

# Clinical Laboratory Science Model Career Ladder

The Model Career Ladder grid was developed to serve as a guide to be used by laboratory leaders when developing a career ladder within their institution. Revisions specific to the institution (e.g., changes, additions, deletions) should be made to reflect the needs of the organization and their laboratory professionals.

Title	Education	Certification	Skills
Phlebotomist I	High School Grad, AA, AS degree or Certificate	PBT	<ul style="list-style-type: none"> <li>• Focuses on skill and knowledge development</li> <li>• Receives direction from more experienced team members as necessary</li> <li>• Exhibits basic proficiency in specimen collection techniques</li> <li>• Exhibits basic knowledge of specimen types and handling requirements</li> <li>• Adheres to quality systems protocols</li> <li>• Interacts with patients in a professional manner</li> <li>• Demonstrates competency at least annually</li> <li>• Completes required continuing education</li> <li>• Membership in a professional organization</li> </ul>
Phlebotomist II	High School Grad, AA, AS degree or Certificate	PBT	<p>Demonstrates characteristics of Phlebotomist I plus:</p> <ul style="list-style-type: none"> <li>• Works efficiently and independently under the direction of assigned leader.</li> <li>• Mentors Phlebotomist I staff as requested</li> <li>• Performs complex specimen collection techniques</li> <li>• Focuses on obtaining additional knowledge and skills</li> <li>• Active membership in a professional organization</li> </ul>
Medical Laboratory Assistant I	High School Grad, AA, AS degree or Certificate	MLA or PBT	<ul style="list-style-type: none"> <li>• Focuses on skill and knowledge development</li> <li>• Receives direction from more experienced team members as necessary</li> <li>• Exhibits basic proficiency of specimen processing</li> <li>• Exhibits basic knowledge of specimen types and appropriate processing, preparation, and handling requirements as they relate to laboratory tests</li> <li>• Performs Waived or POC testing under guidance of experienced staff, if applicable</li> <li>• Adheres to quality systems protocols</li> <li>• Communicates regarding requisitions and/or specimen requirements with patients, customers/clients and other healthcare team members in a professional manner</li> <li>• Demonstrates competency in position duties at least annually</li> <li>• Completes required continuing education</li> <li>• Membership in a professional organization</li> </ul>
Medical Laboratory Assistant II	AA, AS degree or Certificate	MLA	<p>Demonstrates characteristics of Medical Laboratory Assistant I plus:</p> <ul style="list-style-type: none"> <li>• Works efficiently and independently under the direction of assigned leader</li> <li>• Performs complex specimen processing techniques</li> </ul>

Title	Education	Certification	Skills
			<ul style="list-style-type: none"> <li>• Performs Waived or POC testing and demonstrates basic problem-solving skills</li> <li>• Actively participates in department improvement initiatives</li> <li>• Focuses on obtaining additional knowledge and skills</li> <li>• Active membership in a professional organization</li> </ul>
Medical Laboratory Technician I	AA or AS degree	MLT	<ul style="list-style-type: none"> <li>• Focuses on skill and knowledge development</li> <li>• Receives direction from more experienced team members as necessary</li> <li>• Exhibits knowledge of laboratory tests, standards, and quality system protocol</li> <li>• Exhibits basic knowledge of professional ethics, laws and regulations</li> <li>• Demonstrates entry level technician competencies in producing accurate laboratory test results</li> <li>• Disseminates laboratory test information in a timely manner</li> <li>• Demonstrates problem solving skills in performance of laboratory testing</li> <li>• Demonstrates competency in field at least annually.</li> <li>• Completes required continuing education</li> <li>• Membership in a professional organization</li> </ul>
Medical Laboratory Technician II	AA or AS degree	MLT	<p>Demonstrates characteristics of Medical Laboratory Technician I plus:</p> <ul style="list-style-type: none"> <li>• Works efficiently and independently under the direction of assigned leader</li> <li>• Demonstrates advanced problem-solving skills in performance of laboratory testing</li> <li>• Focuses on obtaining additional knowledge and skills</li> <li>• Active membership in a professional organization</li> </ul>
Medical Laboratory Technician III	AA or AS degree	MLT	<p>Demonstrates characteristics of Medical Laboratory Technician II plus:</p> <ul style="list-style-type: none"> <li>• Demonstrates advanced knowledge and skills</li> <li>• Demonstrates ability to assist as directed with quality system projects and key performance monitoring</li> <li>• Involved in training/orientation of new medical laboratory personnel</li> <li>• Involved in education of student medical laboratory technicians / medical laboratory scientists</li> </ul>
Medical Laboratory Scientist I	Bachelor's Degree	MLS	<ul style="list-style-type: none"> <li>• Focuses on skill and knowledge development</li> <li>• Receives direction from more experienced team members as necessary</li> <li>• Demonstrates ability to assist as directed with quality system projects and key performance monitoring</li> <li>• Exhibits knowledge of laboratory tests and standards</li> <li>• Exhibits basic knowledge of professional ethics, laws, and regulations</li> <li>• Disseminates laboratory test information in a timely manner</li> <li>• Offers suggestions for improvement in operations</li> </ul>

