

# Competency-Based Position Description Template

**Program/Department:**

**Position Title:** Laboratory Information Systems Manager

**Reports to:**

**Previous Incumbent:**

**Job Position Summary:**

This leadership position oversees the laboratory data management systems of the [Name of Laboratory] including the development, review, implementation, and communication of all laboratory information system processes.

**Essential Job Duties:**

- Plans and directs the administrative and operational activities of data management systems within the laboratory
- Oversees data interoperability projects to improve data exchange among partners
- Ensures data security, data integrity, and data retrieval
- Manages core IT hardware, software, and services
- Coordinates system changes/improvements to support lab processes
- Responsible for financial oversight of program or service

**Job Position Competencies:**

***Informatics (50%)***

**INF 01.00 Laboratory test request and sample receiving: manages sample receiving and the processing of laboratory test requests**

- Manages daily electronic data exchange activities regarding test requests to ensure efficient operations and resolution of root causes of errors (P)
- Evaluates use of vocabulary standards for identification of missing or misidentified codes (P)
- Evaluates the need for new test orders and associated meta data (P)
- Configures a variety of complex hardware to ensure proper operation (P)
- Manages problem resolution concerning entry of metadata and auxiliary data (P)

**INF 02.00 Test preparation, Laboratory Information Management System (LIMS) processing, test results recording and verification: manages systems for electronic test preparation, LIMS processing, and test results recording and verification**

- Ensures that valid values and test codes are properly harmonized between submitters and receiving laboratory (P)
- Evaluates the LIMS tracking of testing processes and associated sample sources (P)
- Troubleshoots automated test results data capture utilities (P)
- Evaluates the need for new tracking reports to facilitate data review (P)
- Institutes rules to ensure that laboratory programs have tools to manage data verification processes (P)
- Evaluates the processes for auto-assignment of reflex or repeat testing (P)

**INF 03.00 Report preparation and distribution: manages test result report creation and distribution**

- Appraises solutions for data selection for nonroutine reports and for research purposes (P)
- Evaluates report production processes (P)
- Manages the tracking and needs assessment of electronic reporting of data (P)
- Modifies noncomplex electronic formats to meet customer requirements (P)

**INF 08.00 Data exchange and interoperability: manages the electronic exchange of laboratory data with data partners**

- Develops automated interfaces to export data from instruments to electronic storage (P)
- Maps electronic data to form messages consistent with client message structure, format, and vocabulary for export (E)
- Determines secure electronic messaging transport protocols (P)
- Automates the mapping of test codes and results to all standardized notifiable diseases and conditions (E)
- Manages the automation of test orders in collaboration with partners (P)

- Manages the automation of test order receipts and notification in collaboration with partners (P)
- Manages the automation of test results reporting in collaboration with partners (P)
- Manages the automation of test results receipts in collaboration with partners (P)
- Troubleshoots exchange network interfacing (P)

**INF 09.00 Statistical analysis and surveillance: generates statistical analyses of analytical results for public health surveillance**

- Ensures the ability to capture, retrieve, and link metadata and demographic data associated with laboratory testing (P)

**INF 10.00 Billing for laboratory services: manages billing for laboratory services**

- Evaluates centralized functionality regarding an enterprise-wide capability to account for costs (P)

**INF 14.00 Customer relationship management: manages customer relationships**

- Evaluates current and future needs to handle customer relationships and perform ad hoc queries to improve regulatory compliance and business management (P)
- Evaluates current and future needs to track and perform ad hoc queries on laboratory errors and information requests (P)
- Evaluates current and future needs to track, perform ad hoc queries, and provide reports regarding corrective actions (P)

**INF 17.00 Laboratory mutual assistance and disaster recovery: manages laboratory mutual assistance and disaster recovery**

- Develops informatics COOP workflows and procedures to restore informatics and IT support (E)
- Develops workflows and project management processes to validate the electronic catalogue of capabilities, services, schedules, and testing of effectiveness during disaster recovery and emergency situations (E)

**INF 18.00 Core IT products and services: manages core IT hardware, software, and services**

- Evaluates modifications, upgrades, and new releases to laboratory instrument software and systems (P)

- Evaluates the use and requirements of electronic information communication tools (P)
- Evaluates LIMS functionality to meet laboratory and customer needs (P)
- Evaluates the use of networks to support laboratory activities (P)
- Evaluates IT support needed for laboratory operations (P)
- Evaluates the resources that impact the SDLC (P)
- Evaluates integration functions with partners and customers (P)
- Evaluates the accessibility and searchability of legacy data (P)
- Evaluates the ability of the LIMS to communicate with third-party data systems (P)
- Evaluates the ability of the LIMS to manage access and audit trails (P)
- Performs complex computer maintenance and troubleshooting (P)

**INF 19.00 Policies and procedures: manages operational, budgeting and funding policies and procedures**

- Evaluates informatics policies (P)
- Develops workflows and processes to ensure paper and electronic documentation is centrally located and accessible (E)
- Ensures that laboratory informatics business needs are presented to stakeholders and partnership channels (P)

***Bioinformatics (10%)***

**BIO 1.00 Biology and computer science knowledge: integrates knowledge of biology and computer science**

- Applies computer science domains to biological problems (C)

**BIO 2.00 Statistical methods knowledge: applies knowledge of statistical methods for analysis of biological data**

- Compares findings to any related data sets (P)

