lifting from Floor

Lifting from Table

Lifting Overhead

Climbing Stairs

Stooping

Crouching/Squatting

Reaching - at Shoulder

Reaching - above Shoulder

Twisting/Turning

Pushing

Pulling

Occasional; 2-4 times per week:

Strength - Light (to 20 lbs.)

Strength - Medium (to 50 lbs.)

Repetitive Motion - elbow

Very Infrequent: 1-2 times per week or less:

Strength - Heavy (to 100 lbs.)

Strength - Very Heavy (100+)

Walking - Uneven

Climbing Ladder

Kneeling

Repetitive Motion – Knees

Repetitive Motion – Back

**SENSORY DEMANDS:**

Constant; several times per day or more:

Talking

Hearing

Seeing - Near

Seeing - Depth

Seeing - Color

Seeing - Field

Frequent; daily:

Feeling

Occasional; 2-4 times per week:

Seeing - Far

Very Infrequent; 1-2 times per week or less:

Taste/Smell 16

**ENVIRONMENTAL DEMANDS:**

Constant; several times per day or more:

Works with Others

Works under Time Constraints

Hazards - Biological

Use of Tools

Use of Machinery/Equipment

Frequent; daily:

Works Alone

Customer/Public Contact

Hazards - Electrical

Occasional; 2-4 times per week:

Exposure - Dusts

Hazards - Mechanical

Hazards - Chemical

Very Infrequent; 1-2 times per week or less:

Exposure - Weather

Exposure - Extreme Heat

Exposure - Extreme Cold

Exposure - Humidity/Wetness

Exposure - Extreme Noise

Exposure - Noxious Odors Exposure - Gasses

Vibration

Hazards - Radiation

Driving a Motorized Vehicle

**COGNITIVE DEMANDS:**

Constant; several times per day or more:

Reading

Writing

Accuracy/Precision

Short Term Memory

Long Term Memory

Transfer of Knowledge to Unique Situations

Sequencing

Problem Solving

Attentiveness - Duration

Social Interaction

Self- Control

Frequent, daily:

Simple Arithmetic

Weighing/Measuring

Attentiveness - Concentration

Work that is Highly Structured/Directed

Work that is Loosely Structured/Directed

Concurrent Performance of Multiple Tasks

Self- Expression

Autonomy

Occasional; 2-4 times per week:

Influencing Others

Very Infrequent; 1-2 times per week or less:

Mathematics

Directing Others

Evaluating the Performance of Other

**ESSENTIAL FUNCTION DEFINITIONS**

**PHYSICAL DEMANDS**

**Strength:** Amount of lifting or carrying of objects, determined by weight. Sedentary: lifting 10 lbs. occasionally, and/or negligible amounts frequently. Light: lifting up to 20 lbs., with frequent lifting and/or carrying objects weighing up to 10 lbs. Medium: Lifting up to 50 lbs., with frequent lifting and/or carrying objects weighing up to 25 lbs. Heavy: lifting up to 100 lbs., with frequent lifting and/or carrying objects weighting 50 lbs. or more.

**Standing:** remains upright on one’s feet at a work station without moving about.

**Walking:** requires moving about on foot on even or uneven terrain.

**Sitting:** remains in the normal seated position.

**Lifting:** raises or lowers objects from one place to another, at varying heights while remaining in a stationary position.

**Carrying:** transports objects from one place to another using arms and/or shoulders.

**Climbing:** ascending and/or descending stairs or ladders.

**Stooping:** bends the body downward and forward from the waist.

**Kneeling:** bends at the knees so as to come to rest on one’s knee(s).

**Crouching/Squatting:** bends the body downward and forward by bending the legs (may also bend spine).

**Reaching:** extends the arms up, down, or forward toward an object.

**Grasp/Release:** seizes, holds, and lets go of objects.

**Fingering:** picks, pinches, or pokes objects for such activities as fine object manipulation, writing, keying, typing, or sewing.

