



Clinical Laboratory Scientist Series

Classification Title	Class Code	Date Established	Date Revised
Clinical Laboratory Scientist I	7927	06-30-80	06-01-06
Clinical Laboratory Scientist II	7926	06-30-80	06-01-06

OVERVIEW:

The Clinical Laboratory Scientist Series is comprised of two classifications with progressive responsibility for laboratory administration as well as quality control and assurance. All incumbents are responsible for performing a wide variety of clinical laboratory tests which provide the medical staff with essential data and information for the prevention, diagnosis, and treatment of illnesses, diseases, and other conditions found within the university setting. Tests include chemical, physical, microscopic, bacteriological, hematological, immunological, and related tests. Incumbents also are responsible for maintaining the laboratory in support of Student Health Center operations.

Clinical Laboratory Scientist I - Incumbents are licensed professionals responsible for the performance of a wide variety of clinical laboratory tests and examinations as well as laboratory quality control and assurance. In a smaller and/or less complex clinical laboratory performing a narrower range of tests and where only one Clinical Laboratory Scientist may be needed, incumbents also may assist in some aspects of laboratory administration. Additionally, incumbents must have access to a physician laboratory director or higher-level clinical laboratory scientist for referral of unique, extraordinary, or unexpected test results.

Clinical Laboratory Scientist II - Incumbents are distinguished by broader and higher-level responsibility for the technical administration of a Student Health Center clinical laboratory, most often in a larger laboratory characterized by more varied and complex operations with additional staffing requirements and a wider range of tests performed. Incumbents work under the general supervision of and must have access to a physician laboratory director, and typically serve as the technical supervisor for the laboratory by overseeing daily technical operations and providing lead work direction to other Clinical Laboratory Scientists and/or laboratory support staff.

CLINICAL LABORATORY SCIENTIST I

The Clinical Laboratory Scientist I is a licensed professional responsible for the performance of a wide variety of clinical laboratory tests and examinations using manual methods or applicable mechanical and electronic equipment. In most cases, testing steps are well defined and delineated; however, tests range from moderately to highly complex in nature, involving multiple steps and procedures and requiring professional judgment. Incumbents are responsible for quality assurance and control and work under the supervision of a physician laboratory director or more senior Clinical Laboratory Scientist who spot checks work and must be available for referral on unique, extraordinary, or unexpected test results.

The following examples of typical work activities are meant to illustrate the general range of work functions performed by the Clinical Laboratory Scientist I; they are not meant to be all-inclusive or restrictive. Work assignments may involve related activities.

- ◆ Perform clinical laboratory tests such as chemical, physical, microscopic, microbiological, bacteriological, hematological, immunological, and other laboratory diagnostic tests ordered by a physician or other licensed practitioner. Frequently performed tests include routine urinalysis, pregnancy tests, blood tests, and antibiotic sensitivity tests.
- ◆ Collect specimens to perform tests, including performing phlebotomy. Prepare solutions and reagents used in testing and analysis.
- ◆ Read test results and examine and interpret outcomes to identify abnormalities. Perform mathematical calculations related to testing and analysis. Provide results to practitioners.
- ◆ Ensure laboratory quality control and assurance, perform proficiency testing, and maintain a safe laboratory environment in accordance with established standards, protocols, and applicable federal and state regulations, such as the Clinical Laboratory Improvement Amendments (CLIA) and the Occupational Safety and Health Act (OSHA). Ensure compliance with infection control policies and blood borne pathogen safety precautions.
- ◆ Use automated and manual data and reporting systems, such as a laboratory information system, to maintain records of laboratory tests conducted, prepare and maintain patient data, and prepare reports. Assist in maintaining such systems and their interfaces to other medical information systems and ensure data accuracy.
- ◆ Prepare for licensing and related inspections, prepare laboratory and operational compliance reports, and provide data for more comprehensive state and federal regulatory compliance reports.
- ◆ Operate and maintain instruments and equipment utilizing established procedures. Conduct routine calibration and/or standardization of instruments.
- ◆ Maintain laboratory, materials, and equipment in orderly condition. Ensure supply and materials are maintained at adequate levels.
- ◆ In a smaller and/or less complex student health center clinical laboratory where only one Clinical Laboratory Scientist may be needed, incumbents may assist the physician laboratory director in some aspects of laboratory administration which may include coordinating daily operations, assisting in monitoring the budget, preparing technical and administrative reports, and participating in the development of laboratory processes and protocols.
- ◆ May be assigned to provide lead work direction to laboratory support staff. Lead work direction involves training and orienting employees, scheduling support staff, assigning and reviewing work, and providing input to employee selection and performance evaluations.

TYPICAL QUALIFICATIONS:

Knowledge:

Incumbents must possess a thorough knowledge of the theories, principles and practices of clinical laboratory science including the use and care of all applicable laboratory equipment; working knowledge of the preparation of specimens; working knowledge of various laboratory disciplines, tests and procedures including chemical, physical, microscopic, microbiological, bacteriological, serological, hematological, immunological, and other related disciplines and laboratory tests; basic knowledge of mycology, virology, and genetics; working knowledge of automated information systems used in clinical laboratory settings; general knowledge of clinical laboratory quality control and assurance procedures, protocols and standards; and general knowledge of state and federal regulations pertaining to the operation of a clinical laboratory.

