

## Postdoctoral Scholar

Zheng Lab

Department of Physiology and Membrane Biology

---

UC DAVIS  
HEALTH

SCHOOL OF  
MEDICINE

**Description:** A NIH-funded postdoctoral position in **ion channel physiology and biophysics** is immediately available in the Zheng Lab, Department of Physiology and Membrane Biology at UC Davis School of Medicine. We are recruiting a highly motivated and creative scientist to join our research group [https://basicscience.ucdmc.ucdavis.edu/zheng\\_Lab/](https://basicscience.ucdmc.ucdavis.edu/zheng_Lab/).

Our lab studies ion channel gating mechanisms and how channel functions contribute to physiology. A major research focus has been the capsaicin receptor TRPV1 that plays a central role in nociception and temperature-sensing. The lab uses multidisciplinary approaches including patch-clamping at macroscopic and single-channel levels and associated kinetic analysis, state-of-the-art quantitative fluorescence microscopy (e.g., FRET, unnatural fluorescence amino acid, calcium imaging), and *in silico* protein structure modeling. We recently established a new research area on the calcium-activated monovalent cation channel TRPM4 that is involved in several human cardiovascular and skin diseases. We have established a CRISPR-Cas9 mouse model and are expanding methodologies to include primary cell culture, RNAseq, protein purification and mass spectrometry.

Successful candidates will enjoy a collaborative and stimulating laboratory environment with cutting-edge instrumentation and facilities, and a strong culture of training and mentorship.

Applicants with a PhD or MD degree and a demonstrated background in ion channel physiology and/or biophysics are welcome to apply. Previous experience in patch-clamp electrophysiology is highly desirable; additional experience in the following areas is preferable: fluorescence microscopy, mass spectrometry, protein chemistry.

### TO APPLY:

Interested candidates should send their CV/Biosketch, cover letter, name and email of three professional references, and one representative publication to Dr. Jie Zheng via email [jzheng@ucdavis.edu](mailto:jzheng@ucdavis.edu).

UC Davis commits to inclusion excellence by advancing equity, diversity and inclusion in all that we do. We are an Affirmative Action/Equal Opportunity employer, and encourage applications from members of historically underrepresented racial/ethnic groups, women, individuals with disabilities, veterans, LGBTQ community members, and others who demonstrate the ability to help us achieve our vision of a diverse and inclusive community. For the complete University of California nondiscrimination and affirmative action policy see:

<http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct>. If you need accommodation due to a disability, please contact the recruiting department.

Under Federal law, the University of California may employ only individuals who are legally able to work in the United States as established by providing documents as specified in the Immigration Reform and Control Act of 1986. Certain positions funded by federal contracts or sub-contracts require the selected candidate to pass an E-Verify check. More information is available <http://www.uscis.gov/e-verify>.

UC Davis is a smoke- and tobacco-free campus effective January 1, 2014. Smoking, the use of smokeless tobacco products, and the use of unregulated nicotine products (e-cigarettes) are strictly prohibited on any property owned or leased by UC Davis -- indoors and outdoors, including parking lots and residential space. (<http://breathefree.ucdavis.edu/>).