



# Duke University

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**Postdoctoral Fellow in hiPSC-based Heart Repair.** Our group has developed robust methods to generate highly functional human heart tissues made of hiPS cells for use in drug development, disease modeling, and cardiac regenerative therapies. We are looking for a talented postdoctoral fellow with expertise in cardiac cell biology and differentiation of human iPS cells that would pursue therapeutic applications of human “cardiac tissue patch” in rodent and porcine models of myocardial infarction. The project will involve studies in human iPSC derivatives and animal models aimed at stimulating cardiomyocyte maturation, hypertrophy, and regeneration and understanding the roles that cardiomyocyte-nonmyocyte interactions play in these processes. Basic biology studies will be complemented with physiological measurements of cardiac electrical and mechanical function at a variety of spatial scales from a single cell to whole organ. This work is a part of a collaborative project involving cardiac biologists, bioengineers, and clinical scientists.

Qualifications include PhD in developmental and cell biology, biomedical engineering, or other relevant areas of biomedical sciences. The applicant is required to have experience in human ES or iPS culture and cardiomyocyte differentiation and good knowledge of cardiac biology. Expertise in modern techniques of genetic engineering (CRISPR/Cas9), molecular biology, and animal experimentation are highly desired. The candidate needs to be self-motivated, independent, good communicator, and able to work within a large team of scientists with diverse backgrounds. Our group provides a stimulating environment with excellent opportunities for scientific growth and pursuit of academic and industry careers. Interested candidates should send their resume, statement of research goals, and at least three names of references that can provide letters of recommendation to Dr. Nenad Bursac ([nbursac@duke.edu](mailto:nbursac@duke.edu)). Lab website: <http://bursaclab.pratt.duke.edu/>. This is an immediately available position.