2025-26 Texas Public Health Fellowship

Fellowship Name: Next Generation Sequencing Fellowship

Fellowship Details

Host Site Organization Name: Texas Department of State Health Services

Host Site Division/Program: Public Health Laboratory

Host Site/Fellowship Location: 1100 West 49th Street, Austin, Texas

Host Site Workplace Setting: 100% onsite/in-person

Workplace Setting Description: This position is 100% onsite at the DSHS Laboratory in Austin, TX.

Public Health Core Disciplines: Biostatistics   Epidemiology

Primary Fellowship Focus/Topics: Disease Surveillance   Laboratory Testing and Analysis

Fellowship Overview

Host Site Mission
The DSHS Public Health Laboratory tests over 1.5 million samples per year to monitor, identify, and prevent health threats and outbreaks, and tests food, water, and environmental samples for dangerous pathogens, toxins, and chemicals.

Fellowship Projects
The DSHS Genetic Sequencing Branch (GSB) has been sequencing extracted genetic material from wastewater samples and performing bioinformatic analyses to detect SARS-CoV-2 along with other pathogens. The Fellow will join the team and continue to use NGS to identify SARS-CoV-2 and other emerging pathogens as well as other infectious diseases of public health importance, including viruses, bacteria, parasites, and antimicrobial resistant targets responsible for outbreaks.

Fellowship Deliverables
- Safety training and standard new employee training for the Genetic Sequencing Branch
- Learn and understand all the sequencing instruments
- Independently prep samples
- Load and run samples
- Interpret results
- Apply training to wastewater testing

Fellowship Activities/Responsibilities
Following training and under the supervision of the Genetic Sequencing Branch team leads and senior staff, the Fellow is expected to follow standard or developmental protocols, perform highly complex and advanced molecular testing and typing using Next Generation Sequencing, and perform bioinformatics analysis on NGS data. They will also assist with expanding wastewater testing. Additionally, the Fellow will learn about the importance of and compliance with CAP, CLIA, and Laboratory Quality Management System requirements. This will include experience with process controls and interpretation, troubleshooting method and instrument problems; ensuring proper documentation, traceability, and maintenance of equipment, instruments, and reagents; and participating in internal audits. They will be in attendance for test application and interpretation and assume additional duties as assigned. The Fellow will be expected to attend all meetings deemed relevant to the fellowship, including fulfilling requirements from the Office of Practice and Learning.

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Salary and Benefits
Annual Salary: Tier 3, $66,150
All fellows will be eligible for DSHS employee benefits including health insurance and leave.

Travel
Percent Travel: 5%
Travel Description: If funding is available, the Fellow may attend a national conference or training related to the fellowship project.

Required Applicant Qualifications
(The following qualifications are REQUIRED. Do NOT apply to this position unless you currently meet or plan to meet these requirements by the start of the Fellowship, June 1, 2025.)

Required certification/license:
Degree in physical or life science, or Medical Laboratory Science degree

Ability to Speak in Spanish:
No Requirement

Ability to Write in Spanish:
No Requirement

Preferred Educational Qualifications
(The following preferences are guidelines provided by the Host Site. These are NOT requirements. Host Sites prefer that applicants have completed or are currently working toward these.)

Preferred Level of Education: Master's Degree

Preferred Specialized and Technical Skills
(The following skills will be a focus during this Fellowship position. If you have or are interested in developing data analysis skills or building technical skills in the software listed below, this could be a good Fellowship position for you.)

Data Analysis Skills:
Basic Skills: has some awareness or knowledge of Data Analysis

Statistical Software Skills:
Limited proficiency: has knowledge and interest in learning more, but little experience using the software

Statistical Software:
No preference

Other Software:
No preference