



Job Title: Research Technician

Job Family: Research

Job Code: 000319 & 001593

Grade: 13 & 14

Department: All Research Departments

GENERAL SUMMARY/ OVERVIEW STATEMENT:

The Kwon Laboratory at the Ragon Institute of MGH, MIT and Harvard at the Massachusetts General Hospital in Boston (www.kwonlab.org) has an opening for a highly motivated Research Technician to study the immunopathogenesis of HIV infection and the human microbiome at mucosal tissue sites, including the female reproductive tract. The overall goal is to conduct human translational research to help reduce the spread of HIV, particularly among young women in sub-Saharan Africa. The person hired will work under the supervision of Dr. Kwon conducting patient-oriented translational research involving cutting-edge technologies. The position will involve handling and processing of tissue and blood samples, performance of anaerobic bacteriology, immunologic assays, nucleic acid extractions, PCR, sequencing, and utilizing novel assays to study mucosal immune responses to HIV and mucosal bacteria.

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 and South Africa examining risk of HIV, HIV pathogenesis, and other adverse reproductive outcomes. State-of-the-art facilities are available within an exceptionally energetic research setting. Tech would be required to perform experiments analyzing microbial and tissue samples from human subjects, assessing the impact of the microbiome and HIV infection on cervicovaginal mucosal health and perform and assist with experiments involving bacteriology, immunologic assays, microscopy, flow cytometry and molecular biology.

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

PRINCIPAL DUTIES AND RESPONSIBILITIES:

- Prepares basic solutions and performs base-level procedures as assigned (i.e. – pipetting, cell and tissue culture, etc.)
- Maintains laboratory notebook
- Understands and applies basic scientific techniques
- Conducts analysis of results and may begin interpretation of results
- Sets up and prepares routine experiments as directed
- Prepares lab reagents, chemicals, instruments and equipment

- May perform independent literature searches
- Assists with organizing materials for publication or presentation
- Maintains and orders supplies

A Research Technician II performs the duties of a Research Technician I (above) and may also:

- Execute protocols of non-routine experiments
- Assist the PI(s) with determining the most suitable methodology
- Perform basic design and modification of protocols
- Calculate, transcribe and analyze data
- Prepare and present reports
- Organize and summarize acquired data, using scientific and statistical techniques.
- Organize and/or draft material for the preparation of research papers, manuscripts and other documents for publication and/or presentation.
- Participate in the design of experiments or field work.

SKILLS/ABILITIES/COMPETENCIES REQUIRED:

- Ability to work independently and as a team member
- Good communication skills
- Computer literacy
- Working knowledge of clinical research protocols
- Ability to perform multiple tasks independently

The Research Technician II should also possess:

- Analytical skills and the ability to resolve technical problems
- Ability to interpret acceptability of data results
- Working knowledge of data management programs
- Demonstrated competence in research techniques and methodologies

EDUCATION:

Bachelor's degree required.

EXPERIENCE:

New graduates with some lab experience (via course work, internships, etc.) or those without any prior research experience will be considered for the Research Technician I position outlined above.

Those with a minimum of 1 year of **directly related** work experience will be considered for a Research Technician II position.

SUPERVISORY RESPONSIBILITY (if applicable):

A Research Technician II may serve as a team leader to lab assistants and Research Technician I's.