



VA St. Louis Health Care System Medical Laboratory Science Program Admission Information & Application

Application Deadline	January 31, 2024
Classes Begin	July 8, 2024

For more information

VASTLHCS Medical Laboratory Science Program

915 N. Grand Blvd, Pathology & Lab Medicine Services (113-JC)

St. Louis, MO 63106

Phone: (239)412-2718

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VASTLHCS OVERVIEW

Hospital –

We provide health care services at 10 locations serving east central Missouri and southwestern Illinois. Facilities include John Cochran Veterans Hospital in midtown St. Louis and St. Louis VA Medical Center-Jefferson Barracks. We also have 8 community-based outpatient clinics in Washington, Florissant, O’Fallon, and St. Louis, Missouri; and Scott Air Force Base and Shiloh, Illinois. To learn more about the services each location offers, visit the VA St. Louis [health services page](#).

The VA St. Louis Healthcare System is one of the leading health care systems serving Veterans in the VA Heartland Network. We’re an innovative care center within the Veterans Integrated Service Network 15 (VISN 15), which includes medical centers and clinics in Missouri, Kansas, Illinois, Kentucky, Indiana, and Arkansas.

Clinical Laboratory –

- Pathology and Laboratory Medicine Service (PLMS) at VASTLHCS is a large facility employing over 100 technical and professional personnel with the following departments:
 - Central Receiving
 - Anatomic Pathology
 - Transfusion Medicine Service (Blood Bank)
 - Core Clinical Laboratory
 - Clinical Microbiology and Immunology
 - Molecular Testing
 - Ancillary Testing
 - Information Management
 - Quality Management
- Accredited by the Joint Commission (TJC), American Association for Laboratory Accreditation (A2LA), American Association of Blood Banks (AABB) and the Food and Drug Administration (FDA)
- Equipped with state-of-the-art clinical instrumentation and a sophisticated interfaced computer information system
- Full-service core laboratory including stat, reference, routine and special testing
- Integrated Pathology residency program
- Performs more than 2.1 million diagnostic tests per year

Medical Laboratory Science

Upon completion of this 11-month program, the graduate will have earned a Certificate of Completion in Medical Laboratory Science Training Program. Graduates are then eligible to take nation certification exams to qualify to work in hospital laboratories and clinical laboratories performing blood tests. The Medical Laboratory Technologist makes up part of the diagnostic health care team and is responsible for processing body fluids for chemical, serological and biological analysis. He/she analyzes these fluids with computerized high technology instruments.

Application Checklist

All necessary forms are in the back of this package.

- 1. Complete the VASTLHCS Medical Laboratory Science Program application and return to VASTLHCS Medical Laboratory Science Program, 915 N. Grand Blvd, Pathology & Lab Medicine Service (113-JC), St. Louis, MO 63106, tara.lambert@va.gov
- 2. Complete the essential functions form and include with application.
- 3. Complete the Statement of Intent form and include with application.
- 4. Complete the Narrative Statement and include with application.
- 5. Request all official transcripts to be emailed or sent directly to VASTLHCS Medical Laboratory Science Program, 915 N. Grand Blvd, Pathology & Lab Medicine Service (113-JC), St. Louis, MO 63106 tara.lambert@va.gov
- 6. Request 3 reference letters to be completed on included form and email or send directly to VASTLHCS Medical Laboratory Science Program, 915 N. Grand Blvd, Pathology & Lab Medicine Service (113-JC), St. Louis, MO 63106, tara.lambert@va.gov. One from former instructor, one from employer, and one personal.
- 7. Set up personal interview when notified.

Completion of this list does not guarantee acceptance to the Medical Laboratory Science Training program. Students are selected on a competitive basis. The VA St. Louis Health Care System Medical Laboratory Science Program, St. Louis, Missouri reserves the right to change conditions, provisions & requirements upon reasonable notice as may be necessary to maintain proper standards and objectives of the Program. Each student must exhibit professional conduct, satisfactory progress in academic standing and practical achievement. The Program reserves the right to require, at any time, the removal of any student whose attitude, conduct, health, scholastic records or practical experience is not in harmony with the policies of the hospital or its best interests.