Title	Education	Certification	Skills
			<ul style="list-style-type: none"> <li>• Monitors accuracy and precision of laboratory testing</li> <li>• Demonstrates problem solving skills in performance of laboratory testing and quality systems management</li> <li>• Demonstrates competency in field at least annually.</li> <li>• Involved in education of student medical laboratory technicians/medical laboratory scientists</li> <li>• Involved in training/orientation of new medical laboratory personnel</li> <li>• Completes required continuing education</li> <li>• Pursues additional continuing education and/or formal education</li> <li>• Membership in a professional organization</li> </ul>
Medical Laboratory Scientist II	Bachelor's degree	MLS	<p>Demonstrate characteristics of Medical Laboratory Scientist I plus:</p> <ul style="list-style-type: none"> <li>• Works efficiently and independently under the direction of assigned leader</li> <li>• Demonstrates advanced problem-solving skills in performance of laboratory testing and quality systems management</li> <li>• Applies critical decision-making skills to reach conclusions about diagnostic testing needs</li> <li>• Evaluates laboratory testing requests for appropriateness</li> <li>• Uses pre-established evidence-based criteria to interpret laboratory-testing data</li> <li>• Participates in clinical research</li> <li>• Focuses on obtaining additional knowledge and skills</li> <li>• Active membership in a professional organization</li> </ul>
Medical Laboratory Scientist III	Bachelor's Degree	MLS	<p>Demonstrates characteristics of Medical Laboratory Scientist II plus:</p> <ul style="list-style-type: none"> <li>• Develops evidence-based criteria to correlate and interpret laboratory testing data</li> <li>• Applies clinical research information to optimize laboratory testing</li> <li>• Assumes informal leadership role by demonstrating leadership skills in problem solving, diagnostic testing management, and conflict resolution</li> <li>• Provides laboratory testing consultation to other members of the healthcare team</li> <li>• Participates in organization wide activities (e.g., committees, taskforces)</li> <li>• Involved in didactic instruction of student medical laboratory technicians/ medical laboratory scientists</li> </ul>
Medical Laboratory Scientist IV	Bachelor's Degree	MLS *Specialization in one or more	<p>Demonstrates characteristics of Medical Laboratory Scientist III plus:</p> <ul style="list-style-type: none"> <li>• Has completed enhanced clinical training and/or certification in a clinical area(s) of expertise</li> <li>• Provides leadership in their clinical area(s) of expertise</li> </ul>

