

Standard VIII Matrices: Please complete for your program discipline.

Standard VIII Matrix (MLS)		
Medical Laboratory Scientist	Course(s)	Location(s) or Unit Number(s)
Standard 8A2		
Pre-analytical, analytical, and post-analytical components of laboratory services		
Clinical Chemistry		
Hematology/Hemostasis		
Immunology		
Immunohematology/transfusion medicine		
Microbiology		
Urine and body fluid analysis		
Laboratory Operations		
Standard 8A3		
Application of safety and governmental regulations and standards as applied to clinical laboratory science		
Standard 8A4		
Principles and practices of professional conduct and the significance of continuing professional development		
Standard 8A5		
Communications sufficient to serve the needs of patients, the public, and members of the health care team		
Standard 8A6		
Principles and practices of administration and supervision as applied to clinical laboratory science		
Standard 8A7		
Education methodologies and terminology sufficient to train/educate users and providers of laboratory services		
Standard 8A8		
Principles and practices of clinical study design, implementation, and dissemination of results		

Standard VIII Matrix (MLT)		
Medical Laboratory Technician	Course(s)	Location(s) or Unit Number(s)
Standard 8A2		
Pre-analytical, analytical, and post-analytical components of laboratory services		
Clinical Chemistry		
Hematology/Hemostasis		
Immunology		
Immunochemistry/transfusion medicine		
Microbiology		
Urine and body fluid analysis		
Laboratory Operations		
Standard 8A3		
Application of safety and governmental regulations compliance		
Standard 8A4		
Principles and practices of professional conduct and the significance of continuing professional development		
Standard 8A5		
Communications sufficient to serve the needs of patients, the public, and members of the health care team		

Standard VIII Matrix (HTL)

Histotechnologist	Course(s)	Location(s) or Unit Number(s)
Standard 8A2		
Histology		
Immunohistochemistry		
Enzyme Histochemistry		
Cytology Specimen Preparation		
Electron Microscopy		
Light Microscopy		
Management		
Education		
Regulations		
Standard 8A3		
a) Fixation		
• Tissue Identification		
• Parameters		
• Reagents		
• Pathology		
• Biochemistry principles and theories		
b) Processing, to include chemistry principles and theories		
• Decalcification		
• Frozen sections		
• Enzymes		
• Immunohistochemistry		
• Cytology		
c) Embedding/Microtomy		
d) Staining		
• Procedures, reagents, and quality control		
• Hematoxylin and Eosin		
• Special Staining procedures		
• Immunohistochemistry		
• Cytology		
• Pathology		
• Biochemistry principles and theories		
e) Laboratory Operations		
• Safety		
• Laboratory mathematics		
• Instrumentation		
• Quality Control		

Histotechnologist	Course(s)	Location(s) or Unit Number(s)
• Management		
• Education		
• Regulations		
Standard 8A4		
Application of safety and governmental regulations and standards as applied to histotechnology		
Standard 8A5		
Principles and practices of professional conduct and the significance of continuing professional development		
Standard 8A6		
Communications sufficient to serve the needs of patients, the public, and members of the health care team		
Standard 8A7		
Principles and practices of administration and supervision as applied to histotechnology		
Standard 8A8		
Education methodologies and terminology sufficient to train/educate users and providers of laboratory services		

Standard VIII Matrix (HT)		
Histotechnician	Course(s)	Location(s) or Unit Number(s)
Standard 8A2		
Histology		
Immunohistochemistry		
Enzyme Histochemistry		
Cytology Specimen Preparation		
Electron Microscopy		
Light Microscopy		
Standard 8A3		
a. Fixation		
• Tissue Identification		
• Parameters		
• Reagents		
b. Processing		
• Decalcification		
• Frozen sections		
• Enzymes		
• Immunohistochemistry		
• Cytology		
c. Embedding/Microtomy		
d. Staining		
• Procedures, reagents, and quality control		
• Hematoxylin and Eosin		
• Special Staining procedures		
• Basic Immunohistochemistry		
• Cytology		
e. Laboratory Operations		
• Safety		
• Laboratory Mathematics		
• Instrumentation		
• Quality Control		

Histotechnician	Course(s)	Location(s) or Unit Number(s)
Standard 8A4		
Application of safety and governmental regulations and standards as applied to histotechnology		
Standard 8A5		
Principles and practices of professional conduct and the significance of continuing professional development		
Standard 8A6		
Communications sufficient to serve the needs of patients, the public, and members of the health care team		
Standard 8A7		
Principles and practices of safety as applied to histotechnology		