Application and Admission Requirements

A student must have a Baccalaureate degree and thus be eligible for application. Admission is competitive, with a limited number of student positions available annually. Attendance at an affiliated college or university or completion of prerequisite coursework does not guarantee a position.

Prerequisites

Chemistry

Sixteen (16) hours in Chemistry, including General Chemistry.

Specifications

1. Three (3) courses must include lab experience.
2. One (1) course must be Organic Chemistry or Biochemistry.

Biology

Sixteen (16) hours in Biological Science, including General Biology or Zoology

Specifications

1. Microbiology with laboratory component.
2. Immunology course.
3. Two (2) courses must include lab experience (includes Microbiology lab).

Mathematics

1. One college level course. Statistics is strongly encouraged.

The content of the Chemistry, Biology and Math courses acceptable towards meeting these requirements would be those applicable towards a major in those fields or in medical technology. Survey or remedial courses do not fulfill these prerequisites.

Any applicant who has attended an educational institution outside of the U.S. is required to submit a transcript evaluation verifying U.S. equivalency. Contact the ASCP Board of Certification (www.ascp.org) For information.

Files on all prospective applicants must be ***complete*** by January 31.

Application Process

Prior to beginning the application process:

1. Read the Medical Laboratory Science Training Program Application booklet.
2. Those students who have completed their application by the closing date of January 31 **and** who meet our stated minimal acceptance criteria will be contacted by the Program Director to schedule a mandatory personal interview. Interviews are generally conducted during late December and early January.
3. Final acceptance into the program is contingent upon satisfactory results from physical examination, drug screen, and background check. Information on obtaining these tests/reports will be provided in the provisional acceptance notification package. These reports should not be included with the initial application materials.
4. Those students who are accepted into the Program agree to submit to a federal employee criminal background check and fingerprinting as administered through the Hospital Human Resource Management Service. Any findings that contraindicate admission may result in withdrawal of the appointment to the Program.

Admission Criteria

Final consideration for admission into the Medical Laboratory Training Program will be based upon the admission committee review and scoring of the following criteria:

Our evaluation and ranking of prospective students will be made by the Admissions Committee, comprised of Program officials and faculty, based on a personal interview (required), academic standing, academic background (considering coursework taken, withdrawals and repeats), previous experience, letters of reference and personal narrative. **Minimum GPA requirement is 2.75 on a 4.0 scale overall and in the sciences.** Students will be notified of acceptance status in February.

Preference points will be given to veterans and to those students from affiliated colleges or universities. Non-citizens will be considered for enrollment **only** in the absence of qualified American citizens. VA educational programs admit students in accordance with national non-discrimination policies. ([USAJOBS Help Center](#) | [Equal employment opportunity policy](#))

Student Drug Screen

When submitted, these results will become property of the training program, and will not be available for copying or for use to meet requirements of outside employers. Students who are out of the program for six months or more must submit new results.

Criminal Background Check

Once completed, these results will become property of the training program, and will not be available for copying or for use to meet requirements of outside employers.

Health/Medical Record

A completed medical health form must also be submitted and approved by the Program Director. This health record will contain results from a physical examination and laboratory tests including immunization records and or titers.

Applicants who do not meet the standards of good physical and mental health, as required by clinical facilities for safe patient care, may reapply and be considered for application to program after resolution of the health problem. An updated health record, verified by a licensed physician, physician's assistant or an ARNP must be submitted.

Non-Acceptance into the Program

Applicants who do not qualify for the program will be notified, and may contact Tara Lambert, Program Director (Tara.Lambert@VA.gov) for clarification on how to strengthen their application before student reapplies.

Medical Laboratory Science Curriculum

Coursework

All the science courses have a didactic and a practical component; this enables the student to learn the theory of procedures, gain experience in performing those procedures, and make clinical correlations from the laboratory data which is generated. The student will learn a wide variety of procedures and will be expected to become proficient in the performance and understanding of all commonly performed laboratory procedures.

Introduction to Clinical Laboratory Science (2 cr.)

An introduction to clinical laboratory science, including the role of clinical laboratory in patient care, overview of clinical laboratory operations and management, workplace hazards and safety, accreditation and regulation of clinical labs, laboratory information (computer) systems. Theory and practice of the art of phlebotomy. Elucidate basic anatomy and physiology of the blood draw, proper procedure for various collections, legal and ethical issues, importance of confidentiality, pre-analytical factors, safety in handling biological specimens, customer service and patient interactions.