**Twisting/Turning:** rotates at the waist while lower body remains stationary.

**Pushing:** exerts force upon an object causing the object to move away.

**Pulling:** exerts force upon an object causing the object to move toward one.

**Repetitive Motions:** frequent movement of a body part in rapid, repetitive fashion.

**SENSORY DEMANDS**

**Feeling:** interprets touch, sensing textures, shapes, size, temperatures, and pain through skin contact.

**Talking:** expresses or exchanges ideas through words.

**Hearing:** interprets sounds, locates source of sounds, and discriminates between important and background sound.

**Seeing:** Perceives the nature of objects by the eye.

Near: clarity of vision at 20 inches or less

Far: clarity of vision at 20 feet or more

Depth: judges distances between objects

Color:: identifies and distinguishes color

Field: area that can be seen up, down, right and left when the eye is stationary.

**Taste/Smell:** interprets tastes and odors.

**ENVIRONMENTAL DEMANDS**

**Works Alone:** does not require interaction with others to complete tasks.

**Works With Others:** requires interaction with co‑workers to complete tasks.

**Customer/Public Contact:** requires interaction with customers and/or the public to get the job done. **Works Under Time Constraints:** plans and organizes work tasks to complete assignments within designated time frames.

**Exposure to Weather:** works outdoors, and is subject to weather conditions such as heat, cold, rain, snow, sleet, and wind which may change at any time.

**Exposure to Extreme Heat:** temperatures, indoors or outside that are sufficiently high enough to cause discomfort.

**Exposure to Extreme Cold:** temperatures, indoors or outside that are sufficiently low enough to cause discomfort.

**Exposure to Humidity/Wetness:** contact with water or atmospheric conditions with moisture content sufficient to cause discomfort.

**Exposure to Extreme Noise:** constant or intermittent sound that is sufficiently loud to cause discomfort or possible hearing loss.

**Exposure to Noxious Odors:** smells sufficient to cause discomfort.

**Exposure to Dusts:** solid particles generated by handling, crushing, grinding, rapid impact, detonation, or decrepitation of organic or inorganic materials sufficient to irritate eyes, skin, lungs or other organs.

**Exposure to Gases:** normally formless liquids which occupy the space of enclosure which may be harmful if inhaled in sufficient quantity.

**Vibration:** rapid, short, repetitive motion (oscillation), which, if endured repeatedly day after day, can cause bodily harm.

**Hazards:** conditions or situations in which there is the potential of danger to life, limb, health, or bodily injury, including exposure to mechanical, electrical, radiation, chemical, or biological agents.

**Use of Tools:** use of objects that can be held in the hand for the purpose of completing a task.

**Use of Machinery/Equipment:** use of mechanical objects that require training, manual dexterity, safety precautions, and attentiveness to operate. This includes computers, vacuum cleaners, drill presses, ovens, copiers, and other objects that are larger than one's hands.

**Driving a Motorized Vehicle:** operates an automobile, truck, motor scooter, riding lawnmower, or other vehicle on hospital property and/or public roads.

**COGNITIVE DEMANDS**

**Simple Arithmetic:** addition, subtraction, multiplication and division.

**Mathematics:** algebra, trigonometry and/or calculus.

**Reading:** reads, comprehends and retains materials written at a 6th grade level or higher.

**Writing:** puts words and symbols down on paper in a meaningful way, such that other people can understand the message.

**Accuracy/Precision:** performs tasks without error, consistently.

**Weighing/Measuring:** uses devices and tools to determine the volume, weight, height or mass of objects, liquids, gasses, or living things.

**Short Term Memory:** accurately remembers things that occurred in the last 5‑30 minutes, including events, written or oral material, and tasks.

**Long Term Memory:** remembers things that happened more than 30 minutes ago, including events, written and oral material, and tasks that occurred days, weeks or months ago.

