

Neutrophil project

Postdoctoral Fellow in Immunology and Nanotechnology

The Department of Pharmacology and Regenerative Medicine at the University of Illinois, College of Medicine invites applications for the position of Postdoctoral Fellow in Immunology and Nanotechnology. The successful applicant will join a research project at the interface of neutrophil biology and nanotherapeutic targeting. The NIH-funded research project focuses on heterogeneity of neutrophils can be leveraged to maximize host defense while minimizing collateral tissue injury using nanoparticle targeting of selective neutrophil populations. This is a full-time, 12-month appointment with the possibility for yearly renewal dependent upon performance and continued funding up to a maximum of 5 years.

Main research responsibilities include:

- Induction of inflammatory injury in genetic mouse models and assessment of tissue injury
- Handling and breeding of mice, collection of blood, bone marrow and tissues tissue for molecular and cellular assays
- Isolation of neutrophils and neutrophil activity assays including bacterial uptake, reactive oxygen species generation, chemotaxis assays
- Isolation and analysis of RNA from cells and tissues (real-time PCR, RNA-seq, scRNA-seq, scATAC-seq) – computational analysis will be provided by our resident bioinformatic team
- Confocal microscopy
- Flow cytometry and flow sorting
- Therapeutic delivery of nanoparticles in models of injury

Qualifications

Candidates must have a doctoral degree in Immunology, Nanotechnology, Physiology, Pharmacology, Bioengineering or associated disciplines and are preferred to have experience with animal studies and cellular studies.

Application Instructions

Candidates should have a track record of scientific productivity as evidenced by first-author publications, and be able to independently design and carry out experiments. The Department of Pharmacology and Regenerative Medicine offers an intellectually exciting, collegial and supportive environment for postdoctoral fellows. Postdoctoral fellows in the Department not only work with the mentor(s) but are also assigned an advisory committee which provides guidance in regards to career development. Applicants should submit a cover letter addressed to Dr. Asrar Malik (<http://mcph.uic.edu/malik/>) and Dr. Jalees Rehman (<http://mcph.uic.edu/rehman/>) including research interests and goals, CV, academic transcripts, one to two reference letters (preferably from the PhD advisor and current postdoc advisor if

the applicant is currently a postdoctoral fellow), and the names and contact information of two additional references. Please submit this information via email to ydong4@uic.edu.

University of Illinois faculty, staff and students are required to be fully vaccinated against COVID-19. This employment offer is contingent on your timely submission of proof of your vaccination. If you are not able to receive the vaccine for medical or religious reasons, you may seek approval for an exemption in accordance with applicable University processes.

As an EOE/AA employer, the University of Illinois encourages applications from individuals regardless of an applicant's race, color, religion, sex, gender identity, sexual orientation, national origin, and Veteran or disability status. The University of Illinois conducts background checks on all job candidates upon acceptance of contingent offer of employment. Background checks will be performed in compliance with the Fair Credit Reporting Act. The University of Illinois System requires candidates selected for hire to disclose any documented finding of sexual misconduct or sexual harassment and to authorize inquiries to current and former employers regarding findings of sexual misconduct or sexual harassment. For more information, visit

<https://www.hr.uillinois.edu/cms/One.aspx?portalId=4292&pageId=1411899>