Clinical Hematology & Hemostasis (3 cr.)

Clinical Hematology is a study of the origin, development, morphology, physiology, & pathophysiology of the formed elements of the blood and bone marrow. Manual & automated methods of cell counting, differentiation & other special hematological procedures on blood & body fluids used in disease diagnosis. Coagulation (Clinical Hemostasis) is a study of the platelet, vascular, coagulation, & fibrinolytic systems. Testing procedures & the application of the principles of hemostasis as related to disease states & therapeutic monitoring are also included.

Immunology and Serology (3 cr.)

Theory and practice of basic immunology with emphasis on immune responses (antigen-antibody reactions), immunodeficiency disorders, autoimmune diseases, hypersensitivity, and tumor and transplant immunology. Also discusses the serologic principles and diagnosis of infectious diseases.

Concepts of Quality Management in Clinical Laboratory (3 cr.)

An overview of medical ethics, laboratory safety, quality management systems, and quality control. Theory and practice of quality control, quality assurance, quality improvement. Basic statistics, process improvement and the regulatory requirements in clinical laboratories are also included.

Clinical Urinalysis and Body Fluids (3 cr.)

Theory of body fluid metabolism and practice of biochemical analyses and microscopic examination of urine and other body fluids with corresponding clinical correlations and clinical significance of laboratory test results

Clinical Microbiology (3 cr.)

Consists of clinical bacteriology, mycology and virology. The bacteriology component consists of the theory and practice of the isolation and identification of pathogenic bacteria and mycobacteria clinical specimens through cultures, morphology, biochemical and/or serological reactions and their drug susceptibility.

Clinical Chemistry (3 cr.)

Theory and practice of analytical biochemistry as applied to physiologic and pathologic states of various organ systems. Emphasizes study of test methodologies and instrumentation for routine and specialized Clinical Chemistry. Statistics are applied to reagent preparation, result determination and quality control. Clinical significance and clinical correlations of test and test results are incorporated. The student applies this theory at the clinical laboratory bench rotations using current diagnostic techniques and instrumentation to correlate laboratory test results to disease processes.

Clinical Immunohematology (Blood Bank) (3 cr.)

Study of red cell antigen-antibody systems, antibody screening & identification, compatibility testing & immunopathologic conditions. Also included are donor requirements & blood component preparation & hemotherapy. The clinical immunology component is a study of the principles of the protective & adverse aspects of the cellular & humoral immune responses. Theory & performance of test procedures based on antigen-antibody reactions & clinical significance of test results is included.

Mycology & Parasitology pathology (3 cr.)

Mycology and virology deal with the theory and practice of the isolation and identification of fungi, parasites and viruses utilizing morphological, cultural, biochemical and serological methods. With each component, the relation of clinical testing to disease states and epidemiology as it applies to clinical microbiology is also included.

Molecular pathology (3 cr.)

Theory & practice of fundamental principles of molecular biochemistry, medical genetics, molecular pathology, performance, evaluation and interpretation of molecular tests. Includes applications and analysis, and the development of competencies in nucleic acid isolation, analysis of nucleic acids and protein, PCR and other molecular biology techniques.

MLS Content Review (1cr.)

This course revisits and reinforces the fundamental principles and practices originally covered in the Medical Laboratory Technologist program. Our primary focus is on helping you achieve success in the certification examination for medical laboratory science. Through a thorough review we will dive deep into the core concepts and techniques learned during the program. We'll provide a comprehensive overview, ensuring you have a strong foundation. This course is designed to align with the objectives of the American Society for Clinical Pathology (ASCP) certification examination for medical laboratory technologists. You'll receive targeted preparation to enhance your chances of passing this critical exam.

Clinical Practical I & II (18 cr.)

Under the guidance and supervision of a certified medical laboratory technologist, student will gain hands-on experience in performing a wide range of clinical laboratory procedures. This comprehensive training includes proficiency in blood bank procedures, as well as the execution of high- complexity laboratory tests. Throughout the course, students will develop a deep understanding of various disease processes, enhancing their diagnostic abilities. Additionally, the student will become proficient in operating and maintaining essential medical equipment, ensuring accurate and reliable results. Students will also learn to evaluate and implement quality control measures.