**Transfer of Knowledge to Unique Situations:** applies one’s knowledge of task performance and behavior to new and different situations.

**Sequencing:** places information, concepts, and actions in order.

**Problem Solving:** recognizes a problem, defines a problem, identifies alternative plans, selects a plan, organizes the steps in the plan, and evaluates the outcome.

**Attentiveness** ‑ Duration: maintains concentration on a task over time.

**Attentiveness** ‑ Concentration: intensity with which one is focused on a particular task.

**Directing Others:** plans and organizes the work of others, assigns tasks to others, and follows up on the activities of others.

**Work That is Highly Structured/Directed:** directions for completing assignments are very specific and leave little room for deviation from the routine. Close supervision is provided.

**Work That is Loosely Structured/Directed:** directions for completing assignments are not very specific, leaving room for variation based on the needs of the situation at hand. Supervision is available, however one is encouraged to use one’s best judgement to determine the course of one’s activity.

**Influencing Others:** uses one’s reasoning, and persuasive abilities to change the behavior of others.

**Evaluating the Performance of Others:** assesses the work of others and provides feedback to them such that they are able to modify their work as needed.

**Concurrent Performance of Multiple Tasks:** does several things at the same time, with speed and accuracy.

**Self‑Expression:** uses a variety of skills to express one’s thoughts, feelings and needs.

**Autonomy:** works independently, takes initiative and responsibility for the work that gets done.

**Social Interaction:** uses manners, personal space, eye contact, gestures, active listening, and self‑expression appropriate to the situation.

**Self‑Control:** modulates and modifies one’s own behavior in response to situational needs, demands, and constraints.

**Evaluations**

Students are evaluated by the faculty during each clinical rotation. These evaluations focus on the affective domains demonstrated by the student during the rotation and are a portion of the rotation grade. Students, in turn, are requested to evaluate the rotations, lectures, and program. Feedback, comments, and constructive criticisms are vital to the welfare of the program and student cooperation in completing thought‑out evaluations is solicited.

Evaluations are also periodically completed by faculty, employers, staff, and graduates. The evaluations are used as a systematic assessment to ensure continuous quality improvement of the program. TGH strives to ensure the program is meeting the established goals, and students achieve necessary competencies. Results are documented as outcome measures which are periodically analyzed and evaluated during advisory committee and faculty meetings.

**Faculty**

The program will have qualified faculty who hold appointments within the educational program (TGH School of Medical Laboratory Science). These appointees will be certified professionals in their respective fields. Faculty members will be chosen at the discretion of the program director, department manager, and laboratory director. The previously defined selection committee will not discriminate on the basis of age, race, color, creed, religion, national origin, disability, or any other classification with faculty appointments. Faculty must meet the requirements listed below. The program will ensure and document ongoing professional development and assessment of the faculty.

**Faculty:**

|  |  |  |
| --- | --- | --- |
| *Name* | *Credentials* | *Positions* |
| Michelle Brilhart | BS, MA (MLS ASCP) | Program Director, Education Specialist: Laboratory |
| Dan Dick | BS (MLS ASCP) | Clinical Laboratory Educator for Hematology/Hemostasis and Urinalysis and Body Fluids, Lead MLS Hematology |
| Anna Castro | BS, MS (M ASCP) | Clinical Laboratory Educator for Microbiology, Microbiology Supervisor |
| Valeria Pasetti | BS (MLS ASCP) | Clinical Laboratory Educator for Esoteric, Lead MLS Esoteric |
| Saji Mathew | BS, MS (MLT ASCP) | Clinical Laboratory Educator for Chemistry and Immunology, MLS – Chemistry |

The faculty will participate in instruction, supervising students, student learning experiences, evaluating student achievement, assessments, providing feedback, developing curriculum, course selection, formulating policy and procedures, assessment of program outcomes, and evaluating program effectiveness.

