



Job Title: Research Technologist

Job Family: Research

Job Code: 000319 & 001593

Grade: 13 & 14

Department: All Research Departments

GENERAL SUMMARY/ OVERVIEW STATEMENT:

The Yu Laboratory at the Ragon Institute of MGH, MIT and Harvard at the Massachusetts General Hospital in Boston has an opening for a highly motivated Research Technologist to study the immunopathogenesis of HIV infection and viral reservoirs in HIV elite controllers. The overall goal is to conduct human translational research to understand the immune control mechanisms of HIV. The person hired will work under the supervision of Dr. Xu Yu conducting patient-oriented translational research involving cutting-edge technologies. The position will involve handling and processing of blood samples, performance of molecular biological and immunologic assays, including nucleic acid extractions, PCR and next generation sequencing, and utilizing novel assays to study viral persistence. The position will also involve general lab organization and assistance with lab logistics.

This is a great opportunity for someone interested in pursuing a career in scientific research or medicine while working in a supportive, highly collaborative, and energetic environment. The lab studies samples from ongoing clinical cohorts based in the US as well as multiple countries in Europe, Africa, and South America, examining risk of HIV, HIV pathogenesis, and other adverse reproductive outcomes. State-of-the-art facilities are available within an exceptionally energetic research setting.

The Yu lab is committed to providing a diverse, inclusive, and supportive environment; appropriately qualified applicants from all backgrounds will be considered.

PRINCIPAL DUTIES AND RESPONSIBILITIES:

- Perform experiments analyzing blood and tissue samples from human subjects, assessing the viral reservoir and immune responses to HIV infection
- Perform and assist with experiments involving immunologic assays, flow cytometry and molecular biology
- Perform assays utilizing standard molecular biology and immunology techniques (cloning, DNA and RNA extraction, quantitative PCR, droplet digital PCR, reverse transcription, gel electrophoresis, flow cytometry, library preparation for next generation sequencing)
- Assist in cell/tissue processing and in vitro cell culture maintenance in a BSL-2+ setting
- Maintain detailed documentation of experimental work
- Work closely with other lab members as well as with outside collaborators

- Perform data analysis and visualization in Microsoft Excel, GraphPad Prism, and Adobe Illustrator
- Ensure quality control of equipment, reagents, and cellular components and participate in ongoing quality control/assurance programs
- Help support lab organization and logistics
- Maintain close communications with PI regarding progress
- Present findings in weekly one-on-one meetings with the PI and on a quarterly basis in lab meetings

SKILLS/ABILITIES/COMPETENCIES REQUIRED:

- Highly motivated and independent, with the ability to work in a dynamic team environment
- Excellent organizational skills and attention to detail
- Laboratory experience required
- Flexibility to occasionally work evenings or weekends
- Experience with flow cytometry, next generation sequencing, cell culture strongly preferred
- Computer experience including expertise with Microsoft Office programs is essential
- Experience with R is preferred but not essential

EDUCATION:

- Bachelor's degree required.

EXPERIENCE:

- Several years of directly related work experience in a scientific laboratory is strongly preferred.

ADDITIONAL INFORMATION:

- Contact: those interested in this position may email their CV to Zachary Manickas-Hill (zmanickas-hill@mgh.harvard.edu)
- Yu Lab website: <https://ragoninstitute.org/yu/>
- Lichterfeld Lab website: <https://ragoninstitute.org/lichterfeld/>