

MGH Next-Gen StARR Participating Faculty and Research Focus

DEPARTMENT OF MEDICINE

- Antonis Aroundas, PhD (Cardiology) – Cardiac arrhythmias from myocyte to whole organ levels
- Jodie Babitt, MD (Nephrology) – Molecular and cellular mechanisms in iron homeostasis
- Aaron Baggish, MD (Cardiology) – Cardiovascular adaptations to exercises in health, disease, and human performance
- Saumya Das, MD, PhD (Cardiology) – Blood markers to predict heart failures and arrhythmias
- Patrick Ellinor, MD, PhD (Cardiology) – Molecular basis underlying abnormalities of heart rhythm and function
- Jose Florez, MD, PhD (Endocrinology) – Genetic research in diabetes
- Steven Grinspoon, MD (Endocrinology) – Neuroendocrine strategies to reduce cardiovascular and metabolic risk
- Farouc Jaffer, MD, PhD (Cardiology) – Molecular imaging approaches to image high-risk plaques and blood clots
- Robert Levine, MD (Cardiology) – Imaging to explore mechanisms of valvular heart disease
- Douglas Levy, PhD (GIM) – Economic determinants and consequences of tobacco use
- Gregory Lewis, MD (Cardiology) – Metabolics of right ventricular-pulmonary vascular interactions during exercise in heart failure
- Janet Lo, MD (Endocrinology) – Endocrine disease, cardiovascular disease and inflammation
- Steven Lubitz, MD, MPH (Cardiology) – Clinical and genetic aspects of heritable cardiac arrhythmias
- Andrew Luster, MD, PhD (Rheumatology) – Chemokines, lipid chemoattractants, immune cell trafficking, and human translational immunology
- Rajeev Malhotra, MD, MS (Cardiology) – Molecular mechanisms of calcification development in vessel walls
- Benjamin Medoff, MD (DPCCM) – Pathogenesis of pulmonary inflammation in asthma, COPD, lung transplant rejection, and viral infections
- Nancy Rigotti, MD (GIM) – HIV/AIDS treatment outcomes in sub-Saharan Africa, HIV/ AIDS and aging, and implementation science of HIV/AIDS care delivery in sub-Saharan Africa
- David Scadden MD (Hematologic Malignancies) – Stem cell therapies for blood disease and cancer
- David Sosnovik, MD (Cardiology) – Molecular imaging in the myocardium
- Melissa Suter, PhD (DPCCM) – Development and translation of novel optical diagnostic tools for pulmonary airways and lungs
- Ahmed Tawakol, MD (Cardiology) – Diagnostic imaging and novel therapeutics for atherosclerosis
- B. Taylor Thompson, MD (DPCCM) – Molecular epidemiology of ARDS and sepsis
- Anne Thorndike, MD, MPH (GIM) – Behavioral interventions to prevent disease and promoting exercise and nutrition at the workplace
- Jatin Vyas MD, PhD (ID) – Pulmonary innate immune response to fungal pathogens
- Christiane Wrann DVM, PhD (Cardiology) – Beneficial effects of exercise on metabolism and the brain
- Jing-Ruey Joanna Yeh, PhD (Cardiology) – Acute myeloid leukemia and inhibition of COX

OTHER MGH DEPARTMENTS

- Fernando Camargo, PhD (Harvard Stem Cell Institute; HSCI) – Adult stem cell biology, organ size regulation, and cancer

- Peter Caravan, PhD (Radiology) – Development of imaging probes and their application in detecting pathological changes
- Joseph Cotten, MD, PhD (Anesthesia) – Respiratory physiology and anesthetic mechanisms
- Georges El Fakhri, PhD (Radiology) – Cardiac perfusion, mitochondrial function, and medical imaging
- Katia Georgopoulos, PhD (Dermatology) – Follicular stem cells maintenance and differentiation
- Udo Hoffmann, MD (Radiology) – Value and accuracy of cardiac CT for atherosclerosis
- Jeff Huffman, MD (Psychiatry) – Psychiatric illness on patients with cardiac disease
- Choukri Mekkaoui, PhD (Radiology) – MRI in myocardial infarction
- Lance Munn, PhD (Radiation Oncology) – Blood vessel structure and function in normal and pathological conditions
- Matthias Nahrendorf, MD (Radiology) – Immunity in atherosclerosis and heart failure
- Roy Perlis, MD, MSc (Psychiatry) – Genetic discovery to understand the effect of antidepressants on cardiac rhythms
- Jayaraj Rajagopal, MD (Regenerative Medicine) – Lung epithelial homeostasis and regeneration after tissue injury
- Jesse Roberts, MD (Anesthesia) – Pulmonary vascular disease in pediatric patients
- Richa Saxena, PhD (Anesthesia) – Preeclampsia and predicting cardiovascular disease
- Guillermo Tearney MD, PhD (Pathology) – Non-invasive, high resolution optical imaging methods for disease diagnosis
- Tilo Winkler, PhD (Anesthesia) – Effect of bronchoconstriction on regional ventilation to determine how ventilation defects emerge
- Binglan Yu, PhD (Anesthesia) – Blood transfusion and blood substitutes

BROAD INSTITUTE

- Paul Blainey, PhD – Molecular, optical, and microfluidic technology for probing cell function
- Todd Golub, MD – Leukemia and classification of human cancer using gene expression analysis
- Stuart Orkin, MD – Molecular genetics of blood cell development and stem cells

INTERESTED IN SOMEONE NOT LISTED HERE? MENTORS WOULD NEED TO BE ADDED TO THE R38 GRANT

It is possible to add a mentor not listed above. These individuals were selected based on NHLBI funding and listed in the grant application. Typically, the Internal Steering Committee is willing to have an outside mentor if [1] the research project is relevant to the National Heart, Lung and Blood Institute (NHLBI), [2] they have funding to support research efforts, and [3] the individual is willing to mentor the resident.

For more questions or interest in becoming a mentor in the MGH Next-Gen StARR program, please contact the Program Manager (Becca Ward, raward@mgh.harvard.edu).