

Lexington Medical Center School of Medical Laboratory Science

Goals of the Program:

Lexington Medical Center School of Medical Laboratory Science has the following goals:

1. To provide students with a strong curriculum in medical laboratory science using a variety of educational methods, resources and experiences.
2. To prepare graduate medical laboratory scientists for career entry level positions
3. To prepare graduates for national certification in medical laboratory science.
4. To instill professional integrity and pride and to maintain the standards of the profession of medical laboratory science.
5. To provide graduate medical laboratory scientists with the necessary skills to advance into leadership rolls in the medical laboratory sciences
6. To provide students with the communication skills and attitudes necessary to promote teamwork in the healthcare setting.
9. To provide an environment conducive to professional growth and development.
10. To help meet the demand for competent practitioners in a variety of laboratory settings and venues.

Program Competency Statements for Medical Laboratory Scientists

The curriculum is designed to provide the student with the theoretical and practical knowledge, attitudes, and skills necessary for entry-level competency as a graduate medical laboratory scientist. At entry level, the MLS will possess the entry level competencies necessary to perform the full range of clinical laboratory tests in areas such as Clinical Chemistry, Hematology/Hemostasis, Immunology, Immunohematology/Transfusion medicine, Microbiology, Urine and Body Fluid Analysis, and other emerging diagnostics, and will play a role in the development and evaluation of test systems and interpretive algorithms. The medical laboratory scientist will have diverse responsibilities in areas of analysis and clinical decision making, regulatory compliance with applicable regulations, education, and quality assurance/performance improvement wherever laboratory testing is researched, developed, or performed.

At entry-level, the medical laboratory scientist will have the following basic knowledge and skills in:

- 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

- Educational methodologies and terminology sufficient to train/educate users and providers of laboratory services
- Principles and practices of clinical study design, implementation and dissemination of results

Although job responsibilities vary, graduates from the Lexington Medical Center School of Medical Laboratory Science, with minimal supervision, are expected to:

1. Organize the workload to achieve efficiency and productivity.
2. Perform blood collection procedures efficiently.
3. Perform basic and complex analyses of body fluids, cells, and other specimens with proficiency, accuracy, precision, and according to standard operating procedure.
4. Apply knowledge of scientific and technical principles, instrumentation, procedures, and physiological conditions in the correlation of test results with health and disease processes.
5. Correlate laboratory findings with other laboratory data to assess test results and procedures and to identify the need for future testing.
6. Interpret unusual results, solve problems, and make decisions regarding possible discrepancies.
7. Detect problems and errors when collecting and processing specimens and performing analyses and use a systematic approach in problem solving and decision making to correct them.
8. Assume responsibility for reporting test results accurately and in a timely manner.
9. Develop and evaluate procedures, equipment, instruments, and people using knowledge of scientific concepts, technical skills, and personnel relations.
10. Contribute data to quality control and quality assurance programs, evaluate results, and take appropriate action to maintain accuracy and precision and solve problems; participate in implementation of quality control and quality assurance programs.
11. Participate in decisions regarding quality control, quality assurance, instrument selection, safety, reagent purchases, and selection of new methods and procedures.
12. Analyze new clinical laboratory methodologies/tests/instruments in order to select the best method/test/instruments. Correlate old method to new method and conduct adequate crossover studies. Evaluate their usefulness and practicality within the context of a given laboratory's personnel, equipment, space, and budgetary resources.
13. Apply appropriate safety regulations and look for ways to improve and make the environment conditions safer.
14. Establish and perform preventive and corrective maintenance of equipment and instruments as well as identifying appropriate sources for repairs.
15. Use effective oral and written communications skills with laboratory personnel and people outside the laboratory; keep accurate and legible records; prepare management documents; use computer skills in communications and data management to enable effective, timely, accurate and cost-effective reporting of laboratory generated information.
16. Apply basic knowledge, skills, and relevant experiences in management and supervision, including financial, operation, marketing, and human resource management of the clinical laboratory to enable cost effective, high quality services.

17. Assume responsibility for one's own actions and decisions; supervise others effectively; guide subordinates in problem solving and decision-making.
18. Provide clinical instruction to others in basic theory and technical skills and/or plan, implement, and evaluate formal and informal programs of instruction using principles of educational methodology.
19. Participate in continuing education activities for the advancement of one's own knowledge of the field and maintenance of professional competence.
20. Demonstrate professional conduct and interpersonal skills with patients, laboratory personnel, other health care professionals, and the public in the following ways;
 - a. Convey a professional appearance when performing the duties of a medical technologist.
 - b. Be punctual.
 - c. Display initiative and effectively use free time by undertaking additional tasks.
 - d. Interact appropriately and effectively with patients, visitors, physicians, supervisors, co-workers, and other hospital personnel.
 - e. Maintain confidentiality and integrity in handling laboratory test results and other patient information.
 - f. Work under pressure without loss of composure, efficiency or accuracy.
 - g. Maintain a neat and orderly work area; maintain neat, accurate, and legible records.
21. Successfully pass ASCP BOC MLS certification exam.