DUTY STATEMENT - PROPOSED

Employee Name:	Position Number: 580-410-5594-909
Classification: Research Scientist III (Epi-Bio)	Tenure/Time Base: Limited Term/Full-Time
Working Title: Infectious Disease Modeler III	Work Location: 850 Marina Bay Parkway Richmond, CA 94804
Collective Bargaining Unit: R10	Position Eligible for Telework (Yes/No): Yes
Center/Office/Division: Center for Infectious Diseases/Division of Communicable Disease Control	Branch/Section/Unit: Covid Control Branch/Modeling Section

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 California Department of Human Resource's Job Descriptions webpage.

Job Summary

This position supports the California Department of Public Health's (CDPH) mission and strategic plan by performing a critical role performing and supporting infectious disease modeling for COVID-19, influenza, RSV, and other diseases to provide timely evidence for public health action.

The Covid Control Branch (CCB) coordinates and provides guidance on statewide COVID-19 case reporting, surveillance, epidemiologic investigations, laboratory testing, and on clinical and infection control issues. The Branch works closely with other Teams to help produce various daily reports for

CDPH leadership and other stakeholders; these are often fast moving and changing as pan-respiratory surveillance evolves. The CCB works closely with local health departments, other state teams and agencies, and the Centers for Disease Control and Prevention (CDC) on public health surveillance and response. It is also poised to response to other epidemics as they may emerge.

The Research Scientist III (RS III), within the CCB Modeling Section, will provide modeling, analytical, and statistical support of high complexity for the study and forecasting of infectious disease data. The RS III is responsible for coordinating with internal and external partners around modeling tools and methodologies available. The RS III has direct responsibility, in collaboration with other team members, to produce infectious disease forecasts and other modeling deliverables via the California Communicable diseases Assessment Tool (CalCAT) and other means, and to help interpret and contextualize modeling evidence for stakeholders.

The incumbent works under the general direction of the Research Scientist Supervisor I (RSS I), Modeling Section.

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:

Essential Functions (including percentage of time)

40%   Designs, implements, and conducts analysis for infectious disease modeling projects of high complexity, including but not limited to parameter estimation, nowcasting, forecasting, and scenario modeling. Uses advanced modeling methods to inform planning and programmatic action for the public health response to COVID-19, influenza, RSV, and other infectious diseases of public health significance. Under general direction, plans, organizes, and directs research into quantifying and combining model uncertainty across multiple pathogens, optimizing ensembles of multiple models, and evaluating models using alternate metrics.

25%   Designs and conducts implementation science research of high complexity into usage of the California Communicable diseases Assessment Tool (CalCAT: http://calcat.cdph.ca.gov/) and other forecasting and modeling tools provided to local health jurisdictions and other users. Serves as team subject matter expert related to implementation science implications for modeling projects. Disseminates findings to other public health departments and scientific research community.

15%   Provides guidance and technical support to the Branch, Division, Center, and Department management as needed on areas of expertise in their scientific portfolio for generating and interpreting modeling evidence. Acts as a team subject matter expert and liaison internally with disease-specific subject matter experts at CDPH and externally on their projects and modeling methodologies. Mentors junior scientific staff on their areas of modeling expertise. Supports

senior scientific staff in making independent, complex decisions related to Modeling Section deliverables and relevant policy.

15%   Generates and presents reports on modeling information to leadership and other internal and external stakeholders, including collaborating with other CDPH teams working on infectious diseases. Writes reports and presents investigative findings at national, state, and local conferences and meetings; serves as lead author for peer-reviewed modeling publications to ensure maximum dissemination and impact of the Modeling Section's work.

Marginal Functions (including percentage of time)

5%   Performs other job-related duties as required.

☐ 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: AV
Date: 6/17/2024

DUTY STATEMENT - PROPOSED

Employee Name:	Position Number: 580-410-5582-909
Classification: Research Scientist II (Epi-Bio)	Tenure/Time Base: Limited Term/Full-Time
Working Title: Infectious Disease Modeler II	Work Location: 850 Marina Bay Parkway Richmond, CA 94804
Collective Bargaining Unit: R10	Position Eligible for Telework (Yes/No): Yes
Center/Office/Division: Center for Infectious Diseases/Division of Communicable Disease Control	Branch/Section/Unit: Covid Control Branch/Modeling Section

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 [California Department of Human Resource's Job Descriptions webpage](#).

Job Summary

This position supports the California Department of Public Health's (CDPH) mission and strategic plan by performing a critical role performing and supporting infectious disease modeling for COVID-19, influenza, RSV, and other diseases to provide timely evidence for public health action.

The Covid Control Branch (CCB) coordinates and provides guidance on statewide COVID-19 case reporting, surveillance, epidemiologic investigations, laboratory testing, and on clinical and infection control issues. The Branch works closely with other Teams to help produce various daily reports for

CDPH leadership and other stakeholders; these are often fast moving and changing as pan-respiratory surveillance evolves. The CCB works closely with local health departments, other state teams and agencies, and the Centers for Disease Control and Prevention (CDC) on public health surveillance and response. It is also poised to response to other epidemics as they may emerge.

The Research Scientist II (RS II), within the CCB Modeling Section will provide modeling, analytical, and statistical support of moderate complexity for the study and forecasting of infectious disease data. The RS II is responsible for coordinating with internal and external partners around modeling tools and methodologies available. The RS II has supporting responsibility, in collaboration with other team members, to produce infectious disease forecasts and other modeling deliverables via the California Communicable diseases Assessment Tool (CalCAT) and other means, and to help interpret and contextualize modeling evidence for stakeholders.

The incumbent works under the general supervision of the Research Scientist Supervisor I (RSS I), Modeling Section.

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:

Essential Functions (including percentage of time)

35%   Contributes to the design, implementation, and analysis for infectious disease modeling projects of moderate complexity, including but not limited to nowcasting, forecasting, and scenario modeling. Uses statistical and mechanistic modeling methods to inform planning and programmatic action for the public health response to COVID-19, influenza, RSV, and other infectious diseases of public health significance.

25%   Acts as a team liaison with nationally organized and funded modeling efforts, including the CDC Center for Forecasting and Outbreak Analytics' Insight Net, forecasting and scenario modeling hubs, and other academic groups, consulting with RSS I and senior scientific staff as needed on modeling outputs.

15%   Communicates and presents reports on modeling information to leadership and other internal and external stakeholders, including collaborating with other CDPH teams working on infectious diseases, using scientific best practices. Contributes to writing reports and may present investigative findings at national, state, and local conferences and meetings; co-authors manuscripts for peer-reviewed publications to ensure maximum dissemination and impact of the Modeling Section's work.

10%   Acts as a liaison between the Modeling Section and local health jurisdictions, providing support and guidance for California Communicable diseases Assessment Tool (CalCAT: http://calcat.cdph.ca.gov/) implementation and best practices for interpreting and conveying other modeling evidence. Supports implementation science research in these areas.

10%   Conducts regular literature and tooling reviews for the Modeling Section on general and special topics to ensure the team is up to date on the latest science and methodological advances. Provides updates to senior scientific staff and is mentored on employing innovative methods.

Marginal Functions (including percentage of time)

5%   Performs other job-related duties as required.

☐ 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: AV
Date: 6/17/2024