

**County of Humboldt Job Specification**  
**SUPERVISING PUBLIC HEALTH MICROBIOLOGIST**  
**Classification 0529**  
**FLSA: Non-Exempt**



**DEFINITION**

Under general direction, supervises and coordinates the work of Public Health Laboratory personnel engaged in performing standard microbiological and chemical testing; oversees bioterrorism laboratory; coordinates the implementation of new testing; works with local clinics, other County departments, California Department of Public Health (CDPH), United States Food and Drug Administration (FDA), and other agencies on monitoring and testing reportable and emerging diseases and/or environmental health issues in the community; and performs related duties as assigned.

**SUPERVISION RECEIVED AND EXERCISED**

Receives general direction from the Public Health Laboratory Director or designee. Exercises full supervision over lower-level staff.

**CLASS CHARACTERISTICS**

This is the supervisory level classification in the Public Health Microbiologist series. Incumbents in this class are expected to oversee laboratory processes, supervise lower-level professional and technical staff, and perform difficult and complex testing and analysis.

This class is distinguished from the Public Health Laboratory Director or designee in that the latter is responsible for managing day-to-day operations and activities of the public health laboratory.

**EXAMPLES OF TYPICAL JOB FUNCTIONS (Illustrative Only)**

*Management reserves the right to add, modify, change, or rescind the work assignment of different positions.*

- Plans, organizes, and supervises the daily functions, operations, and activities of staff responsible for conducting, analyzing, and interpreting tests in the Public Health Laboratory.
- Participates in the development and implementation of goals, objectives, policies, and priorities for assigned programs; recommends, within departmental policy, appropriate service levels; recommends and administers policies and procedures.
- Assists in the development and implementation of laboratory budgets; monitors expenditures; monitors and maintains inventory of laboratory supplies; and orders supplies and equipment as necessary ensuring compliance with County and departmental procurement procedures and laboratory budget.
- Develops and standardizes procedures and methods to improve and continuously monitors the efficiency and effectiveness of assigned programs, service delivery methods, and procedures; identifies opportunities for improvement and recommends to the Public Health Laboratory Director or designee.

- Selects, trains, and evaluates the work of assigned personnel; provides or coordinates staff training; conducts periodic one-on-one meetings with lower-level staff to provide feedback on performance and work direction; works with employees to correct deficiencies; oversees the implementation of discipline and termination procedures.
- Oversees the bioterrorism laboratory and performs Laboratory Response Network testing to identify and work with bioterrorism organisms; provides training and works with local laboratories, law enforcement agencies, and other community agencies on identification and reporting of organisms.
- Performs critical and highly specialized serological and molecular procedures to assist in the detection, definition, and control of disease; provides technical oversight and consultation within the laboratory.
- Evaluates current and forthcoming quality systems requirements, public health laboratory methods, and technologies to recommend, develop, implement, and optimize new and existing laboratory procedures as necessary.
- Assists in the coordination with other departmental personnel, laboratory personnel in public and private laboratories, and local health department personnel on technical methods and laboratory results.
- Reviews, analyzes, and interprets laboratory data at the highest level of difficulty; develops conclusions and provides recommendations.
- Maintains quality control/quality assurance standards to ensure that the methods, techniques, and equipment used to analyze samples produce accurate, reliable results.
- Participates in writing, updating, and maintaining laboratory clinical and environmental standard operating procedures.
- Practices, monitors, and trains laboratory staff on proper safety procedures.
- Participates in the coordination of the proficiency testing program; conducts bacteriological, biological, parasitological, virologic, toxicological, molecular, and serological tests and analysis and interprets results to assist in the detection, definition, and control of communicable, chronic, and other diseases.
- Analyzes clinical and environmental samples; reports clinical, environmental, and surveillance data to local clinic practices, County Environmental Health, CDPH, FDA, and the Centers for Disease Control.
- Operates and maintains a variety of laboratory equipment; troubleshoots operating problems and makes adjustments to equipment.
- Participates in the coordination of laboratory activity with those of medical clinics, physicians, public health services, and outside laboratories; advises and/or provides training on sample types, proper sample collection techniques, and explanation of results.
- Attends technical meetings, training sessions, and department meetings and activities.
- Performs minor preventative maintenance on laboratory equipment and coordinates with vendors for specialized preventative maintenance.
- Maintains detailed records of laboratory testing and prepares written reports as necessary.
- Performs related duties as assigned.

