## **DUTY STATEMENT**

| Employee Name:                                    | Position Number:                          |  |  |
|---|---|--|--|
| Vacant  | 580-732-5599-005                          |  |  |
| Classification:                                   | Tenure/Time Base:                         |  |  |
| Research Scientist III (Microbiological Sciences) | Permanent Full Time                       |  |  |
| Working Title:                                    | Work Location:                            |  |  |
| Senior Zoonotic and Vector-borne Diseases         | 850 Marina Bay Parkway                    |  |  |
| Research Scientist                                | Richmond, CA 94804                        |  |  |
| Collective Bargaining Unit:                       | Position Eligible for Telework (Yes/No):  |  |  |
| R10   | No  |  |  |
| Center/Office/Division:                           | Branch/Section/Unit:                      |  |  |
| Center for Laboratory Sciences/Infectious         | Viral and Rickettsial Disease Laboratory  |  |  |
| Diseases Laboratory Division                      | Branch/Zoonotic and Vector-Borne Diseases |  |  |
|   | Section/Zoonotic & Vectorborne Diseases   |  |  |
|   | Genotyping Unit                           |  |  |

All employees shall possess the general qualifications, as described in California Code of Regulations Title 2, Section 172, which include, but are not limited to integrity, honesty, dependability, thoroughness, accuracy, good judgment, initiative, resourcefulness, and the ability to work cooperatively with others.

This position requires the incumbent to maintain consistent and regular attendance; communicate effectively (orally and in writing) in dealing with the public and/or other employees; develop and maintain knowledge and skill related to specific tasks, methodologies, materials, tools, and equipment; complete assignments in a timely and efficient manner; and, adhere to departmental policies and procedures.

All California Department of Public Health (CDPH) employees perform work that is of the utmost importance, where each employee is important in supporting and promoting an environment of equity, diversity, and inclusivity, essential to the delivery of the department's mission. All employees are valued and should understand that their contributions and the contributions of their team members derive from different cultures, backgrounds, and life experiences, supporting innovations in public health services and programs for California.

## **Competencies**

The competencies required for this position are found on the classification specification for the classification noted above. Classification specifications are located on the <u>California Department of Human Resource's Job Descriptions webpage</u>.

## **Job Summary**

This position supports the California Department of Public Health's (CDPH) mission and strategic plan by planning, organizing, and directing highly specialized and large-scale molecular scientific research studies to improve diagnostics and laboratory surveillance tools for viral and rickettsial pathogens in support of outbreak investigations, including response to global public health emergencies such as the COVID-19 pandemic. The incumbent will lead applied research studies to develop detailed pathogen characterization using a variety of specialized, complex methods that may include, but are not limited to, real-time polymerase chain reaction (PCR), amplicon-based sequencing,

and whole genome sequencing (WGS) and commensurate bioinformatic and phylogenetic data analyses to support epidemiological investigations of emerging pathogens. The incumbent will serve as a scientific advisor and provide technical scientific consultation to other research scientists on high-complexity classical and molecular virological methods to support larger research studies and will serve as the technical advisor to communicate scientific findings with other public health professionals, including CDPH laboratorians, epidemiologists, and other partners organizations on public health investigations and scientific studies. The position will coordinate and collaborate with other scientists and public health professionals from CDPH, other public health laboratories, and with the national Centers for Disease Control and Prevention (CDC). The incumbent will present on scientific research and results of major studies to the public health community and publish major findings in scientific reports and journals.

The incumbent works under the general supervision of the Research Scientist Supervisor I in the Zoonotic and Vectorborne Diseases Genotyping Unit.

| Special Requirements  |  |  |
|---|--|--|
| ☐ Conflict of Interest (COI)  |  |  |
| ☐ Background Check and/or Fingerprinting Clearance                      |  |  |
| ☐ Medical Clearance   |  |  |
| ☐ Travel:   |  |  |
| ☐ Bilingual: Pass a State written and/or verbal proficiency exam in     |  |  |
| License/Certification:  |  |  |
| Other: Vaccinations recommended, may require work in BSL-3 environment. |  |  |
| Essential Functions (including percentage of time)                      |  |  |

- 30% Plans, organizes, and directs, as a team lead, major scientific research studies to develop, evaluate and optimize genotyping and WGS applications for zoonotic and vector-borne disease pathogens using highly specialized laboratory technologies on a variety of platforms. Independently develops and implements sophisticated, complex data analysis workflows in bioinformatics and phylogenetics to support molecular assays and analyses for characterizing viral and rickettsial pathogens.
- 30% Serves as team leader on a variety of highly developed scientific projects. As the scientific advisor, serves as the technical lead of a scientific team in the design of complex molecular experiments and interpretation of results. Conceives of and oversees the evaluation and validation of new procedures and research methods. Using highly specialized methods, interprets scientific findings and performs detailed analyses of laboratory data to support outbreak investigations involving viral and rickettsial pathogens. Adheres to all Viral and Rickettsial Disease Laboratory (VRDL) quality assurance and quality control (QA/QC) policies for laboratory operations, biosafety, chemical hygiene and other applicable standards.
- 15% As the scientific advisor, collaborates with public health professionals at the local, state or federal level (CDC, FDA, USDA) as well as academic laboratories, to develop, assess, and as appropriate, implement novel techniques that improves protocols to fulfill research objectives. Maintains familiarity with the latest scientific literature on molecular techniques including WGS and applies this knowledge to lead applied research investigations of infectious diseases.
- 10% Prepares scientific presentations and effectively communicates complex scientific information to the public health community. Prepares scientific articles for publication in peer-reviewed journals; publishes

- summary findings describing genotyping and sequencing results in scientific reports. Assists with writing of grants and funding proposals.
- 10% Serves as technical scientific consultant to provide expertise on complex laboratory and data analysis methods to other public health research scientists and professionals. Provides scientific consultation on molecular assays and sequencing to microbiologists from local and county labs and other programs at CDPH. Works closely with VRDL internal and external partners from local, State and Federal laboratories, as well as collaborators from academic labs to participate in technical, scientific training events.

| Marginal Functions (including percentage of time)  |                 |  |                 |  |
|--|-----------------|--|-----------------|--|
| 5% Other job-related duties as assignable capacity.  | gned, including | assisting other units or sections as n   | eeded for surge |  |
| ☐ I certify this duty statement represents an accurate description of the essential functions of this position. I have discussed the duties and have provided a copy of this duty statement to the employee named above. |                 | ☐ I have read and understand the duties and requirements listed above and am able to perform these duties with or without reasonable accommodation. (If you believe reasonable accommodation may be necessary, or if unsure of a need for reasonable accommodation, inform the hiring supervisor.) |                 |  |
| Supervisor's Name:   | Date            | Employee's Name:   | Date            |  |
| Supervisor's Signature   | Date            | Employee's Signature   | Date            |  |

HRD Use Only:

Approved By: CP Date: 6/24/25