Employee Name:	Position Number:
	580-510-5590 909
Classification:	Tenure/Time Base:
Research Scientist II (Social / Behavioral)	Permanent / Full Time
Working Title:	Work Location:
Participant / Local Agency Program Integrity	3901 Lennane Drive, Sacramento CA
Researcher	95834
Collective Bargaining Unit:	Position Eligible for Telework (Yes/No):
R10	Yes
Center/Office/Division:	Branch/Section/Unit:
Center for Family Health / Women, Infants,	Data and Integrity Branch
and Children (WIC) Division	

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 advancing the health and well-being of California's diverse people and communities. As an employee of the Data and Integrity Branch, the incumbent serves as part of a team that collects, analyzes, monitors and leverages data, research and policies to benefit, optimize, and protect the Women, Infants, and Children (WIC) program and its participants, local agencies, and vendors.

The incumbent works under the general supervision of the Chief, Data and Integrity Branch, Research Scientist Supervisor II (RSS II). The Research Scientist II (Social/Behavioral Science) (RS II) conducts

data analysis and scientific research studies of moderate scientific scope and complexity to investigate, detect, and mitigate fraudulent activity against the WIC program to develop and monitor participant-based high-risk indicators, and apply behavioral modeling and data analytics to protect the fiscal health of WIC. The RS II theorizes and tests various hypotheses to identify suspect WIC participant and staff activity within the WIC program; ensures the WIC certification process conforms to federal guidelines and evaluates fiscal, program, and health outcomes. The RS II develops data tables, figures, written summaries, reports, presentations, and articles for internal and external stakeholders, and may provide expert testimony at administrative hearings.

### **Special Requirements**

$\ge$	Conflict of Interes	t (COI)
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- 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% Analyzes and monitors WIC data to identify anomalous activity associated with fraudulent WIC participant and staff activity. Develops use cases and fraud indicators; integrates data from various sources (including external to WIC); applies sophisticated business rules and advanced analytics, cognitive technologies, and predictive models to identify and diagnose fraud patterns and profiles; identifies data anomalies to flag suspicious participant and staff behavior; applies network, transactional, and open source analysis to identify fraud; calculates data-driven participant and staff fraud risk scores to profile events and activities; and coordinates and provides data to appropriate external parties for investigation. Assists in the development of Case Management tools to properly triage and respond to detected anomalies and track incident responses and outcomes. Uses indicators and monitoring tools to build out use cases for fraud detection and help modify and add new indicators, as needed. Uses statistical software and Structured Query Language (SQL) to detect patterns and anomalies and for more in-depth data mining; develops and updates dashboards using Tableau; builds appropriate reports for use by program integrity and staff. Provides data and documentation to prepare cases, collaborates with legal and law enforcement partners, and provides expert testimony at administrative hearings.
- 25% Develops and applies quantitative and qualitative research methods, and moderately advanced statistical methods to independently and collaboratively conduct complex research studies and analyze data, including measuring the effectiveness of WIC program activities. Develops and maintains expert knowledge of the WIC administrative data; constructs innovative analytical methods to identify and monitor program goals and fiscal health. Conducts literature reviews; defining the nature and scope of the problem to be researched;

applies appropriate scientific research methodologies; applies appropriate scientific techniques and SQL to manipulate and analyze large databases; uses statistical software to analyze data, including the application of moderately complex descriptive and inferential statistical techniques, such as multivariate analyses; interprets findings; and prepares scientific research papers, poster presentations, and State reports. Presents research results to appropriate management and partners, and at professional meetings and conferences. Assists with meeting federal and state data reporting requirements. Responds to internal and external data requests. Collaborates with, and at times leads, Branch staff on research projects and other special assignments, peer reviews statistical software and SQL code and final products from other Branch researchers. Works closely with research staff from the Participant Analysis, Research, and Evaluation (PARE) Section to enhance knowledge exchange and quality assurance of the WIC clinic-based data.

- 25% Collaborates with the Program Integrity team to enhance and implement fraud detection and prevention activities; supports the PI team by providing data and reports for investigations and cases. Collaborates with staff from the Communications, Food, and Vendor Policy and Local Services branches and PARE research staff to develop and implement a high-risk monitoring system for local agencies, participants, and staff. Collaborates in the construction of performance measures to operationalize program goals and objectives; oversees the monitoring of the progress in achieving program goals and objectives; develops and disseminates local agency and participant monitoring and evaluation reports to inform internal and external stakeholders.
- 10% Attends WIC Division, Branch, and Section meetings. Completes State and CDPH mandated trainings; follows and applies data security and confidentiality requirements and laws.

### Marginal Functions (including percentage of time)

5% Performs other job-related duties as assigned.

□ 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: AG Date: May 20, 2024.