Department of Microbiology and Molecular Genetics
Michigan State University

Research Technologist II

Position Summary
The Department of Microbiology and Molecular Genetics is seeking a Research Technologist II to work in the laboratory of Dr. Martha Mulks. This research position is integral to a study to identify the environmental antigens that trigger hypersensitivity pneumonitis in human patients. The technician hired will be responsible for the culture of a wide range of environmental samples collected from the patients’ home/work environment to isolate and identify bacteria and fungi that are responsible for the patient’s disease, i.e., are triggering a deleterious immune response in the patients’ lungs. This technician will need to be able to work as part of a team, and to work in two different laboratory locations with two different supervisors. The following techniques will be utilized: culture and isolation of bacteria and fungi; identification of bacteria and fungi by phenotyping assays and DNA sequence analysis; isolation of DNA from bacteria and fungi, PCR, sequencing of PCR products, and DNA sequence analysis; purification and sterilization of antigens from bacteria and fungi; immunologic analysis of antigen preparations by immunoblot or other immunologic techniques. General laboratory administrative duties will also be expected including supervision of undergraduate employees/researchers, record-keeping, and maintenance of a sample and isolate collection.

Unit Specific Education/Experience/Skills
Knowledge normally acquired by completing a four-year college degree program in microbiology or related field; six months to one year of related and progressively more responsible or expansive work experience in a microbiology laboratory performing basic research techniques such as: culture of bacteria and/or fungi, performance of phenotyping assays for identification of bacteria and/or fungi, DNA isolation and sequencing, performance of PCR, DNA sequence analysis; experience with medical technology; or an equivalent combination of education and experience.

Desired Qualifications
Masters of science degree; Experience with Bioinformatics; performance of immunologic assays such as immunoblots. Course work in microbiology, molecular biology, and chemistry.

Equal Employment Opportunity Statement
All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, citizenship, disability or protected veteran status.

Required Application Materials
Please submit a resume, cover letter, and the names and contact information of three references.

Description of End Date
This is a limited term position funded through 11/30/2021 from date of hire with possible extension contingent upon funding renewal. Bidding and Eligibility Ends on 11/3/2020 at 11:55 PM

Required Application Materials
Please submit a resume, cover letter, and the names and contact information of three references to http://careers.msu.edu posting #679699.