JOB DESCRIPTION

Job Title: Research Scientist
Job Code:
Salary Plan: Exempt
Lab: Alter
Direct Supervisor: Galit Alter

Employing Hospital and Department:
Ragon Institute of MGH, MIT, and Harvard

Minimum degree and field of knowledge: MSc, Ph.D. or MD preferred
Years experience required: 5 – 10 years experience

Summary:
A position is open for a full-time Research Scientist at the Ragon Institute of MGH, Harvard, and MIT in the laboratory of Galit Alter (http://www.ragoninstitute.org/portfolio-item/alter-lab/). The Alter lab specifically focuses on developing novel Systems Biology technologies aimed at defining the mechanism by which antibodies provide protection from infections and disease. The Alter lab's scientific interests span across an exciting array of different areas of human immunology ranging from infectious diseases (HIV, Influenza, Malaria, TB, Ebola, SARS-COV-2, etc), to neonatology, oncology, autoimmune disease, and many more. We are looking for enthusiastic individuals that are curious about the human immune system and want to participate in the exciting world of diving deeply into understanding how vaccines and monoclonal antibodies can be leveraged to fight a broader array of diseases.

The Alter lab now seeks an enthusiastic individual who would oversee all operations of the laboratory under the supervision of Dr. Alter. The Research Scientist will assist in developing and conducting research projects, including experimental design, data analysis, and presentation of experimental results while overseeing the day-to-day operations of the Alter lab. In this role, we hope to teach and train the candidate to lead large scientific investigative efforts and to ensure that the candidate grows to become a critical thought leader in the arena of Infectious Disease and Systems Biology research.

Job Duties:
Under the direction of the Principal Investigator, the Research Scientist will manage and conduct cutting-edge research aimed at defining the specific antibody responses to a number of infectious diseases, including Tuberculosis, Influenza, Malaria, Ebola, HIV, and SARS-CoV-2. The Research Scientist will also oversee all operations of the laboratory, overseeing the day-to-day operations but also helping to support the Alter-labs position within the larger institute. The individual will develop strategies to maximize efficiencies, to help direct the generation of standard operating procedures, to help operationalize the science, to generate collaborative strategies, to drive innovation, to effectively move the team forward as a collective. The Research Scientist will report directly to the PI to ensure that scientific strategy is maintained. In this role, we hope to teach and train the candidate to lead large scientific investigative efforts, to evolve an environment where scientists can thrive, create, and innovate.

Duties and Responsibilities:
- Design, execute and interpret research experiments
• Supervise technicians on a daily basis to ensure the proper execution of the research projects
• Work with other scientists to support the execution of science and to make the science work more efficiently
• Facilitate the PI in the acquisition of funding for the laboratory through the application of research grants, presentation of findings at scientific conferences, and communication of work through peer-reviewed publications.
• Analyze and present data at internal and external meetings with collaborators
• Operationalize day-to-day activities including ordering equipment, lab materials, services, etc.
• Operationalize the execution of lab duties
• Oversee the maintenance of equipment, experimental work, and schedules
• Support the generation of Standard Operating Procedures

Communication
• Effective communication with the PI and staff in the lab, as well as to internal and external collaborators is a must.
• Present data within and outside of the laboratory group at meetings and symposia
• Work closely within the group and with outside collaborators
• Regular communication with the PI and team/group colleagues (one-on-one and group meetings)
• Lead lab meetings weekly to create a cohesive environment

Qualifications:
• Technical expertise in immunology, cell biology, or virology-based experiments. Experience in BSL2+ procedures and operations is highly preferred.
• Technical expertise in immunology-based experiments including flow cytometry, ELISA, cytokine profiling, signaling cascade activation networks, etc.
• Technical expertise in cellular and molecular biology-based experiments including functional protein isolation and purification, molecular cloning, nucleic acids, and protein quantifications, and fluorescence and immunohistochemistry microscopy.
• Background in the mentorship of undergraduate, graduate, and postdoctoral researchers, as well as other staff including technicians, work-study students, and international scholars.
• Proper record-keeping and data management skills are expected, as is the development and implementation of laboratory SOPs.
• Demonstrated ability to work independently and productively
• Strong research design and analytical skills, with demonstrated ability to problem-solving
• Ability to multi-task and work independently under pressure
• Ability to work in a team environment, meet deadlines, and prioritize and balance work from multiple individuals
• Must be willing to learn and grow

The above job description details the major duties and qualifications of the listed position. The employee hired to this position confirms that he/she is able to perform all duties outlined. Although the specific duties and responsibilities of this position may vary slightly, the supervisor of this position will ensure that the employee hired to this position is trained and qualified to complete each task assigned. If the duties or responsibilities of this position need to change significantly, then the supervisor must submit an updated job description to the Office Manager for review.
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