

MEDICAL LABORATORY SCIENCES CAREER OPTIONS

Cytogenetics	This specialty area of the laboratory performs testing to investigate to presence of genetic diseases. Their samples can come from babies before they are born, newborns, infants, children and adults. This area of the laboratory can also test for paternity and maternity confirmation.
Doctor's Office/Clinic	Similar to hospital laboratories but these locations offer a smaller array of testing options and may only have personnel during restricted hours and days when the clinic is open.
Flow Cytometry	A Flow Cytometry instrument analyzes cells from tissue and blood samples to help identify the type of cell and the type of cancer that may be involved.
Forensic (Crime)	Practically everyone is familiar with the TV show CSI or with NCIS. Forensic labs look at materials from a crime scene to help identify victims and criminals.
Government	These laboratories may perform testing for environmental impact factors. They may test water quality and for soil and air contamination.
Hospital	In the hospital laboratory, MLS personnel analyze patient samples to determine their state of health or to diagnose disease. These laboratories typically offer a full array of diagnostic testing services 24 hours/day and 7days/week.
Molecular Diagnostics	Molecular Diagnostic techniques use RNA or DNA analysis to identify cells, organs, tissues, and microorganisms. The technique is used to help identify cell abnormalities and also organisms that cause diseases.
Public Health	A public health laboratory receives samples from other laboratories and from the environment that may contain organisms or toxins that are important to the health of the general public. They may examine possible infection outbreaks, food poisoning, and exposure to toxins.
Reference	A reference lab works on samples from other laboratories that require specialty testing or additional investigation that routine hospital laboratories are not prepared to perform.
Research	Throughout this university there are hundreds of research laboratories that are performing testing and subjects from soil, water, plants to farm or companion animals, human tissues and cells, and individuals. Research is essential to the world of discovery and the advancement of science. Expert testing skills and complex interpretations are part of your MLS degree.
Tissue Typing	When individuals need an organ transplant the individual and possible donor

must be matched based on their cellular tissue markers. This laboratory performs this testing to prepare for transplantation.

Toxicology

Toxicology is the study of chemical toxins. But this may also include investigation of possible poisonings or drug overdoses. This laboratory may also test for alcohol, narcotics, and other medications or recreational drugs.

Veterinary

Almost every disease and laboratory test that is found in humans can also be found in animals. Veterinary laboratories perform the same or very similar testing on dogs and cats, rabbits and gerbils, birds and lizards, cows and horses, chickens and turkeys, goats and sheep, lions and tigers and bears Oh My. Any animal that needs veterinary care also needs laboratory testing.