



## **Postdoctoral Fellow in Ion Channel Signaling and Metabolism**

A postdoctoral fellowship position is available in the Sah Laboratory at the Washington University School of Medicine in St. Louis (Department of Internal Medicine, Cardiology) and the Center for the Investigation of Membrane Excitability Disease (CIMED) to study the mechanisms of Transient Receptor Potential (TRP) and LRRC8a/ SWELL1 ion channel regulation and signal transduction (<https://sahlab.wustl.edu>). The laboratory uses electrophysiological (e.g. patch-clamp), imaging techniques, genetic mouse models (including CRISPR/cas9 technology), biochemical, and molecular approaches to investigate the regulation of signal transduction mechanisms of novel ion channels, including TRP/LRRC8 channels, in cardiac muscle, skeletal muscle, adipose tissue, endothelium and pancreatic islet cells. Broadly speaking the overarching goal of the Sah laboratory is to understand how ion channels and mechano-signaling influence cellular and organismal metabolism. We also combine medicinal chemistry with cryo-EM structure, molecular docking, and functional studies to guide synthesis of novel ion channel modulators for the treatment of human disease.

In addition to the strong laboratory environment, the fellow will benefit from close interactions and collaborations with a dynamic ion channel community within the Department of Medicine, CIMED, the Diabetes Research Center and Cardiac Bioelectricity & Arrhythmia Center (CBAC).

St. Louis is a mid-sized culturally rich city that maintains outstanding resources and facilities in the arts and sciences. Information on being a postdoc at Washington University in St. Louis can be found at [postdoc.wustl.edu/prospective-postdocs](http://postdoc.wustl.edu/prospective-postdocs).

### Required Qualifications:

Applicants should have a Ph.D in the biological sciences (e.g. physiology, molecular biology, cell biology), have experience in ion channel electrophysiology, imaging techniques, protein biochemistry, and an established track record of success (publications in peer-reviewed journals). OR the candidate may have a strong background in cell biology and protein biochemistry with an interest in learning electrophysiology and ion channel biology. Excellent oral and written communications skills are required.

### Application Special Instructions:

To apply, send a CV, a cover letter stating research interests and qualifications, and references to [rajan.sah@wustl.edu](mailto:rajan.sah@wustl.edu)

### EOE:

Washington University is an Equal Opportunity Employer. All qualified applicants will receive consideration for employment