Faculty members are designated and responsible for students learning experiences and assessment assigned to their area. Faculty will ensure all tasks performed by students take place under qualified supervision, are educational, and the student does not replace qualified staff. Faculty should report any issues, of any kind, with a student to the program director. Faculty will ensure to maintain an instructor to student ratio of 1:1 throughout clinical rotations. The program will also ensure to maintain an instructor to student ratio of no more than 1:10 in all didactic areas. The faculty member shall be responsible for all grades earned by the student during the clinical rotation. Grades will be submitted to the program director at the end of the rotation. Faculty shall be responsible for completing the evaluation form for each student. Evaluations are used to review the student’s performance concerning the affective domain and indicate areas that need improvement. The faculty and program director shall oversee student punctuality and attendance. Faculty needing assistance with any matters should contact the program director.

Faculty must demonstrate proficiency and expertise in their subject matter and demonstrate the ability to instruct at the appropriate level.

**Tampa General Hospital School of Medical Laboratory Science Administration**

Lugen Chen M.D. Medical Director

Angela Lauster Administrative Director, Clinical Laboratory

Michelle Brilhart Program Director

**Grading and Grading Scale**

All students are expected to successfully complete each area (rotations and didactic lecture assessments) with a minimum passing grade of “C” (70%) or better. Successful completion of all phases of the clinical education program is a mandatory prerequisite for graduation and certification by the school. Students’ progress through the program as indicated on the rotation and lecture schedule provided to them upon start of the program. The grading scale is as follows:

90 - 100 A

80 - 89 B

70 - 79 C

60 – 69 D

60 – 0 F

Final grades for each area are determined by averaging the following:

1. Lecture: 50%
   1. Assessments administered after every three to five lectures (weekly) unless otherwise noted on schedule or advance notice. Cumulative finals are weighted 20%
2. Rotation 50%: *further broken down as:*
   1. 50%: practical assessments (skills)
   2. 40%: written assessments
   3. 10%: evaluation (affective domain)

Granting of the degree or certificate is not contingent upon passing an external certification or licensure exam.

When a student shows an abnormal trend with their normal performance or multiple C's are accumulated the program director will council the student and offer extra help or guidance to what the student may need to improve. Should a student receive less than 70% for an area they will be placed on probation. In the event a student fails multiple courses of study they will be dismissed from for the program.

**Guidance and Counseling**

Academic guidance, advising, and counseling is primarily given by the program director. Simple personal counseling or advice is provided by the program director, medical director, administrative director, staff pathologists, department managers, supervisors, or lead MLS’s. Counseling of a more serious nature is referred to social agencies. Students from affiliated universities may also use the counseling services of their university. Counseling, academic guidance, and advising of any nature is confidential and impartial.

**Health Insurance Portability and Accountability ACT (HIPAA)**

Health Insurance Portability and Accountability ACT (HIPAA) is a federal regulation regarding patient privacy. Maintaining patient privacy is everyone's responsibility. Violation of patient privacy will result in disciplinary action, up to and including dismissal from the program. Students will be required to sign a HIPAA acknowledgement.

**Information Management**

Students must read, sign off, and abide by Tampa General Hospital’s Laboratory LIC policies on MediaLab. Any computer - related questions please call the Help Desk at extension number 844 7490.

**Event Reporting**

An event is any occurrence, which represents a departure from the norm, and unexpected event, or an event with an unfavorable outcome. Events should be immediately reported to the program director and a supervisor or manager. Events may need to be reported. Depending on the circumstances students may need to make a claim under their liability insurance. Please note the difference between and accident (health) vs an event.

**Insurance**

**Liability**

Students must purchase a private policy for liability coverage during the internship year. Each student must provide his or her own coverage and must have proof of coverage in their student file . In case a claim should arise from any laboratory incident, the student is responsible for submitting the claim to his or her insurance company and for any deductible incurred.

