



# Duke University

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## **Postdoctoral Fellow in Cell and Gene Therapies for Cardiac Arrhythmias and Heart Failure**

Postdoctoral opening in gene- and cell-based therapy for cardiac arrhythmias and heart failure are immediately available in Bursac lab (<http://bursaclab.pratt.duke.edu/>). We are looking for highly motivated candidates with expertise in cell and molecular biology, single cell electrophysiology, optical mapping of action potential propagation in Langendorff-perfused hearts, and small or large animal models of heart disease. The project will aim to develop novel cell- and gene-based therapies for cardiac arrhythmias and heart failure and will include studies on mutagenesis of ion channels, viral genetic manipulations of excitable and unexcitable cells, and application of tissue and genetic engineering techniques to improve electrical conduction, prevent or terminate arrhythmias, and augment contractile function of acutely injured or chronically diseased hearts. Ventricular arrhythmias, atrial fibrillation, conduction system disease, and heart failure will be the main therapeutic targets of this work.

Qualifications include PhD and/or postdoctoral experience in single cell and tissue/organ cardiac electrophysiology, molecular biology, genetics, and other relevant areas of biomedical sciences. The ideal candidate will be highly self-motivated and possess strong training in electrophysiology, molecular biology, animal studies, biochemical and histological assays. Candidates with experience in optical mapping and generation of transgenic animals will be given a preference. Postdoctoral fellows are expected to publish research findings in peer-reviewed journals, participate in conferences for the intellectual exchange of research ideas, engage in existing and new collaborations within and outside Duke University, and assist with training of undergraduate and graduate students, as needed. The training environment of the Bursac group is highly interdisciplinary and provides ample opportunities for scientific growth and pursuit of both academic and industry careers. Duke University is an equal opportunity employer. Interested candidates should send their resume, statement of research goals, and names of three reference writers to Dr. Nenad Bursac ([nbursac@duke.edu](mailto:nbursac@duke.edu)).