

JOB TITLE:
EMPLOYEE CLASSIFICATION:
DEPARTMENT:

Biologist
(10 month) Position EXEMPT
Operations

General Job Function

Performing a variety of laboratory and field services to help carry out the Mosquito Abatement program of South Cook County Mosquito Abatement District. The Biologist will be primarily responsible for carrying out surveillance for mosquitoes and mosquito transmitted pathogens, supervising employees engaged in surveillance work, and assisting in scientific research conducted at the District.

KEY RESPONSIBILITIES

- Help oversee surveillance program for mosquitoes by planning trapping routes, maintaining traps and other surveillance supplies, and deploying, collecting, and fixing traps when necessary
- Sorts and identifies insect samples from surveillance devices; accurately records samples, updates surveillance databases, and prepares surveillance reports
- Assists in preparing vector samples for arbovirus testing, including organizing samples and submission sheets, submitting results to other agencies
- Ability to work in field under adverse weather conditions safely and effectively.
- Respond and survey residential complaints.
- Extended hours/overtime as needed during mosquito season.
- Physically able to sit, stand, walk, bend and stair climb frequently
- Supervises seasonal staff assigned to the laboratory
- Trains staff in mosquito identification, the surveillance program, and other laboratory and field duties
- Maintains colonies of mosquitoes and other invertebrates used for scientific, operational, and educational purposes
- Maintains colonies of vertebrate animals used for laboratory purposes
- Assists in conducting studies and evaluations of the impact, efficacy, and resistance to pesticides or control products used for adult and larval mosquito control in both laboratory and field settings; collects, records, and interprets results as needed or as assigned
- Maintains an inventory of laboratory equipment and supplies
- Assists/coordinates in District research activities including research conducted by District staff and local, national, or international collaborators

- Assists in testing and evaluating new technology/or materials (pesticides) in vector-borne disease surveillance and control;
- Compiles data for reports and scientific publications using word processing, database, spreadsheets, statistics, GIS and map-based applications, and another District software as required
- Provides presentations, posters, and other forms of data dissemination at local, regional, and national meetings; prepares and assists with scientific manuscript writing, public information brochures, and website content
- Keeps informed of current developments in vector biology, vector control, and vector surveillance; attends meetings and trainings to learn up to date information and skills related to vector biology and control
- Other Duties as Assigned

EXPERIENCE/ABILITIES/SKILLS

- Knowledge of the scope and subject of mosquito surveillance/control, as related to Mosquito Abatement
- Knowledge of ecology and biology of vectors and vector-borne pathogens and other biological or physical sciences related to vectors and habitats
- Proficiency in basic principles, methods, and tools used in scientific research, investigation, data analysis, and report writing
- Knowledge of laboratory procedures, quality control, and overall good laboratory practices
- Competence in basic molecular biology techniques including extraction, preservation, and amplification of genetic material from mosquitoes and pathogens they vector
- Understanding of mathematics and chemistry principles used to make solutions in laboratories, calculate concentrations, set up experiments, and make chemical mixtures for laboratory and field research and operational use
- Excellent comprehension of best practices of mosquito abatement and vector-borne disease control
- Proficient in operation of computer software applications, databases, spreadsheets, word processing; understanding of safe handling of potential hazardous materials including pesticides and laboratory chemicals
- Ability to inspect, service, and prepare supplies, laboratory equipment, instruments, and surveillance devices in a safe and efficient manner
- Ability to effectively communicate both orally and in writing with the public, government agencies, and coworkers in a tactful and courteous manner

- Capability of establishing and maintaining effective working relationships with other employees and the public
- Ability to maintain composure and professionalism in adverse situations
- Ability to accept and follow through on instructions from the Manager & Board

EDUCATION

- Bachelor's degree from an accredited college or university in the field of biological sciences, entomology, or closely related field.
- Previous experience working in a laboratory or other research setting.
- Possession of a valid Illinois driver's license and must meet minimum requirements to be insurable with the District's insurance carrier; must maintain valid license and insurability throughout employment.
- Possession of any Illinois Pesticide License and certificates deemed necessary to perform this job (or must obtain license within 30 day of hiring); must maintain certificate throughout employment.
- Must have the ability to pass all required pesticide license exams deemed necessary from the Illinois Department of Agriculture

11/2018