Department of Microbiology and Molecular Genetics  
Michigan State University  

Research Associate

Position Summary

A Research Associate (Post-Doc) position is available in the laboratory of Dr. Andrew Olive in the Department of Microbiology and Molecular Genetics at Michigan State University. The position is available starting immediately with two years of funding guaranteed with a possibility of an extension based on progress and performance. The main project is to work on cutting-edge research to understand the host response of alveolar macrophages. The project will center around functional genetic screens using our recently optimized CRISPR-Cas9 systems including in a new ex vivo alveolar macrophage model (See here: https://doi.org/10.1101/2021.12.12.472259) This project will dissect how macrophages respond to infections such as Mycobacterium tuberculosis or contribute to inflammatory diseases such as lupus with a central goal of understanding inflammatory signal regulation during lung immune responses.

The applicant must have a PhD in the area of microbiology/immunology/molecular biology or a related field and have a strong background in genetics. Strong quantitative and communication skills are required. The applicant is expected to design and conduct experiments independently and clearly document results for use in presentations, manuscripts and grants. Previous experience working in a BSL3 is desired but not required. Experience with Fluorescence activated cell sorting, IVIS, and next generation sequencing is preferred although not required.

This is a full-time, 12-month fixed-term position with reappointment contingent on satisfactory performance and available funding.

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, age, disability or protected veteran status.

Minimum Requirements

Ph.D. in Microbiology, Immunology, Genetics, or a related field.

Desired Qualifications

The successful applicant will have experience in mammalian or bacterial genetics, sequencing and bioinformatics analysis, immunology, animal models of bacterial infection and molecular biology. Experience working in a BSL3 is strongly desired.

Required Application Materials

Please submit a cover letter describing your background, research skills and career goals, a CV and contract information for three references to http://careers.msu.edu posting #764321.
**Together-we-will Statement**
The university is requiring all MSU students, faculty and staff to be vaccinated against COVID-19 with limited exceptions. Learn more at: [https://msu.edu/together-we-will/](https://msu.edu/together-we-will/)

**Review of Applications Begins On**

03/15/2022

**Summary of Health Risks**

Duties associated with this position may include exposure to the following:

- Exposure to human blood, serum and tissue
- TB risk or work with animals, cells, or specimens infected with Mycobacterium
- Work with animals or unfixed animal tissue
- Risks that have been identified by Environmental Health and Safety

**Website**

[https://mmg.natsci.msu.edu/](https://mmg.natsci.msu.edu/)

**MSU Statement**

Michigan State University has been advancing the common good with uncommon will for more than 160 years. One of the top research universities in the world, MSU pushes the boundaries of discovery and forges enduring partnerships to solve the most pressing global challenges while providing life-changing opportunities to a diverse and inclusive academic community through more than 200 programs of study in 17 degree-granting colleges.