JOB DESCRIPTION

Job Title: Bioinformatics Specialist in Microbiome Research at the Ragon Institute of MGH, MIT and Harvard

Salary Plan: Exempt
Lab: Kwon
Direct Supervisor: Douglas S. Kwon, MD PhD, Associate Professor in Medicine
Email: dkwon@mgh.harvard.edu
Phone: (857) 268-7009

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

Minimum degree and field of knowledge: PhD
Years experience required: 4 years or more of computational experience with prior work analyzing 16S and metagenomic data.

Summary:
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 Bioinformatician in Microbiome Research to aid in analyzing 16S rRNA and shotgun metagenomic data. The person hired will work conducting patient-oriented translational research involving cutting-edge technologies studying the interaction between microbial strains and the mucosal immune system of the human reproductive tract and gut. We are a results-oriented group of highly motivated scientists from the fields of immunology, virology, genetics, and technology development who perform translational research to treat and prevent HIV. At every level, we value intelligence, teamwork, dedication and creativity, and we’re always looking for people with those skills who thrive in teams and dynamic environments.

Job Duties:
Under the direction of the principal investigator, the associated responsibilities will include:

- Independently analyze data from high-throughput, sequencing projects related to studying the microbiome, including 16s amplicon and shotgun metagenomic sequencing data analysis
- Perform data visualization
- Train other lab members on commonly used bioinformatics applications
- Assists in the development of bioinformatics workflows to automate frequently used analytical procedures
- Provide summary reports of workflow outputs
- The maintenance of detailed documentation either through a laboratory notebook or well annotated scripts
- Be an active member of the Kwon lab, including participating in meetings and regularly presenting results.

Qualifications:
Essential skills
- Ability to analyze and interpret large complex data sets and to communicate data in a clear and concise manner
- Proficiency in Unix and the ability to script in Python and perform statistical analyses in R
- The ability to install and execute software from the Linux command line
- The ability to construct, document and execute analytical workflows

Desirable skills
- Experience processing and analyzing metagenomics data (16S and shotgun)
- An understanding of statistical modelling

Soft skills
- Strong analytical, reasoning and problem-solving skills
- Highly motivated and independent, with the ability to work in a dynamic team environment
- Excellent organizational skills, attention to detail and time management

**Application information:** The position is open immediately. Please submit a cover letter, CV, and references to Dr. Doug Kwon at dkwon@mgh.harvard.edu.