RESEARCH ASSOCIATE in COMPUTATIONAL NEURAL MODELING

DUKE UNIVERSITY

Department of Biomedical Engineering and Department of Psychiatry & Behavioral Sciences

An opportunity exists to join a research team working to understand and advance transcranial magnetic stimulation (TMS). TMS is a non-invasive form of brain stimulation used widely as a neuroscience research tool as well as a treatment for psychiatric and neurological disorders (FDA approved for depression since 2008). We have an ongoing NIH-funded project that combines computational modeling at several scales with single neuron recordings in pre-clinical models.

We seek a highly-motivated individual who is interested in developing and applying computational models of TMS. The parallel experimental component of the study provides unique opportunities to validate and calibrate computational models. This is a full-time position with University Benefits and provides exceptional opportunities for interdisciplinary research and career development. This position will be jointly mentored by Angel V. Peterchev, PhD (Department of Psychiatry & Behavioral Sciences, School of Medicine) and Warren M. Grill, PhD (Department of Biomedical Engineering, Pratt School of Engineering), providing exposure to both clinical and engineering research settings. A PhD in biomedical engineering, electrical engineering, neuroscience, physics, or math is required, as are excellent communication skills. Previous experience in computational neural modeling is required, and previous experience with neural stimulation is desirable.

For consideration submit a CV and the names and contact information of three professional references as a .pdf file attachment to:

Angel V. Peterchev, PhD

Assistant Professor of Psychiatry & Behavioral Sciences, Biomedical Engineering, and Electrical & Computer Engineering

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