

PROGRAM GOAL – Method Evaluation, Quality and Research Skills

The OSU Medical Laboratory Science Program will prepare entry level medical laboratory scientists who will apply knowledge of evidence-based practice and method evaluations to create, analyze and interpret data related to validations of new methods/instruments, quality programs and published scholarly work and apply the results/information to professional practice. This goal will be achieved by:

OBJECTIVE 1: The entry level medical laboratory scientist will evaluate the feasibility and usefulness of laboratory methods to the extent that optimal conditions and standardization, sources of error and reference ranges are identified. This implies the ability to:

- Identify the parameters of the method to be evaluated
- Develop a research strategy that will provide accurate and objective data pertinent to the parameters being evaluated
- Conduct experiments to provide data
- Evaluate data results
- Draw conclusions relative to the parameters in question

OBJECTIVE 2: The entry level MLS will establish and use quality control/assurance systems for established laboratory procedures to the extent that quality of output is assured. This implies the ability to:

- Recognize problem situations
- Analyze problem situations
- Theorize the cause of specific problems
- Synthesize, implement and evaluate solutions

OBJECTIVE 3: The entry level medical laboratory scientist will use evidence-based practice to find, understand, interpret, and apply research findings to their professional practice. This implies the ability to:

- Explain the rationale for evidence-based practice and use it to research a health-related question
- Interpret published research with respect to study limitations, soundness of conclusions, and implications for professional practice
- Critically analyze and apply methods from external sources
- Respond to evidence-based changes in medical laboratory science