**Health**

Tampa General Hospital’s group medical insurance is NOT available to students. Students must purchase private health insurance for coverage during the internship year. In case a claim should arise from any laboratory incident, the student is responsible for submitting the claim to his or her insurance company and for any deductible incurred.

**Library Privileges**

**Medical Library**

The Medical Library and privileges will be extended to all Medical Laboratory Science students. Services include literature searches, article retrieval, training, and computer access. The room and computers are available 24/7.

**School of Medical Laboratory Science Library**

The School of Medical Laboratory Science also has a library pertinent to the clinical education. Books may be checked out from the Program Director. Time limits may apply.

**Meetings**

Students will be given the opportunity to attend various hospital meetings to experience other aspects of the institution. Shared governance meetings occur monthly. The safety huddle is everyday. Students may shadow leadership team members for the Hazardous Waste, Laboratory Nursing, Disaster Planning, and others as they arise.

**Mosley Achievement Award**

Dayton L. Moseley, Jr., M.D., served as Director of the Clinical Laboratories and Director of the School of Medical Laboratory Science at Tampa General Hospital from 1960 until his untimely death in 1969. As an excellent physician, pathologist, and medical examiner as well as a dedicated teacher, he was loved and respected not only by his staff and students but throughout the hospital. The award, created in 1969 in memory of Dr. Moseley, is given to the student selected by the Education Committee as the most outstanding all around Medical Laboratory Science student of the year and recognizes outstanding scholastic aptitude, achievement, and attitude as well as commitment to the goals and standards of the profession and of the hospital. The recipient’s name is engraved on the Moseley Award Plaque which is exhibited in the School of Medical Laboratory Science Display Case. The award is not necessarily given annually. It is only given when the Teaching Supervisors and Program Director feel there is a qualified candidate.

**Non-Discriminatory Policy**

No form of harassment or discrimination on the basis of age, race, color, creed, religion, national origin, disability, sexual orientation, or any other classification prohibited by law, will be permitted. Harassment is aggressive pressure or intimidation. Harassment includes unwelcome or unsolicited verbal, non-verbal, printed, electronic mail, or physical conduct which substantially interferes with an employee’s or a student’s performance or which creates an intimidating, hostile, or offensive environment. Each allegation of harassment or discrimination will be promptly investigated in accordance with applicable TGH policies. Students must abide by Tampa General Hospital’s Code of Conduct.

**Professionalism**

All TGH team members (including students) are expected to behave in all interactions with every patient, visitor, and member of the healthcare team with professionalism. At the heart of all our actions is TGH's Core value: We put patients first in all that we do. Professionalism at TGH encompasses integrity, compassion, accountability, excellence, and courage.

**Resources**

The hospital’s laboratory is an educational resource for students. They are able practice under the supervision of a MLS with all equipment in the laboratory. Instrumentation is utilized for students to practice assays, calibrations, preventative maintenance, troubleshooting, quality control, and analyze and interpret results. Patient specimens are in abundance to practice and perform assays in all the departments. The school maintains some of its own resources such as specified student specimens, books, computer programs, microscopes, and Powerpoints used with lectures displayed on a large screen to provide teacher prepared notes of new information. We have classroom for lectures. A laptop is available to work in MeidaLab, MindLab, and Medtraining. A large dry erase board is used for group discussion, mindmapping, etc. The Medical Library is available for research, a place to study, and access to computers. The school maintains it’s own budget and has access to the Tony Salgado fund for extraneous resources throughout the year. The school ensures to maintain the necessary resources to achieve program goals and provide students with the defined competencies.

**Safety**

Orientation will include a safety presentation covering biohazard training, the safety policies of the hospital and laboratory including proper use of personnel protective equipment, hand hygiene, and proper disinfection. The laboratory safety officer will give students a tour of the laboratory’s safety features including fire pull stations, fire extinguishers, eyewashes, safety showers, where to evacuate and report if the laboratory is evacuated, and event reporting. A safety checklist aligns with the presentation and tour. Students and team members are also required to complete the OSHA blood born pathogens and other modules found on Medialab annually. Depending on the event students may be required to report to Team Member Health or student may utilize the emergency department for serious events.

