

## Endothelial project

### Postdoctoral Fellow in Vascular Biology and Inflammation

The Department of Pharmacology and Regenerative Medicine at the University of Illinois, College of Medicine invites applications for the position of Postdoctoral Fellow in Vascular Biology and Inflammation. The successful applicant will join a research project at the interface of vascular biology and immunology. The NIH-funded research project focuses on understanding how adaptive responses of the vascular endothelium during host defense are coordinated and how maladaptive responses can result in excessive inflammation as well as tissue vascular injury. 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:

- Breeding of Cre-Loxp mice
- Induction of inflammatory injury in mouse models and assessment of tissue injury such as vascular leakiness
- Handling and dissection of mice and collection of lung tissue for molecular and cellular assays
- Isolation and culturing of mouse lung endothelial cells, lung epithelial cells and lung immune cells
- 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
- Transfection of cells with siRNA and shRNA
- CRISPR/Cas9 editing
- Confocal microscopy
- Flow cytometry

### **Qualifications**

Candidates must have a doctoral degree in Molecular Biology, Cellular Biology, Physiology, Pharmacology, Bioengineering or associated disciplines and are preferred to have experience with cell culture and animal 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](mailto: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>