

## JOB DESCRIPTION

**Job Title:** Postdoctoral Fellow to Study HIV Cure in Humanized Mice

**Job Code:**

**Salary Plan:** NIH funding

**Lab:** Allen

**Direct Supervisor:** Todd Allen

**Employing Hospital and Department:**

Ragon Institute of MGH, MIT, and Harvard

**Minimum degree and field of knowledge:** PhD, MD, DVM

**Years experience required:** 0 – 2 years experience

### Summary:

A position is open for a full-time postdoctoral fellow within the Allen laboratory at the Ragon Institute of MGH, MIT and Harvard located in Kendall Square in Cambridge, MA (<http://www.ragoninstitute.org/portfolio-item/allen-lab/>). This highly motivated postdoctoral fellow will focus on developing novel approaches to eradicate HIV reservoirs towards establishing a functional cure for HIV.

This position will focus on utilizing gene-editing approaches (such as CRISPR-Cas9 of CCR5) to protect human CD4+ T cells and stem cells from HIV infection, as well as improving the potency of HIV-specific chimeric antigen receptor T (CAR T) cells to target and eradicate HIV reservoirs. These studies will be conducted using humanized mice (BLT and HSC+ models) and will involve both cellular and molecular bench work, as well as murine vivarium work with experienced animal research personnel.

This NIH funded position requires a Ph.D, M.D. or DVM degree with a background in infectious diseases and/or immunology. Work with mice and/or humanized mice is an asset. The goal of this work is to define the successful components of a novel approach to develop a functional cure of HIV infection and advance our understanding of immune control of HIV.

State-of-the-art facilities are available within an exceptionally energetic research setting.

### Job Duties:

Under the direction of the principal investigator the applicant independently carries out daily activities of the laboratory.

- Performs standard molecular assays including DNA/RNA extraction, standard and quantitative PCR, site-directed mutagenesis
- Performs standard cellular assays including ELISPOT, intracellular cytokine staining, flow cytometry, and ELISA
- Cell/tissue processing, culture and maintenance
- Work in both BSL1 and BSL2 environments
- Detailed documentation of the experimental work

### Qualifications:

- PhD, MD, or DVM with relevant experience in infectious diseases, immunology, or virology

- Strong candidates will have demonstrated experience in the immunology or virology of infectious diseases or murine immunity to pathogens
- Experience working with mice is preferred but not required
- 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
- Ability to perform as a team member and must have good interpersonal skills