**Health**

To provide a safe environment and to prevent exposures to communicable diseases, we must ask all persons to comply with TGH policies and procedures on immunizations and communicable illness. There are guidelines and procedures to follow in the event of an exposure to a bloodborne pathogen (i.e. needlestick) or other communicable disease (i.e. meningitis, tuberculosis). Team Member Health will provide / perform a health screen before the first week of August.

**Service Work and Part-time Employment**

Students do not take the responsibility or the place of qualified staff. The students will not be encouraged or allowed to engage in repetitive tasks that add no educational value. Majority of tasks completed by the student must be under the direct supervision of a qualified medical laboratory scientist. Some tasks are created specifically for students to perform on their own such as practical’s.

All students are temporary laboratory assistants as a separate entity from the internship. Students will be paid for work outside of regular academic hours and based on departmental staffing need. Students are expected to work 8 hours a week to gain experience with the psychomotor and affective domains of medical laboratory science. Students will be evaluated to provide feedback to ensure they are developing professionalism and the skills necessary to succeed in the medical laboratory and allied health field.

**Student Records**

Student records shall be permanently maintained as confidential documents as a hard copy or electronic copy in the program director’s files or in Iron Mountain Archives. These records contain documents related to student admission records, progress in the program and transcripts.

The program transcript will include:

1. Legal name

2. Grades and credits

3. Dates of admission and completion

Beginning the class of 2014 - 2015, date of admission is listed on the student transcript.

Student records are open to the student at her/his request with the exception of reference letters if the student has waived the right of access. The student file will be reviewed in the presence of the program director.

Transcript requests must be in writing and will be sent within 7 days of the request.

Current students are required to immediately report any change in their name, address, email address and telephone numbers.

Note: Human Resources maintains records of the mandatory orientation of all the students in the program, including a sign acknowledgment of HIPAA, Code of Conduct, Drug Free Campus and Core Values.

**Student Withdrawal**

It is the responsibility of each student to make every effort to complete the full internship. For students from affiliated universities, academic credit is awarded ONLY upon completion of the entire course of study. Students must successfully complete the entire internship in order to receive a certificate from Tampa General Hospital’s School of Medical Laboratory Science. Affiliated students should refer to their college catalog for university policies regarding dropping courses, academic penalties, and refunds of tuition.

Any student wishing to withdraw must state their intention in writing. The program director, medical director, and university advisor (if applicable) will counsel the student prior to accepting the resignation. A written summary of the reason for the withdrawal will be placed in the student’s file at Tampa General Hospital and, if applicable, a copy will be sent to the University of South Florida advisor.

**Teach Out Plan**

TGH guarantees you will be able to finish the program! In the event the main facility suddenly could not be used, it is possible that the School of Medical Laboratory Science would have to postpone training for a short duration (estimation of not more than two weeks) in order to prepare other locations from which the school could operate. Tampa General Hospital owns and operates, in addition to the main facility at 1 Tampa General Circle, Tampa FL 33606, numerous other satellite locations. The off-site locations are sufficient facilities from which the School of Medical Laboratory Science could operate in the event the main facility could not be utilized. The Tampa General Outpatient Center has a conference room that could be used for delivering lectures and administering assessments. There is also ample space between TOC, TGMG, and the Kennedy laboratories to supplement the rotation training.

**Temporary Closure**

In the event students are not permitted on TGH campus’s; lectures and lecture exams will continue virtually. The lecture schedule will be modified to cover more material per day. Completing lecture series virtually will allow more time in rotations upon return to the laboratory. In extreme circumstances graduation may be postponed to allow for make-up time. Videos will supplement training if necessary and possible.

**Fees and Refund**

Fees below are non-refundable by the school. Students paying tuition to an affiliated university should consult the university’s refund policy.