Standard VIII Matrix (DMS)		
Diagnostic Molecular Scientist	Course(s)	Location(s) or Unit Number(s)
Standard 8A2		
Pre-analytical, analytical, and post-analytical components of diagnostic molecular laboratory services cover diagnostic molecular tests used to detect or diagnose acquired (infectious and non-infectious) diseases and genetic predisposition or disorders		
Organic and/or biochemistry		
Genetics		
Cell biology		
Microbiology		
Immunology		
Diagnostic molecular biology		
Principles, methodologies, and applications of:		
Molecular microbiology (infectious diseases)		
Molecular pathology (hematology/oncology)		
Molecular genetics		
Techniques of molecular science must include current techniques in:		
Separation and detection		
Amplification		
Sequence analysis		
Standard 8A3		
Application of safety and governmental regulations and standards as applied to diagnostic molecular science		
Standard 8A4		
Principles and practices of professional conduct and the significance of continuing professional development		
Standard 8A5		
Communications sufficient to serve the needs of patients, the public, and members of the health care team		
Standard 8A6		
Principles and practices of administration and supervision as applied to diagnostic molecular science		
Standard 8A7		
Education methodologies and terminology sufficient to train/educate users and providers of laboratory services		
Standard 8A8		
Principles and practices of applied study design, implementation, and dissemination of results		

Standard 8 Matrix (CG)		
Cytogenetic Technologist	Course(s)	Location(s) or Unit Number(s)
Standard 8A2		
Specimen Preparation:		
Sample Acquisition		
Transport/Storage		
Preparation		
Culture		
Harvest		
Slide Preparation		
Staining		
Molecular Cytogenetic Testing:		
Utilize appropriate techniques for preparation and analysis of molecular cytogenetic specimens, including array analysis		
Chromosome Analysis and Imaging:		
Selection, analysis, and description of suitable metaphase or interphase cells using microscopy and imaging		
Laboratory Operations:		
General laboratory skills		
Guideline/government regulations		
Safety		
Quality Assurance/Control		
Professional Standards and Conduct		
Standard 8A3		
Principles of interpersonal and interdisciplinary communication and team building skills and the significance of continuing professional development		
Standard 8A4		
Principles and practices of administration and supervision		
Standard 8A5		
Education methodologies and terminology sufficient to train/educate users and providers of laboratory services sufficient for future clinical faculty		
Standard 8A6		
Principles and practices of clinical study design, implementation, and dissemination of results		

Standard VIII Matrix (PathA)		
Pathologists' Assistant	Course(s)	Location(s) or Unit Number(s)
Standard 8A2		
Principles and Methodologies		
Performance of Procedures		
Correlation of Clinical Information and Gross Pathology with proper technique		
Problem-solving		
Troubleshooting techniques		
Principles and Practices of Quality Assurance/Quality Improvement		
Laboratory management		
Anatomy and Basic Microanatomy		
Human Physiology		
General and Systemic Human Pathology		
Anatomic Pathology:		
Surgical Pathology Techniques (Adult)		
Surgical Pathology Techniques (Pediatric)		
Autopsy Techniques – Medical (Adult)		
Autopsy Techniques – Medical (Pediatric)		
Autopsy Techniques – Forensic (Adult)		
Autopsy Techniques – Forensic (Pediatric)		
Autopsy Techniques – Forensic (Toxicology Collection)		
Histological Methodists and Techniques – Concepts of Immunohistochemistry		
Concepts of Molecular Diagnostics		
Microbiology/Immunology		
Clinical Pathology		
Embryology		
Laboratory Safety		
Laboratory Information Systems		
Laboratory Management		
Medical Ethics		
Medical Terminology		
Biomedical Photography		
Standard 8A3		
Application of laboratory safety governmental regulations and standards as applied to anatomic pathology		
Principles and practices of professional conduct		
Principles of interpersonal and interdisciplinary communication and team-building skills		

Pathologists' Assistant	Course(s)	Location(s) or Unit Number(s)
Principles and practices of administration and supervision as applied to clinical laboratory science		
Educational methodologies		

Standard VIII Matrix (PBT)		
Phlebotomy	Course(s)	Location(s) or Unit Number(s)
Standard 8A1		
Collection techniques:		
Tube Collection Devices		
Syringe Collection		
Capillary/Dermal puncture methods		
Standard 8A2		
Contact with various patient types		
Standard 8A3		
100 hours of clinical experiences		
100 hours of successful unaided collections		
Standard 8A4		
Application of laboratory safety governmental regulations and standards as applied to phlebotomy		
Standard 8A5		
Principles and practices of professional conduct		
Standard 8A6		
Principles of interpersonal and interdisciplinary communication and team-building skills		

Standard VIII Matrix (CA)		
Clinical Assistant	Course(s)	Location(s) or Unit Number(s)
Standard 8A1		
100 hours of clinical experiences		
Core module competencies must be completed		
Instruction in:		
Blood collection		
Preparation/reconstitution of reagents		
Standards and controls		
Tests at the CA level and follow established quality control protocols		
Standard 8A2		
Application of safety and governmental regulations compliance		
Standard 8A3		
Principles and practices of professional conduct and the significance of continuing professional development		
Standard 8A4		
Communications sufficient to serve the needs of patients, the public, and members of the health care team		