

Postdoctoral Position in Mechanisms of Hypertensive Vascular Remodeling

The Heart Institute, Morsani College of Medicine, University of South Florida

A position for a postdoctoral research scientist is available in the laboratory of Satoru Eguchi, professor, the Heart Institute in the [Morsani College of Medicine, University of South Florida](#). The laboratory conducts research in the cellular and molecular mechanisms of several cardiovascular diseases, including hypertension and abdominal aortic aneurysm (AAA). Genetically modified animal and cell culture models are used to characterize the molecular and cellular mechanisms leading to vascular smooth muscle cell stress signaling and metabolic maladaptation. The lab currently focuses on mechanisms of angiotensin II action via AT1 receptors, which regulate the vascular response to hypertension, with other projects focusing on molecular mechanisms of AAA development and rupture. The goals of these studies are to determine how manipulations on stress signaling or metabolic maladaptation might resolve vascular remodeling in hypertension and AAA.

Lab members have access to state-of-the-art molecular biology, proteomics, mouse physiology, metabolic, and imaging facilities in [the Heart Institute](#), MCOM, USF. The ideal candidate should be self-motivated, have the ability to create innovative ideas and perform experiments to address them, and be able to work in a collaborative environment.

Preferred skills needed for this postdoctoral position include, but are not limited to

- Performance of primary molecular biological assays in vitro and in vivo related to animal studies, including primary tissue culture, qRT-PCR, immunoblotting, cell transfection, and cellular outcome assays.
- Design and performance of experiments, analysis, data interpretation, and presentations.
- Performance of rodent colony maintenance and surgery.
- Interaction with senior and junior members of the Center, as well as limited training of graduate and undergraduate students.

Candidates must meet the following minimum education and skills.

- Ph.D. or MD. in physiology, pharmacology, biochemistry, or a related discipline.
- Hands-on experience with animals and cell culture.
- Strong documentation skills and the ability to work in a fast-paced, sometimes changing environment.

- Ability to communicate both orally and in writing with staff and professional colleagues.

Candidates must submit via email a statement of interest that details their research experience and interest in the relevant research work, a current CV, and contact information for three references that include the candidate's doctoral supervisor to **Satoru Eguchi MD PhD**, professor, Department of Surgery and the Heart Institute.
Email: eguchis@usf.edu



