



HARVARD MEDICAL SCHOOL
TEACHING HOSPITAL



**Boston
Children's
Hospital**

Until every child is well™

Postdoctoral fellows in Immunology and Systems biology

The Zhou lab at Boston Children's Hospital and Harvard Medical School is recruiting 1-2 postdoc fellows to join a growing team. The lab is broadly interested in understanding molecular and cellular mechanisms that regulate tissue homeostasis and inflammation. Mammalian tissues are ecological communities of diverse cell types. It has been more appreciated that immune cells are integral members of tissue ecosystem. We are interested in studying how immune cells communicate with their tissue neighbors and surrounding environment to maintain homeostatic states of tissues, and how dysregulation of cell-cell and cell-environment interactions may lead to inflammatory disorders. We use combination of mammalian tissue culture, animal disease models, flow cytometry, immunological analysis, live-cell imaging, genetics, genomics and computational approaches towards this goal. Our research interests include dissecting the molecular mechanisms and physiological impact of the interactions between immune and non-immune cell types (macrophages, fibroblasts, epithelial cells) as well as understanding the immunological functions of sensing tissue microenvironment. Ultimately, we aim to leverage the understanding of tissue homeostasis and inflammation to program immune cells to combat inflammatory disorders. Area of potential projects include:

1. Macrophage-fibroblast circuit communication in the context of inflammation.
2. Roles of sensing pH in modulating immune response.
3. Novel approaches to identify cell-cell interactions and program innate immune response.

Dr. Zhou obtained his PhD from Harvard University and received postdoctoral training at Yale School of Medicine. He is an Assistant Professor of Pediatrics at Harvard Medical School and Principal Investigator in the Division of Gastroenterology, Hepatology and Nutrition at Boston Children's Hospital. The Zhou lab locates in the Enders building at the heart of Harvard medical campus, surrounded by Harvard Medical School and affiliated research institutes. More information about the lab and other available positions can be found at our website: www.xuzhoulab.com.

Postdoctoral fellows: Candidates must have a good publication record, and are expected to finish full-time PhD or MD/PhD training within 12 months or have received the degrees in less than 2 years. Exceptional candidates with 2+ years previous postdoctoral training will be considered as well. We are building a team with talented individuals from diverse backgrounds. Experience in immunity, mucosal immunology, systems biology or relevant fields are strongly encouraged to apply, but not required. Prospective applicants please send the following materials to Xu Zhou (xu.zhou@childrens.harvard.edu).

1. A cover letter briefly stating your research achievement and future interests
2. CV
3. Contact information of 2-3 references