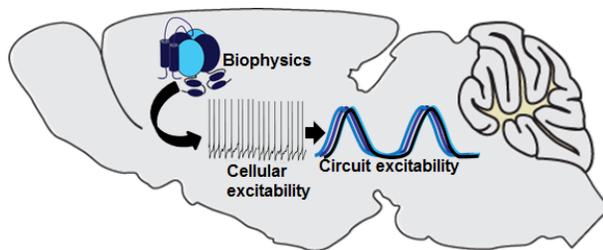


## **Postdoctoral Position Available to Study KCNMA1-Linked Channelopathy**



Our research focuses on the mechanisms by which ion channels regulate information coding in the brain and other excitable cells (<http://meredithlab.org>). In my lab, we combine the genetic manipulation of ion channels with electrophysiology, imaging, and *in vivo* physiology. Two central goals of the lab are to identify the fundamental biophysical properties of ion channels that cause neurological diseases, and to identify how ion channels pattern action potential activity in the circadian clock of the brain. Techniques in the lab include voltage- and current-clamp recordings, multi-electrode array recordings, imaging, molecular biology, transgenics, and *in vivo* telemetry.

For this postdoctoral position, we are seeking a highly motivated team-player to contribute to our studies of a new ion channelopathy defined by mutations in *KCNMA1*, the gene encoding the large conductance  $\text{Ca}^{2+}$ -activated BK channel. The project involves investigating human *KCNMA1* mutations and their impact on excitability in heterologous and neuronal models. See our recent publications:

- *KCNMA1-Linked Channelopathy* ([Journal of General Physiology, 2019, 151 \(10\): 1173](#))
- *Comparative Gain-of-Function Effects of KCNMA1-N999S Mutation on Human BK Channel Properties* ([Journal of Neurophysiology, 2020, 123:560](#))
- *Effects of single nucleotide polymorphisms in human KCNMA1 on BK current properties* ([Frontiers in Molecular Neuroscience, 2019, 12:285](#)).

**Requirements:** Candidates should have a PhD in biophysics, neuroscience, physiology, or other relevant field. Experience with electrophysiological recordings is required. Excellent oral and written communication skills should be demonstrated through publications and presentations. This position will be funded by an NIH T32 training grant, which requires US citizenship or permanent residency.

**To apply:** Please send by email to Dr. Andrea Meredith ([ameredith@som.umaryland.edu](mailto:ameredith@som.umaryland.edu)) with:

- your CV
- a letter describing your research accomplishments, expertise, and career goals
- contact information for three references



### **The Department of Physiology**

(<http://medschool.umaryland.edu/physiology>) offers outstanding research and NIH-funded postdoctoral training opportunities.

**The University of Maryland School of Medicine**, located in downtown Baltimore, is the oldest public medical school in the U.S. and the founding campus of the University of Maryland system. The School of Medicine ranks 6th among all 76 public medical schools.