This program will equip students with the skills needed to collect and analyze patient specimen samples. By the end of the course, students will be well prepared to contribute effectively to the field of medical laboratory science.

Program Mission

To equip Medical Laboratory Scientists with the knowledge and critical thinking skills to perform diagnostic laboratory testing critical for supporting the whole health of those who have borne the battle, our community and our nation. In this program, students obtain the knowledge and skills necessary for entry level Medical Laboratory Scientists performing a wide array of medical laboratory tests that assist healthcare providers in the diagnosis and treatment of illness. Medical.

Program Goals

In this program, students obtain the knowledge and skills necessary for entry level Medical Laboratory Scientists performing a wide array of medical laboratory tests that assist healthcare providers in the diagnosis and treatment of illness.

- Educate Medical Laboratory Science students in the art and science of clinical laboratory medicine, thus preparing them to 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 VASTLHCS Medical Laboratory Science Program is committed to student success. Students have access to six board certified pathologists for guidance and instruction as well as many experienced Medical Laboratory Scientists for application of clinical laboratory principles and critical thinking skills.
- Promote the highest ideal of the medical profession by instilling and modeling the VA core values of ICARE. Integrity, Commitment, Advocacy, Respect, and Excellence.
- Provide Quality, trained and dedicated Medical Laboratory Scientists in the profession positively facilitating the institutional ability to recruit and retain quality laboratory staff essential for the mission of caring for our veterans.

Program Outcomes

1. Apply the skills, knowledge, attitudes and values necessary for positions as medical laboratory technicians in the real workplace.
2. Demonstrate professional attitudes and values and an understanding of the ethical/legal principles in all interactions as a medical lab professional.
3. Apply the principles and procedures for entry-level medical laboratory technicians in the areas of hematology, urinalysis, immunohematology, serology, clinical chemistry and microbiology without clinically significant errors.

a. Phlebotomy

- Perform collection of blood specimens for clinical laboratory testing.

b. Clinical Chemistry

- Perform analyses of chemical constituents on physiological specimens.
- c. **Microbiology**
 - Culture, isolate and identify microorganisms from clinical specimens.
 - Perform antibiotic susceptibility tests for microorganisms found in clinical specimens.
- d. **Hematology**
 - Perform analyses of chemical, cellular and formed elements in blood and cerebrospinal fluid specimens.
 - Microscopically detect cellular abnormalities in blood specimens.
- e. **Immunoematology**
 - Perform analyses resulting in the typing, antibody identification and compatibility assurance of donor and recipient blood specimens.
- f. **Immunology and Serology**
 - Perform, read and interpret serological tests for the presence of antibodies, antigens or specific proteins.
- g. **Urinalysis**
 - Perform analyses of the microscopic and chemical composition of urine.
- h. **Coagulation**
 - Perform tests which evaluate the hemostatic mechanism.
- i. **Parasitology**
 - Locate and identify parasites present in biological specimens.
- j. **General**
 - Obtain and process biological specimens suitable for analysis.
 - Record and transcribe the results of laboratory tests with **100%** accuracy.
 - Maintain laboratory equipment in accordance with laboratory procedures to the extent that accuracy and precision of test results is maintained.
 - Evaluate and use quality control systems for established laboratory procedures to the extent that quality of output is high.
 - Relate laboratory findings to common disease processes.

Essential Functions

Essential functions represent the technical or non-academic requirements of the Program that all students must master to successfully participate in the Program. All students and, thereby, all applicants are expected to:

