## Mass spectrometry technician or technologist at the Ragon Institute of MGH, MIT and Harvard Cambridge, MA

## Job Description:

A position is open for a full-time mass spectrometry technician or technologist at the Ragon Institute of MGH, MIT and Harvard in the laboratory of Dr S. Le Gall. The group is interested in deciphering the mechanisms of protein degradation into peptides during virus or bacteria infections, exploring links between pathogen degradation and immunity, and assessing the contribution of antigen processing efficiency to immune control or escape. All projects combine multiple approaches to assess protein degradation and epitope presentation, including cell biology, biochemistry, virology, proteomics, peptidomics, and immune assays.

The candidate will be in charge of maintaining the mass spectrometry equipment, preparing various types of samples for mass spectrometry analysis, establishing new mass spectrometry methods, running complex database searches, and organizing mass spec runs for all projects. The candidate will work with all lab members and be involved in our research projects and collaborations. http://ragoninstitute.org/portfolio-item/le-gall-lab/

## **Job Duties:**

- responsible for the maintenance of the HPLC, Nano LC, mass spectrometer
- prepare various types of samples (peptides, proteins) for mass spectrometry analysis
- establish or optimize mass spectrometry methods, protocols related to protein and peptide analysis for various types of experiments in coordination with lab members
- run complex sequence identification searches using Proteome Discoverer, Mascot, Sequest or other proteomics search engines
- record experiments in lab book and organize data into files and graphs
- organize scheduling of samples to be run by mass spectrometry for the lab and external collaborators
- Ordering and inventory of laboratory supplies related to mass spec

## **Qualifications:**

- Master or BS with hands-on experience with HPLC, Nano-LC and mass spectrometer (Orbitrap or other systems)
- 0-3 years post Master (or BS) graduation
- Extensive experience with Excel, Mascot and/or other proteomics data analysis software
- Interest and motivation to develop experimental scientific skills and be involved in specific research projects
- Excellent organizational and problem solving skills and excellent attention to details
- Ability to follow detailed protocols, keep accurate records and manage time efficiently
- Ability to perform as a team member
- Must be willing to learn and grow
- 2 year commitment preferred

Qualified candidates should send an application including a cover letter describing their research experience, scientific interests, and motivation to join the group, a C.V., and contact information for three references. Send applications to <u>sylvie\_legall@hms.harvard.edu</u>