Application Fee $25.00

Textbook Fee No Charge

Tuition for non affiliated students\* No Charge

State of Florida Trainee License Fee\*\* $45.00

Liability Insurance\*\* $37.00

ASCP certification exam\*\* $240.00

\*\* Fees not determined by the school. (NOTE: All fees are subject to change without prior notice and are non-refundable)

\*Affiliated students from the University of South Florida pay tuition to USF at the university’s prevailing rate.

State Licensure – A fee is charged by the State of Florida for the trainee license. (Students should be aware, you will also be charged when upgrading to Medical Laboratory Scientist)

Insurance – Students are required to purchase a liability policy for the internship year.

National Certification – A fee is charged by the American Society of Clinical Pathologists (ASCP) Board of Registry for the certification examination.

Students are required to provide their own medical insurance. Fees vary.

Room and Board – Room and board will be provided by the student. Meals may be purchased in the hospital employee cafeteria or lunches may be brought and kept in the laboratory staff lounge refrigerator.

**Tampa General Hospital Intern Agreement**

In consideration of my internship opportunity at Tampa General Hospital, I fully understand my responsibility to adhere to Tampa General Hospital’s, the laboratories, and the student handbook’s policies, rules, regulations, and working in cooperation with visitors, patients, and all members of the healthcare team. HIPAA regulations regarding protection of confidential patient information, the use of hospital information systems, fire and safety procedures, and the general code of conduct for staff and patients have been explained to me and I agree to abide by these standards during my internship.

I understand I am expected to behave in all interactions with every patient, visitor, and member of the healthcare team with professionalism. At the heart of all our actions we put patients first in all that we do. Professionalism at TGH encompasses integrity, compassion, accountability, excellence, and courage.

I understand that medical insurance is not provided. I agree to provide my own insurance coverage. In case of injury, or claim from a laboratory incident, I agree to submit the claim to my insurance company and be responsible for any deductible that may apply.

I understand and accept the working conditions of a medical laboratory scientist. I understand I will be educated in the hospital, in patient care, and medical laboratory testing environment where there is possible exposure to patients, toxins, chemicals, fumes, noxious odors, specimens, and infectious diseases. I may be required to lift and carry supplies and equipment as listed in the essential functions.

With an adverse event such as the pandemic of COVID-19 in 2020 students will be held accountable to the same expectations of a Medical Laboratory Scientist. Medical Laboratory Scientist’s were deemed essential workers and by entering the program I understand and accept the expectations and risks associated with the profession.

The position of a Medical Laboratory Scientist has been evaluated as a Level 1 in accordance with the Occupational Safety and Health Administration (OSHA) definition of occupational exposure to blood borne pathogens.

Level I: Positions in this category require the performance of tasks which involve exposure to blood and potentially infectious body fluids.

I will not post anything on social media related to Tampa General Hospital.

I understand my position as a laboratory assistant is temporary and will terminate in July of the graduating year. I agree to only work 8-20 hours per week (40 hours per pay period) and understand my hours may be decreased at the discretion of the program director. The program director will monitor my evaluations and grades to ensure success in the program.

The TGH values include: compassion, accountability, excellence, courage, and INTEGRITY. By signing below I promise not to cheat in any way shape or form during the MLS program.

**Grievance Form**

|  |  |
| --- | --- |
| **Student** |  |
| **Faculty** |  |
| **Grievance** | Date:  Signature: Student notified: |
| **Program Director or Laboratory Directors Response** | Date:  Signature: Student notified: |
| **Committees Response** | Date:  Signature: Student notified: |
| **Human Resources** | Date:  Signature: Student notified: |
| **Appeal**  **Yes \_\_\_\_**  **No \_\_\_\_** |  |

Please attach any supporting documentation.

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**P.O. Box 1289**

**Tampa, Florida 33601-1289**

**813 844 7098**