*The requirements listed below are representative of the knowledge and ability required. Reasonable accommodations may be made to enable qualified individuals with disabilities to perform the essential functions.*

## **QUALIFICATIONS**

### **Knowledge of:**

- Principles and practices of employee supervision, including work planning, assignment review and evaluation, discipline, and the training of staff in work procedures.
- Principles and practices of leadership.
- General principles and practices of budget development and implementation.
- Principles, practices and procedures of clinical and environmental laboratory operations including biology, physiology and/or chemistry, clinical bacteriology, clinical virology, clinical serology/diagnostic immunology, mycobacteriology, parasitology, mycology, and molecular biology.
- Principles and practices of laboratory quality assurance/quality control, statistical measurements, and evaluation.
- Principles and practices of laboratory detection and characterization of diseases of public health concern.
- Causes and modes of transmission of communicable diseases.
- Policies, procedures, and methods related to Laboratory Response Network for responding to potential bio-terrorism threats and events.
- Operation and minor maintenance of a wide variety of laboratory equipment used in the work.
- Record keeping principles and procedures.
- Occupational hazards and safety principles, practices, and procedures, including handling and storage of hazardous chemicals.
- Applicable federal, state, and local laws, regulatory codes, ordinances, and procedures relevant to public health laboratory.
- Principles and techniques for working with groups and fostering effective team interaction to ensure teamwork is conducted smoothly.
- Techniques for providing a high level of customer service by effectively dealing with the public, vendors, contractors, and County staff.
- The structure and content of the English language, including the meaning and spelling of words, rules of composition, and grammar.
- Modern equipment and communication tools used for business functions and program, project, and task coordination, including computers and software programs relevant to work performed.

### **Ability to:**

- Supervise staff, delegate tasks, provide training and development opportunities, ensure work is performed effectively, and evaluate performance in an objective and positive manner.
- Assist in developing and implementing goals, objectives, practices, policies, procedures, and work standards.
- Plan, assign, supervise, review, and evaluate the work of assigned staff.
- Effectively provide staff leadership and work direction.
- Train others and observe safety practices related to the work.
- Inspect the work of others and maintain established quality assurance and quality control standards in performing laboratory work.

- Read and interpret reference materials to remain knowledgeable and proficient in public health microbiology theory and application.
- Write technical reports of laboratory activities; conduct statistical analyses; analyze test results accurately and take effective action; and review procedures for accuracy and compliance.
- Develop and implement new assays.
- Perform a wide variety of bacteriological, biological, parasitological, virologic, toxicological, molecular, and serological tests and analysis.
- Operate, calibrate, and maintain complex laboratory equipment.
- Prepare and maintain accurate records of work performed.
- Observe safety practices related to the work including working with and disposing of biological and chemical hazards materials in a safe and proper manner.
- Wear personal protective equipment (PPE) in the performance of assigned duties.
- Understand, interpret, and apply all pertinent laws, codes, regulations, policies and procedures, and standards relevant to work performed.
- Independently organize work, set priorities, meet critical deadlines, and follow-up on assignments.
- Use tact, initiative, prudence, and independent judgment within general policy and procedural guidelines.
- Effectively use computer systems, software applications relevant to work performed, and modern business equipment to perform a variety of work tasks.
- Communicate clearly and concisely, both orally and in writing, using appropriate English grammar and syntax.
- Establish, maintain, and foster positive and effective working relationships with those contacted in the course of work.

**Education and Experience:**

*Any combination of training and experience that would provide the required knowledge, skills, and abilities is qualifying. A typical way to obtain the required qualifications would be:*

Equivalent to a bachelor's degree from an accredited college or university with major coursework in microbiology, biology, bacteriology, or a related field.

**and**

One (1) year of increasingly responsible experience equivalent to the County's class of Public Health Microbiologist II.

**Licenses and Certifications:**

- Must possess a valid US driver's license upon date of application. Must obtain California driver's license following hire date per California DMV regulations.
- Possession of a valid Public Health Microbiologist Certificate issued by the California Department of Public Health.

**PHYSICAL DEMANDS**

- Mobility to work in a standard office and laboratory setting and use standard office laboratory equipment, including a computer and diverse testing equipment, and to operate a motor vehicle to visit various County and meeting sites; ability to stand and walk between work areas; required to bend, stoop, kneel, reach, push, and pull drawers open and closed to retrieve and file information; ability to lift, carry, push, and pull materials and objects averaging a weight of 5 pounds or heavier weights up to 50 pounds on a frequent basis, in all cases with the use of proper equipment and/or assistance from other staff.
- Vision to read printed materials and a computer screen.
- Hearing and speech to communicate in person and over the telephone.
- Finger dexterity is needed to access, enter, and retrieve data using a computer keyboard or calculator and to operate standard office equipment.

### **ENVIRONMENTAL CONDITIONS**

- Office and laboratory environment with moderate noise levels, controlled temperature conditions, and direct exposure to hazardous physical substances within the laboratory.
- Field environment and exposure to cold and hot temperatures, inclement weather conditions, mechanical and/or electrical hazards, unpleasant odors, vermin, insects, parasites, biologic and infectious agents, and hazardous chemical substances and fumes. Employees use protective clothing, equipment devices, and materials.
- Employees may interact with members of the public or with staff under emotionally stressful conditions while interpreting and enforcing departmental policies and procedures.

### **ADDITIONAL REQUIREMENTS**

Must be willing to be on a call-down list to work evenings and weekends for emergency situations. Some positions are required to be immunized against various communicable diseases, including rabies. Some departments may require pre-employment screening measures before an offer of employment can be made (i.e. background screening, physical examination, etc.).