



Lab Coordinator – Mosquito Abatement

Job Description

Department: Health
Position: Career Service
Grade: 721
Supervisory: No
Reports to: Mosquito Abatement Manager

Summary

Under general guidance and direction of the Mosquito Abatement Manager, responsible for a range of laboratory and field duties that support the Integrated Mosquito Management (IMM) program of Utah County Mosquito Abatement District (UCMAD). Conducts mosquito and mosquito-borne pathogen surveillance, oversees employees involved in surveillance activities, and contributes to scientific research initiatives undertaken by the UCMAD.

Essential Functions

Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

1. Collaborate in mosquito surveillance efforts by assisting with the planning of trapping routes, maintaining traps and other surveillance supplies; conduct field operations including trap deployment, collection, and necessary repairs, as needed.
2. Sort and identify insect specimens collected from surveillance devices; ensure accurate data records samples; update surveillance databases and prepare surveillance reports.
3. Prepare vector specimens for arbovirus testing, including sample organization, complete form submission, and timely submission of samples to collaborating agencies.
4. Conduct arbovirus testing on samples using methods including Ribonucleic Acid (RNA) extraction and quantitative real-time Polymerase Chain Reaction (PCR) tests; maintain accurate and document test results in databases and prepare comprehensive reports.
5. Oversee seasonal staff assigned to the laboratory.
6. Provide training to staff in mosquito identification, the surveillance program, and other laboratory and field procedures.
7. Maintain colonies of mosquitoes, other invertebrates, and vertebrate animals for scientific, operational, educational, and laboratory purposes.
8. Assist in the evaluation of the impact, efficacy, and resistance to pesticides or control products used for adult and larval mosquito control in both laboratory and field settings; collect, record, and interpret relevant data, as needed or as assigned.

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Job Code: 3602

Job Title: Lab Coordinator – Mosquito Abatement

FLSA: Non-Exempt

Effective Date: 2/14/2025

Public Safety: No

Worker's Compensation: County

Background Level: I

Safety Sensitive: No

DOT: No

ML: Individual Contributor

9. Maintain an inventory of laboratory equipment and supplies.
10. Assist in district research activities, including those conducted by district staff and collaborators at the local, national, or international levels.
11. Assist in research and development activities related to new technologies for vector-borne disease surveillance and control.
12. Compile data for reports and scientific publications using a variety of software tools, including word processing, database management, spreadsheets, statistical analysis, Geographic Information System (GIS) and map-based applications, and other district software, as required.
13. Provide presentations, posters, and other forms of data dissemination at local, regional, and national meetings; prepare and assist with scientific manuscript writing, public information brochures, and website content.
14. Actively maintain knowledge of current advancements in vector biology, control, and surveillance; participate in relevant meetings and trainings to acquire and maintain up-to-date information and skills.
15. Utilize Artificial Intelligence (AI) tools as directed by Utah County Policy and with approval from Department Head.
16. Perform other duties as assigned.

Knowledge, Skills, and Abilities

- Knowledge of ecology and biology of vectors and vector-borne pathogens and other biological or physical sciences related to vectors and habitats
- Knowledge of basic principles, methods, and tools used in scientific research, investigation, data analysis, and report preparation
- Knowledge of laboratory procedures, quality control, and Good Laboratory Practices (GLP)
- Knowledge of basic molecular biology techniques including extraction, preservation, and amplification of genetic material from organisms like mosquitoes and viruses
- Knowledge of mathematical and chemical principles essential for laboratory work, including solution preparation, concentration calculation, experimental design, and the formulation of chemical mixtures for research and operation use
- Skilled in best practices of IMM and vector-borne disease control
- Skilled in operation of computer software applications, databases, spreadsheets, word processing
- Ability to safely handle and identify potential hazardous materials, including pesticides and laboratory chemicals
- Ability to effectively inspect, service, and repair surveillance equipment while adhering to safety protocols
- Ability to communicate effectively verbally and in writing
- Ability to develop and maintain cooperative working relationships with the public and with those contacted during the course of working activities

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- Ability to maintain composure and professionalism in challenging or stressful situations
- Ability to accurately follow written and verbal instructions from supervisors and managers

Supervisory Responsibility

This position has no direct supervisory responsibility but does serve as a coach and mentor for other positions in the department.

Work Environment

Work is performed in a professional office and controlled environment but is performed for sustained periods outdoors and occasionally in hot, cold, or inclement weather. This job requires outdoor physical work such as occasional field work and inspections traversing uneven ground such as fields, dirt banks, stream banks, and shallow ponds. Work exposes the incumbent to contagious or infectious diseases, high-stress situations including contact with the public in confrontational, emotionally charged, or uncomfortable circumstances. Incumbent maybe be exposed to pesticides, chemicals, insects, insect-borne diseases, and other health hazards. This role requires the use of protective devices such as respirators, masks, goggles, gloves and other safety related equipment. The noise level in the work environment is usually moderate. The incumbent is required to drive Utah County owned vehicles in the course of conducting County business and must abide by the Utah County Vehicle Policy.

Physical Demands

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is required to use manual dexterity to handle, feel, and operate objects, tools and controls, and reach with hands and arms. This employee is frequently required to sit at a desk, stand, walk, stand, stand, or stoop. The employee is required to periodically wear a respirator or other safety related equipment. Specific vision abilities by this job include close vision, color vision, and ability to adjust focus while operating a microscope and computer. Works for sustained periods of time maintaining concentrated attention to detail. The employee is occasionally required to lift or otherwise move objects weighing up to sixty (60) pounds. The employee regularly drives a motor vehicle.

Position Type / Expected Hours of Work

Incumbent must work forty (40) hours each week to maintain full-time status. There may be availability to work out a flex schedule ahead of time that works for both the County and the employee. Occasional evenings, weekends, holidays, and overtime work may be required as job duties demand.

Travel

Travel is primarily local during the business day, although some out-of-area and overnight travel may be expected, up to five (5) percent.

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Required Education and Experience

- 1. Bachelor’s degree from an accredited college or university in the field of biological sciences, entomology, or a closely related field.

OR

- 1. High School Diploma or equivalent.
- 2. Two (2) years of work experience in a laboratory, clinical, medical, or other related setting.

Additional Eligibility Qualifications

- 1. Selected applicants must obtain a Non-Commercial Pesticide Applicator License in the area of Public Health through the State of Utah during the probationary period for new hires or trial period for promoted County employees and must maintain license during employment.
- 2. Applicants must possess a valid driver’s license and obtain a valid State of Utah driver’s license within sixty (60) days of employment.
- 3. Selected applicants will be required to submit to a pre-employment drug screen and background check.
- 4. Selected applicants shall be strongly encouraged to receive immunizations according to the Center for Disease Control and/or County Health Department Policy.

AAP/EEO Statement

It is the policy of Utah County Government to assure equal employment opportunity to its employees and applicants for employment without regard to race, color, religion, national origin, disability, age, sex, sexual orientation, genetic status or gender identity.

Other Duties

Please note this job description is not designed to cover or contain a comprehensive listing of activities, duties, or responsibilities that are required of the employee of this job. Duties, responsibilities, and activities may change at any time.

Utah County Government is a drug-free workplace.

Acknowledgement below to be completed after an offer has been extended and accepted.

This job description has been approved by the Office of Human Resource Management in consultation with the Department Head.

Signature below constitutes an understanding of the requirements, essential functions and duties of the position.

Candidate / Employee _____ Date _____

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