#### **BIO 4.00 Data management: conducts data management, storage, and retrieval**

Manipulates data structures to address biological problems (P)

Evaluates data management techniques (P)

- Evaluates data storage and retrieval techniques (P)
- Manages allocation of multiple computing resources (P)

#### ***Management and Leadership (10%)***

##### **MLD 1.00 General management: ensures sound management of laboratory operations**

- Coordinates program activities according to laws and regulations related to laboratory operations (C)
- Evaluates the quality of services for continued quality improvement (P)
- Identifies strategies and activities to improve customer service (P)
- Directs the management of projects at the programmatic level (P)

##### **MLD 2.00 Policy development: ensures the development, implementation, and review of internal policies**

- Compiles important issues, lists of stakeholders, and various options and solutions for internal policy development (C)
- Ensures staff compliance with laboratory-wide policies (P)
- Develops amendments or updates to internal policies (C)

##### **MLD 4.00 Human resource management: ensures effective management of human resources**

- Enforces human resource requirements and policies (C)
- Promotes EEO requirements and policies (C)
- Manages the development and implementation processes for position descriptions (P)
- Monitors staff progress on agreed-upon performance parameters (P)
- Administers performance appraisals (C)

- Resolves conflicts in a fair and equitable manner (C)
- Administers progressive discipline (C)
- Assesses professional development gaps to ensure and support staff competency development (P)
- Recommends staff for advancement (C)
- Develops succession plans that consider current and future needs (P)

### ***Communications (5%)***

#### **COM 2.00 Active listening skills: displays active listening skills when interacting with others**

- Provides feedback based on the dialogue summary (P)
- Applies range of body language cues to enhance the exchange (C)
- Provides counterpoints while being respectful of disagreements (C)

#### **COM 4.00 Communication technology: utilizes technology to communicate information to internal and external partners**

- Evaluates the effectiveness of the technology used for sharing information (E)

#### **COM 5.00 Communication professionalism: ensures professionalism in communication with customers and stakeholders**

- Monitors interactions with customers and stakeholders to ensure they are conducted professionally (P)
- Develops overarching system for exchange of information to meet the needs of customers and stakeholders (E)
- Selects information to share (C)

#### **COM 8.00 Public health laboratory value: promotes the value of the public health laboratory**

- Identifies opportunities to promote the public health laboratory and system (P)
- Supports the development and distribution of communication materials about the public health laboratory (B)
- Participates in marketing strategies (B)

### ***General Laboratory Practice (5%)***

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

- Applies basic scientific and laboratory concepts and theories related to the specific testing that is conducted in work area (B)
- Discusses scientific and technical advances relevant to own work (C)
- Resolves complex technical problems with methods, procedures, and laboratory equipment, including documenting corrective action (P)
- Ensures utilization of established paper and electronic documentation methods or systems (P)
- Identifies methods to improve stewardship of resources (C)

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

- Ensures staff compliance with regulatory requirements and guidelines related to laboratory testing (P)
- Ensures staff compliance with policies, processes, and procedures regarding protected information (P)

### ***Quality Management Systems (5%)***

#### **QMS 02.00 Customer focus: ensures that customer needs, expectations, and requirements are consistently met**

- Analyzes feedback and satisfaction data from internal and external customers (P)
- Develops procedures to address customer needs, expectations, and requirements (P)

#### **QMS 09.00 Information management: ensures the confidentiality, security, and integrity of generated and disseminated information**

- Complies with policies, processes, and procedures for maintaining confidentiality of internally and externally derived information (C)
- Develops policies, processes, and procedures for maintaining confidentiality of internally and externally derived information (P)

- Complies with policies, processes, and procedures for securing information (C)
  - Develops policies, processes, and procedures to ensure information is secure (P)
- Develops processes and procedures to ensure the integrity of information (P)

### ***Security (5%)***

#### **SEC 5.00 Information security: ensures that information security meets organizational goals, regulatory requirements, and established standards**

- Interprets information security concepts to adapt policies, processes, and procedures to support organizational goals (P)
- Implements processes and procedures for prioritizing risks associated with the laboratory's sensitive information and technology, including the methods of control (P)

### ***Ethics (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**

- Exemplifies integrity in interactions and activities (C)
- Coaches staff in behaviors that exemplify integrity (P)
- Ensures staff compliance with policies and procedures related to ethical principles and professional rules of conduct (P)
- Identifies methods to improve stewardship of resources (C)

### ***Workforce Training (5%)***

#### **WFT 4.00 Training delivery: applies principles of learning to training implementation and delivery**

- Develops presentation materials to address learning preferences and styles (P)
- Ensures implementation of the most effective presentation tools and techniques (P)

#### **WFT 5.00 Training evaluation: evaluates learner knowledge and skill development**

- Carries out the evaluation steps for standard training evaluations for routine courses (C)
- Recommends improvements based on evaluation data from training assessment tools (P)

- Facilitates activities leading to the continuous improvement of a training plan (P)

**Minimum Education and Experience Requirements:**

- Bachelor's degree in laboratory science (Chemistry, Microbiology), or in computer science or a related field
- More than 3 years of recent related laboratory or data systems work experience in a certified (e.g., CLIA, CAP, EPA, NELAC) clinical, public health or environmental laboratory
- Equivalent combinations of directly related education and experience may be considered on a case-by-case basis