JOB DESCRIPTION

Job Title: Postdoctoral Fellow
Job Code: Exempt
Salary Plan: Exempt
Lab: Evavold
Direct Supervisor: Charles Evavold

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

Minimum degree and field of knowledge: MD, PhD, MD/PhD
Years experience required: 0 – 2 years experience

Summary:
The Evavold Laboratory (https://ragoninstitute.org/evavold/) at the Ragon Institute of MGH, MIT, and Harvard invites applications for a post-doctoral fellow position. We seek a passionate, motivated individual that brings a positive outlook to research tasks and maintenance of lab operations. The Evavold Lab focuses on the basic decision making of cells towards different cell fates using cell death programs as a model system. We have a particular interest in the intersection of microbiology and metabolism with impact on host cell survival or death.

The candidate will lead research aimed at defining molecular and cell biological regulation of cell death in the context of the innate immune system. These studies will combine techniques from molecular biology, cell biology, microbiology, immunology, and metabolism to probe cellular decision making. Recent studies have combined the use of synthetic biology to model signaling nodes within a canonical pathway under precise chemical control coupled to targeted or genome-wide genetic perturbations.

This position is ideal for candidates who are interested in pursuing a career in biomedical research and industry. A interest in mentoring of students and technician level trainees from the candidate is of high priority. The candidate must be willing to work independently and on collaborative projects with other adjacent labs. The Ragon Institute serves as an ideal setting for this training and research opportunity with access to state-of-the-art facilities and technologies in a highly collaborative environment.

Job Duties:
Under the direction of the Principal Investigator and/or a research fellow/scientist, the applicant independently carries out daily activities of the laboratory.

Laboratory and related work:

- Guide research projects through experimental design, conduct of experiments, and analysis of data
- Performs assays utilizing standard techniques (Flow cytometry, DNA/RNA extraction and analysis, standard and quantitative PCR, ELISA, western blotting, cloning, imaging)
- Cell/tissue processing, culture, maintenance, and genetic engineering
- Independently performs routine and non-routine experiments which are moderate to complex
- Develop and troubleshoot new assays based on literature searches and discussions with the PI
- Ensures quality control of equipment, reagents and cellular components
- Participates in on-going quality control/assurance programs
- Ordering and inventory of laboratory supplies
**Documentation**

- Maintain detailed documentation of the experimental work
- Regular maintenance, cataloging and back-up of experimental data files
- Contribute to writing of SOPs, study reports, and protocols
- Preparation of presentation materials for internal and external meetings

**Communication**

- Regular communication with supervisor and team/group colleagues (one-on-one and group meetings)
- Present data within and outside of the laboratory group at meetings and symposia
- Work closely within the group and with outside collaborators
- Write, edit, and submit manuscripts/abstracts detailing the results of the project
- Mentor students and technicians
- Maintain close communications with the PI regarding progress

**Qualifications:**

- A Ph.D. or M.D. with relevant experience in microbiology, cell biology, biochemistry, or immunology
- Strong candidates will have demonstrated experience in immunology or microbiology
- Knowledge of cellular and molecular immunology
- Demonstrated proficiency in the use of software tools to support data analysis (e.g., Prism, FlowJo, MATLAB, ImageJ)
- Independently motivated, detailed orientated and good problem solving ability
- Excellent organizational and time management skills with the ability to work under tight timelines with changing priorities
- Ability to multi-task and work independently under pressure
- Ability to work in a team environment, meet deadlines, and prioritize and balance work from multiple individuals
- Must be willing to learn and grow
- Excellent documentation skills
- Must have good interpersonal skills
- Some occasional weekend or evening flexibility may be required
- Two year commitment preferred

The above job description details the major duties and qualifications of the listed position. The employee hired to this position confirms that he/she is able to perform all duties outlined. Although the specific duties and responsibilities of this position may vary slightly, the supervisor of this position will ensure that the employee hired to this position is trained and qualified to complete each task assigned. If the duties or responsibilities of this position need to change significantly, then the supervisor must submit an updated job description to the Office Manager for review.

---

Approved by (Print Name) ____________________________  Signature _______________  Date ____________

Supervisor (Print Name) ____________________________  Signature _______________  Date ____________