

JOB DESCRIPTION

Job Title: Postdoctoral fellow to study Vectored ImmunoProphylaxis and ImmunoTherapy against Infectious Disease

Job Code:

Salary Plan: NIH salary scale

Lab: Balazs

Direct Supervisor: Alejandro Balazs

Employing Hospital and Department:

Ragon Institute of MGH, MIT, and Harvard

Minimum degree and field of knowledge: MD, PhD, MD/PhD

Years experience required: 0 – 2 years experience after receipt of Ph.D. or MD.

Summary:

The Ragon Institute of MGH, MIT and Harvard at the Massachusetts General Hospital in Boston has an opening in the Balazs laboratory (<https://balazslab.partners.org>) for a highly motivated postdoctoral fellow to study the application of vectored antibody delivery as a means of preventing or treating HIV or SARS-CoV-2 infection. This position requires an M.D. or Ph.D. with a background in infectious diseases and/or vaccine design. Research will focus on determining the host and viral factors influencing viral transmission and elucidating the mechanisms of viral escape from antibodies, including the identification of critical viral targets for vaccine design. Efforts will include the development of improved antibody-delivery vectors, manipulation of advanced humanized mouse models and application of deep sequencing technologies to address these questions. Studies will also include development of improved humanized mouse models. Candidates will utilize commercially available and in-house software tools; interpret results as they relate to the biology of HIV or SARS-CoV-2 infection; contribute to the design and maintenance of sequence databases; coordinate analyses with collaborators; and communicate results to the scientific community through conference presentations and peer-reviewed publications. Goals are to define a successful strategy for the prevention of transmission or long-term control of viral infection.

Job Duties:

Under the direction of the principal investigator and/or a research fellow, the applicant independently carries out daily activities of the laboratory.

- Responsible for the design, execution, and interpretation of experiments;
- Interfaces with collaborators to design experiments, analyze and interpret the data;
- Prepare scientific presentations and publications
- Supervises the experiments and data analysis of technicians or students as needed
- Cell/tissue processing, culture and maintenance
- Ensures quality control of equipment, reagents and cellular components
- Detailed documentation of the experimental work

Qualifications:

- A Ph.D. or M.D. with relevant experience in infectious diseases, virology, immunology, or evolutionary biology.
- Strong candidates will have demonstrated experience in the immunology or virology of infectious diseases.
- Candidates must be highly motivated and independent, with the ability to work in a dynamic team environment.
- Good organizational skills and excellent attention to detail
- Excellent documentation skills
- Ability to perform as a team member
- Must have good interpersonal skills