- Possess sufficient vision to easily recognize and read text, numbers and graphics in print and on monitor screens.
- Be able to discriminate patterns and colors in order to identify reagents, media, stained cell preparations and physical properties of various body fluids, as well as delineate fine details of cellular structure and morphology when using a microscope.
- Be able to read, write and communicate in the English language to facilitate effective communication with patients, physicians and all other members of the health care team.
- Possess enough hearing ability with or without auditory aids to understand the normal speaking voice and discern audible instrument alert signals and timing devices.
- Demonstrate sufficient manual dexterity to perform such required tasks as: performing phlebotomy safely and accurately; operating delicate instruments; manipulating tools; handling small containers of potentially biohazardous specimens utilizing sample measuring devices; adequately focusing and manipulating a microscope and using a keyboard.
- Bend, reach, sit and be sufficiently mobile to traverse about the laboratory and hospital corridors, including patient rooms.
- Demonstrate sufficient psychological stability to effectively problem solve and to react effectively in stressful situations. Must be able to recognize emergency situations and take appropriate action. Be flexible, creative and adaptable to change.
- Use intellectual skills to calculate, interpret, analyze, reason, evaluate and explain data, solve problems, make critical judgements and initiate corrective action as necessary.

Student Signature _____ Date _____

Application for Admission – Class of 2024

Name:

(Last)

(Maiden)

(First)

(Middle)

Are you a US citizen?

Yes No

Are you a veteran?

Yes

No

Present mailing address:

(Where you can be contacted during the school year)

(Street)

(City/Town)

(State)

(Zip)

(Area Code) (Phone Number)

(e-mail address)

Permanent Mailing Address

(Where you can be contacted during semester and summer breaks)

(Street)

(City/Town)

(State)

(Zip)

(Area Code)

(Phone Number)

(e-mail address)

Emergency Information:

(Name)

(Relationship)

(Home Phone Number)

(Cell Phone Number)

Educational Information

School Name	Location (City/State)	Major/Area of Study	Dates Attended	Hours/Degree Completed and GPA
High School:				
College/University:				
College/University:				
College/University:				

Request all official transcripts be sent to tara.lambert@va.gov

*Tara Lambert, MHS MLS, QLS (ASCP)CM, MLS Program Director
 (239)412-2718
 tara.lambert@va.gov
 VASTLHCS Medical Laboratory Science Program
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Work, Professional & Volunteer Experience

Name of Institution, City/State/Phone, Name of Supervisor	Dates (To/From)	Duties & responsibilities

Extra-Curricular Activities, Professional Organizations, Honors & Awards

Reference Information

List three persons we may expect to receive letters of recommendation from on your behalf. Please include at least one *professors or academic advisors* who know you reasonably well, as well as one former/current employer. (You **may** include additional personal references.) A recommendation form is included as the last page of this application; please make copies and distribute them to your references.

Completed recommendations must be sent directly to the Program using the address on the recommendation form or emailed directly to the program director at: tara.lambert@va.gov

Name & Title	Address	Telephone Number

Statement of Intent

I authorize the Committee for Admissions and Enrollment to utilize the information from this application (including transcripts, references, etc.) to determine my eligibility for this educational opportunity. I have read the student policies and guidelines, understand their content, and agree to abide by them if accepted into the Program.

If accepted into the Program, I agree to submit to a physical examination before final admission is granted. I have read the essential functions, understand their content and have the ability to meet each function.

I attest that the information in this application and the attachments are true.

(Your Signature & Date)

Narrative Statement

Please attach a brief personal sketch describing why you are interested in the field of Medical Laboratory Science, describing your personal and professional goals. Present a summary of the attributes, experiences and qualities which would make you a good candidate for our Program here at VA St Louis Health Care System.

LETTER OF RECOMMENDATION

Please complete this evaluation sheet in support of the student's application to the VASTLHCS Medical Laboratory Science Program. All information is confidential if returned directly to the Program.

Name of applicant: _____

Evaluator: _____

Please place a check in the column that best applies to this individual:

Trait	Below Average	Satisfactory /Average	Above Average	Not Observed
Interpersonal Skills				
Honesty				
Dependability				
Initiative				
Poise & Self Control				
Leadership				
Attendance				
Manual Dexterity				
Organizational Ability				
Communication – Oral				
Communication -Written				
Problem Solving				
Academic Performance				

ADDITIONAL COMMENTS (please use additional sheet if necessary):

Recommend fully Recommend with reservation Do not recommend

Signature _____

Title and institution _____

Phone number _____ Date _____

Return recommendation by January 31st to student in sealed envelope or emailed directly to:

Tara Lambert, MHS MLS, QLS (ASCP)CM, MLS Program Director

tara.lambert@va.gov

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