



# Duke University

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## **Postdoctoral Fellow in Cell and Gene Therapy for Cardiac Arrhythmias**

Postdoctoral openings in gene- and cell-based therapy for cardiac arrhythmias and myocardial infarction 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 studies. The project involves development of novel in situ and exogenous cell- and gene-based therapies for cardiac arrhythmias and will include work in ion channel engineering, genetic manipulation of excitable and unexcitable cells, and application of tissue and genetic engineering techniques to improve electrical conduction and prevent or terminate arrhythmias in injured or chronically diseased hearts. Post-myocardial infarction induced VT and chronic AF will be the two main applications of this work.

Qualifications include PhD and 0-3 years of 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, generation of transgenic animals, and genome editing (CRISPR/Cas9) techniques 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. Interested candidates should send their resume, statement of research goals, and at least three names for recommendation letters to Dr. Nenad Bursac ([nbursac@duke.edu](mailto:nbursac@duke.edu))