Title	Education	Certification	Skills
		areas: See comprehensive list below	<ul style="list-style-type: none"> <li>• Develops and performs clinical research to optimize laboratory services</li> <li>• Evaluates patient laboratory test results and suggests additional testing if necessary</li> <li>• Provides direction to assigned personnel</li> <li>• Develops, implements, and maintains a quality management system</li> <li>• Assumes responsibility for outcomes of the department or assigned specialty division</li> <li>• Assumes Leadership role in education; designs, implements, and evaluates education of new clinical laboratory personnel / students</li> <li>• Actively pursues advanced positions in the field</li> <li>• Collaborates in submission of case studies and articles for publication</li> <li>• Serves in leadership positions in a professional organization</li> </ul>
Advanced Practice Scientist I	Master's degree	MLS  *Specialization in one or more areas: See comprehensive list below	<p>Demonstrates characteristics of Medical Laboratory Scientist IV plus:</p> <ul style="list-style-type: none"> <li>• Evaluates laboratory testing for reimbursement based on evidence-based mechanism</li> <li>• Uses clinical and other data to optimize laboratory services</li> <li>• Provides patient consultation regarding the purpose and results of laboratory tests</li> <li>• Serves as a clinical consultant for the health system and healthcare team members</li> <li>• Demonstrates leadership skills in problem solving, diagnostic testing management, and conflict resolution</li> <li>• Involved in the development of new techniques/procedures/services and obtains approval for implementation</li> <li>• May serve as faculty or program director for a hospital-based educational program</li> <li>• Active in submission of articles for publication</li> <li>• Involved in process improvement projects</li> <li>• Presents at state, local, and national professional meetings</li> </ul>
Advanced Practice Scientist II	Master's degree	MLS  *Specialization in one or more areas: See comprehensive list below	<p>Demonstrates characteristics of Advanced Practice Scientist I plus:</p> <ul style="list-style-type: none"> <li>• Demonstrates advanced leadership skills</li> <li>• Completes research to identify service improvements (e.g., new testing methods, quality protocols, patient safety initiatives)</li> <li>• Contributes to professional development in field of practice</li> <li>• Recognized as an expert in specialized field</li> <li>• Leads organization-wide collaborative team efforts with other members of the healthcare team and departments</li> </ul>

The following represent advance-degree professional options within the Clinical Laboratory:

Doctor of Clinical Laboratory Science	PhD	Pathologist/Physician
<p><b>Education:</b> Advanced Practice Clinical Doctorate (generally requires certification as MLS and 2 years clinical experience as MLS for acceptance)</p> <p><b>Summary:</b></p> <ul style="list-style-type: none"> <li>• Multi-specialty degree focused on specialized knowledge/skills that bridge the gap between the laboratory &amp; clinical care</li> <li>• Program includes clinical experience (clinical rounds, diagnostic management, utilization)</li> <li>• Can serve as a Laboratory Director or Clinical Consultant under CLIA. Requires certification by HHS-approved board.</li> <li>• Can serve as technical consultant, technical supervisor, or general supervisor under CLIA.</li> </ul> <p><b>Focus Areas:</b></p> <ul style="list-style-type: none"> <li>• Applies a broad / generalist knowledge focusing on all areas of the Body of Knowledge, leading to the ability to better integrate test results across a range of specialties.</li> <li>• Educates and engages in clinical consultation with healthcare professionals about laboratory test utilization and interpretation across many laboratory specialty areas</li> <li>• Utilizes a broad base of clinical knowledge that focuses on evidence-based practice including areas such as clinical correlations and pre-and post-analytical variables</li> </ul>	<p><b>Education:</b> PhD Scientist in chemical, physical, biological, or clinical laboratory science</p> <p><b>Summary:</b></p> <ul style="list-style-type: none"> <li>• Typically, has had post-doctoral training (fellowship) in a specific discipline or specialty</li> <li>• Can serve as a Laboratory Director or Clinical Consultant under CLIA. Requires certification by HHS-approved board.</li> <li>• Can serve as technical consultant, technical supervisor or general supervisor under CLIA, if they meet qualification requirements of education, experience, and training.</li> </ul> <p><b>Focus Areas:</b></p> <ul style="list-style-type: none"> <li>• Expands the body of knowledge in the field</li> <li>• Assumes an advanced consultant role</li> <li>• Evaluates and documents interventions and laboratory testing outcomes</li> </ul>	<p><b>Education:</b> Licensed MD, DO, or DPM</p> <p><b>Summary:</b></p> <ul style="list-style-type: none"> <li>• Frequently has specialty training from post-residency fellowships</li> <li>• Usually board certified in Clinical and/or Anatomic Pathology</li> <li>• Can serve as a Laboratory Director under CLIA</li> <li>• Can serve as clinical consultant, technical consultant, technical supervisor or general supervisor under CLIA.</li> </ul> <p><b>Focus Areas:</b></p> <ul style="list-style-type: none"> <li>• Identifies and diagnoses disease</li> <li>• Provides consultation on which tests to order, test result interpretation and appropriate treatments.</li> </ul>

\* Advanced Certifications currently available through the ASCP Board of Certification:

Specialist in Blood Banking	SBB	Specialist in Microbiology	SM
Specialist in Chemistry	SC	Specialist in Molecular Biology	SMB
Specialist in Cytometry	SCYM	Diplomate in Laboratory Management	DLM
Specialist in Hematology	SH		