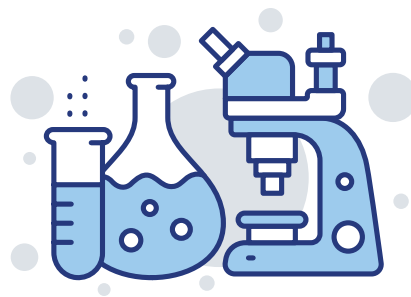

The William O. Green, Jr., M.D.

Medical Laboratory Science Program



The Valley Hospital
223 North Van Dien Avenue
Ridgewood, NJ 07450
201-447-8234

ValleyHealth.com/MLSProgram

(Click hyperlink above or scan QR code below)



Founded in 1969

Accredited by the National Accrediting Agency for
Clinical Laboratory Sciences (NAACLS)

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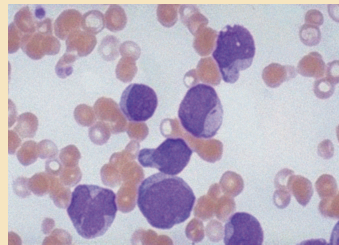


What is Clinical Laboratory Science?

Clinical laboratory scientists or medical laboratory scientists (also referred to as medical technologists) are indispensable members of the healthcare team, who are concerned with the qualitative and quantitative analysis of blood, urine, body fluids, and other biologic specimens. They possess knowledge of physiologic and pathologic conditions affecting these analyses, which is essential for the validation of accurate results. The results of patients' laboratory analyses are crucial to the physician's diagnosis, treatment, and monitoring of disease.

The types of analyses performed by a clinical laboratory scientist include the determination of the chemical composition of blood, the identification and enumeration of the different types of cells that are found in the blood and body fluids, blood typing for transfusion purposes, and the culturing and identification of bacteria, fungi, and viruses from sites of infection in the body.

These analyses require manual and interpretive skills in the testing process, as well as expertise in the operation of state-of-the-art computerized and automated instruments.



In **Hematology**, laboratory scientists analyze blood samples on automated instrumentation to determine if cell counts are abnormal. They methodically examine blood smears for often-subtle signs of disease. The ability to recognize cells as abnormal is critical to the prompt diagnosis and treatment of the patient.

Laboratory personnel in **Microbiology** examine a variety of specimens, looking for pathogenic bacteria and other types of microorganisms. Once the bacteria are identified, the next critical step is to determine which antibiotic will be the most effective in eliminating the infection.



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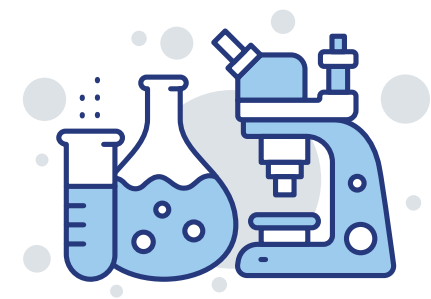
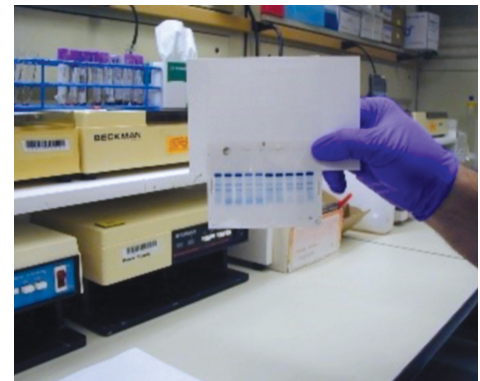


In **Clinical Chemistry**, a wide variety of techniques and sophisticated computerized instruments are used. Samples are analyzed for protein, lipid, and carbohydrate content and the laboratory scientists interpret test results while checking for accuracy and precision.

Changes in plasma proteins are linked to cardiac, liver, and kidney disease and can be detected by methods that separate the various proteins. Skilled laboratorians look for even slight abnormalities that may suggest the early onset of an illness.



The **Immunoematology** (Blood Bank) department has the responsibility of performing serologic tests to determine compatibility between transfusion recipients and the blood products that they receive. Selection of the appropriate donor blood is critical for ensuring transfusion safety.



Rapid and constant improvements in laboratory technology and in testing strategies provide exciting and challenging opportunities for clinical laboratory scientists to grow professionally as the field of healthcare continues to evolve. To be successful as a clinical laboratory scientist, an individual must have sound problem-solving skills, an interest and aptitude in biology, chemistry, and mathematics. Laboratory personnel must be able to work responsibly and calmly under pressure, as many patients are critically ill and their physicians need rapid, accurate results to properly manage their patient's care. Good communication skills, motor skills, and visual acuity are all essential attributes for clinical laboratory scientists.

Most important, working in the healthcare environment requires commitment and respect for the patients and their families, yourself, and your coworkers, along with the projection of a professional image.

Admission Requirements

For many students, choosing medical laboratory science involves a pre-professional phase of 3 years of college with prerequisite biology, chemistry, and mathematics courses. Following successful completion of these courses, the student may then apply for admission to the professional phase of the program, which is a 11-month internship in a clinical setting.

Individuals who have completed a baccalaureate degree in a scientific discipline can also apply to the professional program with completion of prerequisite coursework. After completion of the program didactic coursework and clinical rotations, graduates are eligible to sit for the American Society for Clinical Pathology (ASCP) national certification examination. The ASCP Board of Certification (BOC) is the gold standard in global certification for medical laboratory professionals.

Source: ASCP Board of Certification

See what some of our graduates have to say!

"I gained valuable experience at The Valley Hospital MLS program and now I am able to do something that I enjoy every day." – Cristina H.

"The work that we do in the lab is so important to patient care and this has been an extremely rewarding career in which I can help people every day." – Joey K.

"I have always enjoyed biology and science courses, but wasn't sure how to pursue a career in these disciplines. Medical Laboratory Science focuses on helping patients and incorporates biology, science, and technology all in one profession. – Amanda T.

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