

# Seeking Research Assistant/Technician for Determining the Structural Basis of $\text{Ca}^{2+}$ Regulation of $\text{Ca}^{2+}$ Ion Channels

Research assistant/technician position open immediately within the Calcium Signals Laboratory in the BME/Neuroscience Departments at Johns Hopkins University School of Medicine. We seek an individual to join a small team of investigators seeking to determine the structural basis and mechanism of  $\text{Ca}^{2+}$  feedback regulation of  $\text{Ca}^{2+}$  ion channels. Fluctuations in the concentration of intracellular  $\text{Ca}^{2+}$  comprise a *lingua franca* of life at the microscopic scale.  $\text{Ca}^{2+}$  ions flowing through  $\text{Ca}^{2+}$  ion channels—a voltage-controlled,  $\text{Ca}^{2+}$ -entry porthole into cells—are key to speaking the ‘syllables’ of this language, and negative feedback inhibition of these ion channels by  $\text{Ca}^{2+}$  is essential to proper articulation of the  $\text{Ca}^{2+}$  language. Mis-adjustment of such negative feedback underlies electrical disturbances in heart disease, and probably disrupts the neuro-processing underlying our very thoughts. Unmasking the secrets of such feedback regulation will enormously deepen understanding of normal biology, and reveal important molecular targets for novel disease therapy. Our team is now poised to determine the molecular structures and mechanisms supporting this negative-feedback regulation of  $\text{Ca}^{2+}$  channels, and we seek a energetic researcher to join us in this quest. The research strategy involves a blend of molecular genetics and biochemistry, electrophysiology, and x-ray crystallography. *This is a most attractive opportunity for an aspiring scientist wishing to enhance their research experience for 2 years before going on to graduate or medical school.*

The candidate (BS/BA or higher) should have some experience with molecular biological techniques, recombinant protein expression, and protein purification. In addition, we seek someone excited to engage x-ray structural determination and electrophysiological techniques. See our web page for more information about the laboratory at [www.bme.jhu.edu/labs/dyue/](http://www.bme.jhu.edu/labs/dyue/).

E-mail resume and two references to:  
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