

Competency-Based Position Description Template

Program/Department:

Position Title: LRN Laboratory Scientist

Reports to: Laboratory Manager (or Front Line Supervisor)

Previous Incumbent:

Job Position Summary:

LRN Laboratory Scientists work as specialists in the laboratory, performing analyses of human tissue, body fluids, or referred isolates based on LRN assays. These tests may be basic to highly complex, and encompass knowledge of microbiology, molecular biology, immunology and other disciplines, all performed under a quality management system. Work is performed under the general direction of a technical supervisor, and is compliant with regulatory requirements.

Essential Job Duties:

- Conducts analyses and reports results from analysis/research findings to aid in the diagnosis, treatment and monitoring of diseases of public health significance or in investigating other public health and environmental hazards
- Conducts culture based and molecular LRN specific assays
- Complies with quality management processes and policies; recommends process improvements
- Troubleshoots instrumentation and testing problems
- Provides technical guidance to public health partners, clinicians, and the public
- Assists in training new staff
- Takes on-call

Job Position Competencies:

Microbiology (30%)

MCB 2.00 Facilities and safety: works safely with microbiological agents within a laboratory facility

- Instructs others on laboratory hazards and hazard communication related to microbiological agents (C)
- Instructs others in policies, processes, and procedures regarding safe work practices related to microbiological agents (C)
- Instructs staff in policies, processes, and procedures regarding PPE use for work related to microbiological agents (C)
- Instructs staff in use of biosafety cabinets and other engineering controls (C)
- Establishes waste management processes and procedures related to microbiological agents (P)
- Instructs staff in the policies, processes, and procedures regarding decontamination for different microorganisms (C)
- Instructs staff in policies, processes, and procedures regarding the storage of microbiological materials for different microorganisms (C)

MCB 3.00 Pre-examination: assesses microbiological samples during the pre-examination phase

- Consults on nonroutine sample collection, labeling, and handling procedures for microbiological examination (C)
- Instructs others on packing and shipping of Category A and Category B infectious substances (C)
- Adheres to policies, processes, and procedures regarding the identification, handling, safety, appropriateness and triage of samples containing agents of concern (C)
- Instructs staff in policies, processes, and procedures regarding accessioning and receipt of microbiological samples (C)
- Instructs staff on policies, processes, and procedures for the systematic tracking of microbiological samples from receipt to final disposition (C)
- Instructs others in the appropriateness of routine and nonroutine samples for microbiological examination (C)
- Develops processes and procedures regarding sample set-up for microbiological examinations (P)
- Instructs staff in procedures for microbiological sample storage and handling prior to examination (C)
- Reports to epidemiologists when microbiological examination requests warrant notification (C)

MCB 4.00 Examination: assesses microbiological samples during the examination phase

- Instructs staff in the media selection process (C)

- Instructs staff in how to inoculate cultures using aseptic technique (C)
- Instructs staff in morphological identification and differentiating organisms from artifacts (C)
- Instructs staff in identifying growth characteristics of microorganisms (C)
- Instructs staff in how to perform antigen detection methods (C)
- Ensures the laboratory responds quickly to needs for rapid testing with timely notification and secure messaging of results (P)

MCB 6.00 Regulatory compliance: ensures regulatory compliance

- Analyzes NCEs for corrective actions and documentation (P)
- Evaluates LDT validation data (C)
- Complies with policies, processes, and procedures related to the federal Select Agent Program, including the securing, safe handling, and testing of select agents and the documentation of activities (C)

General Laboratory Practice (30%)

GEN 1.00 - General technical and laboratory practice knowledge: demonstrates general knowledge and skills related to the scientific and technical components of laboratory testing

- Instructs others in concepts and theories related to the specific testing that is conducted in work area (C)
- Instructs others in fundamental mathematical and statistical concepts and practices (C)
- Integrates scientific and technical advances into laboratory operations (P)
- Integrates basic laboratory techniques into standard operating procedures and new laboratory practices (C)
- Resolves complex technical problems with methods, procedures, and laboratory equipment, including documenting corrective action (P)
- Instructs others in model laboratory practices (C)
- Instructs others in use of paper or electronic methods or systems for documentation (C)
- Identifies methods to improve stewardship of resources (C)
- Serves as a role model, consistently conforming to the highest scientific standards and practices (C)

GEN 2.00 - Reagent Use and Storage: adheres to policies and principles regarding the use and storage of laboratory reagents and supplies

- Instructs staff in use and storage of reagents and supplies (C)
- Instructs staff in preparing reagents (C)

GEN 3.00 - Equipment Use: adheres to policies and principles regarding the use, maintenance, and calibration of laboratory equipment

- Instructs staff in the operation of laboratory equipment (C)
- Determines need for repair or replacement of laboratory equipment (P)
- Performs calibration of complex instruments and equipment (C)
- Inspects preventive maintenance and calibrations records for completeness (C)

GEN 4.00 - Pre-examination: performs steps in the pre-examination phase of testing

- Instructs others in policies, processes, and procedures for sample management (C)

GEN 5.00 - Examination: performs steps in the examination phase of testing

- Instructs staff in sample analyses (C)
- Instructs staff in policies, processes, and procedures regarding testing workflow (C)
- Interprets QC data prior to reporting results (C)

