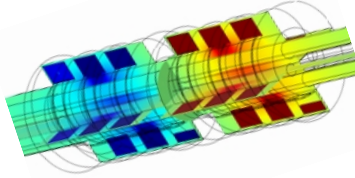# Post-Doctoral Research Associate
Autonomic Neural Engineering

We seek a highly-motivated individual who enjoys the freedom to pursue their own ideas in a supportive environment to join our team. Our goal is to advance electrical stimulation, block, and recording of peripheral autonomic nerve for disease treatment and restoration of function (bioelectronic medicines). We have a NIH-funded SPARC project to develop, validate, and apply computer-based models of electrical stimulation and block of autonomic nerves. There are opportunities in this position to undertake both computational and experimental studies to advance our objectives.

In our lab we presently have active projects in:
• autonomic nerve stimulation and block: vagus nerve stimulation; computational modeling for analysis and design; in vivo electrophysiology
• deep brain stimulation: mechanisms of action; closed-loop control; design of innovative therapies
• spinal cord stimulation to treat chronic pain: modeling, preclinical studies, and clinical studies to understand mechanisms and to innovate for increased therapeutic efficacy
• peripheral nerve recording and stimulation for control of bladder function, including restoration of continence and emptying
• transcranial magnetic stimulation: mechanisms and innovations to increase efficacy

We conduct computer-based modeling of neurons and electric fields, in vivo stimulation and recording in preclinical models, and translational clinical feasibility / physiology experiments in humans. The strong interdisciplinary and collaborative environment at Duke is ideal for our translational research efforts.

An earned PhD and previous experience in at least one of experimental electrophysiology or neurobiology, electrical stimulation, and computational modeling is required, as are excellent communication skills. A start date around Sept 2020 is ideal a start before year's end is preferred.

This is a full-time position with University Benefits and provides exceptional opportunities for interdisciplinary research and career development.

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

Warren M. Grill, Ph.D.
Professor of Biomedical Engineering
warren.grill@duke.edu

Duke University is an equal opportunity / affirmative action employer.