Abilities:

Incumbents must be able to identify incongruities in test procedures and inconsistencies in reports of test results for a patient; demonstrate skill in the performance of a variety of laboratory analyses and evaluate information against measurable criteria; notice pertinent details of specimens under microscopic study; perform applicable mathematical calculations rapidly and accurately; keep current in developments in the field of clinical laboratory science; and if assigned, provide lead work direction to laboratory support staff.

Education and Experience:

Incumbents must possess the requisite education for licensing, which is a bachelor's degree in clinical laboratory science or equivalent from an accredited institution **or** equivalent post-secondary education, training and experience as defined by the California Division of Laboratory Science. In addition, incumbents must possess sufficient experience to demonstrate the professional and technical competencies to independently perform the duties of the position.

Licensing/Certification Requirements:

Incumbents must possess and maintain a valid California Clinical Laboratory Scientist license.

CLINICAL LABORATORY SCIENTIST II

The Clinical Laboratory Scientist II is distinguished by broader and higher-level responsibility and accountability for the technical administration of a student health center clinical laboratory, most often in a larger laboratory characterized by more varied and complex operations, staffing requirements, and a wider range of tests performed. Incumbents work under the general supervision of a physician laboratory director and typically serve as the technical laboratory consultant and supervisor by overseeing daily technical operations, including such duties as bringing new tests on-line and verifying their accuracy, ensuring quality control, establishing appropriate procedures and protocols, and performing proficiency testing and personnel competency programs. Typically, incumbents provide lead work direction to one or more clinical laboratory scientists and/or laboratory support staff, but also may be the sole person within the laboratory.

The following examples of typical work activities are meant to illustrate the general range of work functions performed by the Clinical Laboratory Scientist II; they are not meant to be all-inclusive or restrictive. Work assignments may involve related activities. In addition to the general professional duties of the Clinical Laboratory Scientist I, the Clinical Laboratory Scientist II typically performs the following:

- ◆ Perform a variety of complex and advanced, as well as standard clinical laboratory tests. Adapt, develop and introduce new test procedures and methodologies into the laboratory, including developing and documenting new protocols. Establish and/or modify quality control criteria for measuring the accuracy of results. Instruct other laboratory staff in the performance of new and modified procedures and methods.
- ◆ Collect and extrapolate data on new procedures and methods to develop test criteria and standards. Investigate procedural modifications and unexpected test results to determine reasons for nonconformance with established patterns. Consult with physicians or other practitioners on test results and explore alternative methods for verifying results.
- ◆ Set up new equipment and adapt laboratory guidelines and protocols for new or modified processes and adapt manual tests for automated processing.
- ◆ Perform a variety of administrative functions within the laboratory including coordinating daily operations, administering quality control and assurance and regulatory compliance programs, preparing laboratory operational and compliance reports, ensuring proper use of equipment and materials, developing and monitoring the laboratory budget, and procuring supplies and materials.
- ◆ Ensure the laboratory continues to meet the standards for the compliance and accreditation program under CLIA, Department of Health quality assurance standards, and OSHA regulatory requirements and prepare required compliance reports.
- ◆ May serve as the administrator for the laboratory's automated system including monitoring data and information accuracy and system upgrades.
- ◆ May be assigned to provide lead work direction to one or more Clinical Laboratory Scientists, as well as to laboratory support staff. Lead work direction involves organizing and planning work; training and orienting employees, scheduling laboratory staff; assigning work and reviewing work, and providing input to employee selection and performance evaluations.

TYPICAL QUALIFICATIONS:

Knowledge:

In addition to the knowledge required of a Clinical Laboratory Scientist I, Clinical Laboratory Scientist II incumbents must possess a comprehensive and in-depth knowledge of the theories, principles and practices of clinical laboratory science, including the use and care of applicable equipment and systems; thorough knowledge of clinical laboratory quality control procedures, protocols and standards; thorough knowledge of various laboratory disciplines, tests and procedures including chemical, physical, microscopic, microbiological, bacteriologic, serological, hematological, immunological, and other related disciplines and laboratory tests; thorough knowledge of automated computer systems used in clinical laboratory settings; and thorough knowledge of federal and state regulations pertaining to clinical laboratories.

Abilities:

In addition to the abilities outlined for the Clinical Laboratory Scientist I, the Clinical Laboratory Scientist II must be able to serve as a technical consultant within the laboratory regarding methodologies, protocols, and established laboratory procedures; identify and locate sources of information about various new tests and uses of new equipment; demonstrate competency in the performance of complex and advanced laboratory analyses; adapt and introduce new and modified tests into the laboratory; evaluate tests results and data against measurable criteria; extrapolate data to develop new test criteria and standards; identify incongruities in test procedures and inconsistencies in reports of test results for patients; develop procedures, quality control checks and instructions necessary for new or modified tests; plan, schedule and carry out laboratory activities to meet administrative guidelines and medical needs; perform quality assurance studies and compile statistical information required to meet state and federal licensing standards, requirements, and accreditation programs; keep records and prepare various administrative and laboratory analysis reports; and provide lead work direction to professional and support laboratory staff.

Education and Training:

Incumbents must possess the same educational requirements as the Clinical Laboratory Scientist I. In addition, incumbents must possess sufficient experience to demonstrate the professional and technical competencies to independently perform the administrative and technical duties of a Clinical Laboratory Scientist II, which typically would be two years of increasing responsibility within a clinical laboratory.

Licensing/Certification Requirements:

Incumbents must possess and maintain a valid California Clinical Laboratory Scientist license. National licensing from the American Society for Clinical Pathology and/or a specialty certification in such areas as hematology or microbiology are desirable, but not required.