GEN 6.00 - Postexamination: performs steps in the postexamination phase of testing

- Evaluates QC data for a given data reporting period (C)
- Interpret complex or ambiguous results (P)
- Instructs staff in the policies, processes, and procedures related to reporting and release of examination results and notifiable results (C)
- Collects data for reporting on QA indicators and processes (C)

GEN 7.00 - Regulatory Compliance: complies with regulations and guidelines governing laboratory testing

- Instructs staff on regulatory requirements and guidelines related to laboratory testing (C)
- Reviews PT and alternative assessment results (C)

- Reports PT and alternative assessment (B)
- Compiles results of method validation and performance verification (C)
- Complies with policies, processes, and procedures regarding protected information (B)

Surveillance (15%)

SRV 01.00 Function of surveillance: recognizes the function of laboratory testing in surveillance

- Describes the importance of public health laboratory surveillance testing (B)

SRV 02.00 Notification rules and regulations: complies with national and jurisdictional rules and regulations regarding notifiable results

- Reports data to laboratory management (C)

SRV 03.00 Surveillance testing: performs surveillance testing

- Describes test sample collection, storage, and analytical requirements (B)
- Describes test sample collection, storage, and analytical method workflows (B)
- Participates in performance evaluation of surveillance test methods and testing capabilities (C)
- Informs supervisor of potential outbreak or exposure event (C)
- Receives outbreak or exposure event samples for testing (B)
- Ensures that outbreak or exposure event samples are prioritized according to schema (C)

SRV 05.00 Information for surveillance: recognizes vital information needed for surveillance

- Monitors the capture of sample information (C)

SRV 06.00 Data analysis: analyzes data from surveillance testing systems

- Analyses laboratory surveillance data (C)

SRV 07.00 Data management: manages public health surveillance data using secure data management systems

- Determines validity and reliability of data collection instruments and methods (C)

SRV 08.00 Recognition of significant results: recognizes significant results in surveillance data

- Reports significant results with interpretation to laboratory management and customers (C)

- Identifies trends in surveillance data (C)

SRV 09.00 Partnerships: maintains partnerships to conduct surveillance

- Communicates approved laboratory information to other institutions (B)
- Explains sample requirements and testing procedures (B)

Safety (10%)

SPH 1.00 Physical environment: works safely in the physical environment of the laboratory facility

- Recognizes new physical hazards in the laboratory facility (C)
- Implements control measures to be used when physical hazards are present in the laboratory facility (C)
- Implements work practices to be used when physical hazards are present in the laboratory facility (C)

Security (5%)

SEC 4.00 Personnel security program: implements a personnel security program to meet organizational goals, regulatory requirements, and established standards

- Addresses problems or questions involving personnel security concepts (C)
- Implements the personnel security program (C)

Emergency Management and Response (5%)

EMR 1.00 Mitigation of emergency events: mitigates emergency events

- Describes the incident response plan (B)
- Recognizes emergencies and other incidents in their work area that should be reported (B)
- Recognizes significance of alarms (B)

EMR 2.00 Preparation for emergency events: prepares for emergency events

- Demonstrates awareness of the ICS by completing a FEMA-approved introductory course (B)
- Participates in emergency response training, exercises, and drills (B)
- Describes requirements for notification of emergencies and other incidents according to organizational plans and policies (B)

- Explains how the laboratory interacts with emergency preparedness and response networks (B)

Workforce Training (2.5%)

WFT 1.00 Content: gathers training content

- Develops emerging science and technology content (P)
- Collaborates with subject matter experts to gather content (C)

WFT 2.00 Training design: designs training

- Prepares instructional materials for existing programs (C)

WFT 3.00 Delivery set-up: manages the logistics of set-up for training delivery

- Troubleshoots training equipment (C)

WFT 5.00 Training evaluation: evaluates learner knowledge and skill development

- Implements the training assessment rubric to ensure training outcomes are met (C)

Ethics (2.5%)

ETH 1.00 Professional Code of Conduct: adheres to policies and principles governing professional ethics and rules of conduct when working in a public health laboratory

- Exemplifies integrity in interactions and activities (C)
- Serves as a role model of ethical behavior by consistently conforming to the highest ethical standards and practices (C)

ETH 2.00 Scientific Code of Conduct: adheres to policies and principles governing scientific ethics and rules of conduct when working in a public health laboratory

- Instructs others in policies, processes, and procedures regarding scientific integrity of test results and findings (C)
- Serves as a role model of scientific ethical behavior and rules of conduct by consistently conforming to the highest scientific standards and practices (C)

Education and Experience Requirements:

- Advanced degree in a biological, chemical or physical science related field (to include but not limited to medical or clinical laboratory science, medical technology, chemistry, microbiology, biochemistry, molecular biology, biology, immunology, public health)

- More than 3 years of recent related laboratory work experience in a certified (e.g., CLIA, CAP, EPA, NELAC) clinical, public health or environmental laboratory, including at least 2 years directing or supervising high complexity laboratory testing
- Equivalent combinations of directly related education and experience may be considered on a case-by-case basis
- Special consideration will be given to applicants with national certification as a laboratory director or technical specialists, or demonstrated experience directly related to the job duties
- Background check is required