

JOB DESCRIPTION

Mosquito Surveillance Administrator (created 12/07/2020)

General Purpose

Lab: To prepare and test mosquitoes for potential disease and record results according to accepted lab procedures.

Trapping: To trap and analyze mosquito distribution throughout the district.

Mosquito Surveillance: To control mosquitoes through larvicide and adulticide. Perform surveillance of mosquito habitat to determine the most effective control methods.

General Responsibilities

- Attend all required training sessions.
- Keep accurate records of all data gathered.
- Maintain assigned equipment in a clean and professional manner.
- Perform all other duties seen as necessary to support the team.
- Be appropriately dressed and prepared for all mosquito environments and activities.

Lab Responsibilities

Oversees the Mosquito testing program which includes the following:

- Work in close collaboration with the team to facilitate the testing of vector mosquitoes.
- To follow the SWMACD testing protocol for mosquito borne viruses in the area such as West Nile Virus, Western Equine Encephalitis and Saint Louis Encephalitis.
- Know and use all lab safety precautions while testing.
- To prepare vials with trapped, identified vector mosquitoes.
- To record all data gathered during a testing session in the appropriate databases.
- Follow standard procedures for running testing equipment: pipettes, vortex, centrifuge, dry bath, etc.
- Use great care in preparing supernatants, super pools, RNA samples, positive and negative controls, and master mix so as to not contaminate any samples.
- Run the RT-PCR software to test for potential diseases.
- Produce weekly lab reports for the team.

Trapping Responsibilities

Oversees the trapping program which includes the following:

- Identify potential areas as mosquito habitat.
- Coordinate the setting of traps in different locations throughout the district to get a general surveillance of mosquito distribution that may vary according to seasons.
- Maintain traps including proper care of CO2 cylinders, regulators, and batteries.
- Learn and train the proper identification of mosquitoes found in the area.

Field Technician Responsibilities

Oversees the field surveillance program which includes the following:

- Perform simple building maintenance and equipment repairs as necessary.
- Assist in receiving and maintaining stock inventories.
- Inspect and make appropriate treatments of designated mosquito breeding locations as directed.
- Maintain an awareness of irrigation patterns and practices in assigned areas.
- Dig and clean drainage channels, cut vegetation, and perform other labor in source reduction.
- Make light trap collections and bite counts (at dusk, as needed).
- Keep accurate inspections and treatment records of work performed, both hard copy and digital as necessary.
- Keep district buildings and grounds in a clean orderly condition.
- Use all safety precautions necessary while out in the field.
- Oversee proper distribution of pesticides.
- Follow practices outlined in the Pesticide Discharge Management Plan (PDMP).

Education and Experience

- 4 year degree, preferably in the sciences, or equivalent work experience.
- Should have or be trained to have a working knowledge and understanding of:
 - Lab environment, clinical lab testing, creating a safe & effective environment, sterilization, equipment calibration, biohazard safety, supply management, self-development skills.
 - Entomology or other closely-related field with experience in vector surveillance and control.
 - Proper safety precautions and use of pesticides being used by the district.
 - Mosquito developmental time under prevailing temperatures.
 - Mosquito larval habitats.
 - Proper application of mosquito larval surveillance and treatments.

Key Competencies

- Work dependably and cooperatively with others.
- Maintain and appreciate safety precautions.
- Maintain proper lab inventory.
- Maintain a sanitary, uncontaminated environment, necessary for identifying specific disease.
- Learn to operate specialized equipment.
- Exercise independent judgment.
- Ability to accurately interpret and apply applicable rules and regulations.
- Ability to coordinate various operational functions of the District.
- Work outdoors in difficult terrain and weather conditions.
- Must be physically able and willing to do heavy physical labor.
- Ability to apply scientific principles to practical situations.
- Knowledge of Federal, State, and Local laws and regulations pertaining to vector surveillance and control.
- Basic knowledge in computers (Excel, Outlook, Microsoft Office, etc.).

Licenses

- A valid Utah Motor Vehicle Operator's License with an excellent driving record.
- A Non-commercial Pesticide Applicators License in the Public Health Category from the Utah State Department of Agriculture.
 - If not possession, you must schedule to take the test within 1 month of being hired. You must attain the above license within 2 months of being hired.

Salary/ wage Range

\$18 - \$30 per hour- Depending upon previous experience.