Report of Funded and Unfunded Projects

Clinical Research

2/2015 – 5/2016	**Student Research Associate** PI, Javed Butler, MD Stony Brook Medicine	IRB approved retrospective study using cardiac MRI to assess for a pattern of viability and dysfunction in various types of heart failure
7/2018 – present	**Clinical and Research Fellow** PI, Hanna Gaggin, MD MPh Division of Cardiology Massachusetts General Hospital	Biorepository Studying the Relationship Between Biomarkers and Heart Failure (PREFER-HF Registry): Prospective evaluation of the relationship between serial biomarker measurements and echocardiographic features in patients with heart failure
6/2020 – present	**Clinical and Research Fellow** PIs, Ami Bhatt, MD and Jagmeet Singh MD PhD Division of Cardiology Massachusetts General Hospital	Massachusetts General Hospital Cardiovascular Telemedicine Registry (MGH CTR); IRB approved retrospective study to investigate predictors of telemedicine use with the goals of reducing barriers and increasing access to virtual care

Basic/Translational Research

10/2007 – 7/2012	**Senior Research Technician** PI, Ann C. Foley, PhD Weill Cornell Medical College	Study the temporal and spatial dynamics of marker expression using novel genome edited mouse embryonic stem cells (ESc) in order to elucidate the extraembryonic signals that control cardiogenesis, chamber specificity, and sinoatrial node formation during cardiomyocyte differentiation.
8/2013 – 8/2014	**Student Research Associate** PI, Jianchang Yang, MD PhD Stony Brook University Hospital	Investigate the contractile potential and syncytial contribution of cardiac stem/progenitor cells isolated from adult mouse heart tissue to provide stem cell based regenerative therapies for infarcted cardiac tissue, arrhythmias, and heart failure
9/2016 – 6/2018	**Postdoctoral Research Associate** PI, Lior Zangi, PhD Icahn School of Medicine at Mount Sinai	Investigate the role of modified RNA as a novel gene transfer system in the reactivation of cardiomyocyte proliferation, cardiac regeneration, as well as the de novo production of cardiomyocytes to rescue systolic function post myocardial infarct and in congestive heart failure
12/2019 – present	**Postdoctoral Fellow** PI, Jon and Christine Seidman, MD Harvard Medical School	Use of novel, high-throughput genomics (including single cell/nuclear RNA sequencing, quantitative RNA in situ hybridization) to transcriptionally profile pathologic human and mouse heart tissue. This will guide our understanding of the cardiac microarchitecture and the spatiotemporal signaling of cardiomyocytes and non-

myocytes and will shed light on the biomechanics of inherited and acquired cardiomyopathy, with the overall aim of discovering novel molecular targets needed for drug development.