Enduring Hearts Research Grants

May 2014 - Chimerism of Cardiac Myocytes in Transplanted Heart:
Knowledge discovery related to the host DNA replacing donor DNA in a transplanted heart.

Primary Investigator: Shriprasad Deshpande
Direct - Emory University School of Medicine

July 2014 - Improving Late Survival after Pediatric Heart Transplant through Improved Understanding of Post-Tx Myocardial Fibrosis
Improving Late Survival after Pediatric Heart Transplant through Improved Understanding of Post-Tx Myocardial Fibrosis

Primary Investigator: Brian Feingold
AHA - Children's Hospital of Pittsburgh

April 2015 - Immunogenetic Markers of Extreme Clinical Phenotypes of Post-Transplant Lymphoproliferative Disorder:
Early detection of a specific cancer that can occur with a compromised immune system.

Primary Investigator: Upton Allen
Direct - Hospital for Sick Children - University of Toronto

July 2105 - Prevention of homograft induced cardiac allograft vasculopathy in pediatric heart transplantation:
Research into one of the major factors limiting long-term survival after a heart transplant.

Primary Investigator: Jean Kwun
AHA - Duke University Medical Center

July 2015 - The role of endogenous, antigen-specific, auto- and alloreactive Tregs in transplantation tolerance:
Research of the role that a very specific cell plays in the rejection of a transplanted heart.

Primary Investigator: James Young
AHA - University of Chicago
**January 2016 - 2D speckle tracking echocardiography for non-invasive surveillance of rejection and coronary disease in pediatric heart transplant recipients:**
Testing the efficacy of an alternative non-invasive method of detecting rejection.

Primary Investigator: Justin Godown

Direct - Monroe Carell Jr. Children's Hospital at Vanderbilt University

**May 2016 - Validation of a novel non-invasive assay for the detection of heart rejection:**
Testing the efficacy of an alternative non-invasive method of detecting rejection.

Primary Investigator: Steven Greenway

Direct - University of Calgary (Greenway)

**June 2016 - Enduring Hearts Pediatric Cardiac Research Fund:**
Mike Davis Lab-Laboratory opened its doors in June 2006 at Emory University as part of the joint Biomedical Engineering program at Emory University School of Medicine and Georgia Institute of Technology. Dr. Davis is an associate professor in both the Wallace H. Coulter Department of Biomedical Engineering and the Division of Cardiology at Emory University School of Medicine.

Currently, the only major treatment for heart failure is transplantation. However, it is estimated that less than 30% of patients survive to receive their new hearts. The local cell death following myocardial infarction plays a major role in the progression of cardiac dysfunction. Our laboratory focuses on various aspects of cardiac regeneration and preservation using molecular-based and biomaterials-based approaches to restoring function after cardiac injury.

Primary Investigator: Mike Davis

Direct - Children's Hospital of Atlanta, Biomedical Engineering program at Emory University School of Medicine and Georgia Institute of Technology

**July 2016 - Decision making in adolescents and young adults pre and post heart transplantation:**
Decision making in adolescents and young adults pre and post heart transplantation

Primary Investigator: Melissa K. Cousino, PhD

ISHLT - University of Michigan Medical School
July 2016 - Contribution of innate-like B cells to human cardiac allograft vasculopathy:
Research into one of the major factors limiting long-term survival after a heart transplant.

Primary Investigator: Debanjana Chatterjee
ISHLT - Columbia University Medical Center

July 2016 - Novel tolerogenic CD34/MSC di-chimeric cell therapy in vascularized composite allograft and heart transplant:
Research into a therapy for one of the major factors limiting long-term survival after a heart transplant.

Primary Investigator: Maria Siemionow
AHA - University of Illinois at Chicago

January 2017 - Regulating Glycosaminoglycans in Transplant Vascular Disease and Chronic Rejection:
Research into a therapy for one of the major factors limiting long-term survival after a heart transplant.

Primary Investigator: Alexandra R. Lucas
AHA - Arizona State University at Tempe

January 2017 - Roles of cardiac and hepatic macrophage subsets in immune tolerance:
Research of the role that a very specific cell group plays in the rejection of a transplanted heart.

Primary Investigator: Dilini Soysa
AHA - University of Washington at Seattle

July 2017 - Approval of Grant Application, Cardiac MRI Assessment of Rejection and Cardiac Allograft Vasculopathy in Pediatric Heart Transplant Recipients:
Testing the efficacy of an alternative non-invasive method of detecting rejection.

Primary Investigator: Jonathan Harvey Soslow
Direct - Monroe Carell Jr. Children's Hospital at Vanderbilt University
July 2017 - Targeted Ex vivo Nanotherapy for use in Cardiac Transplantation:
Research into delivering a very small amount of medication to a targeted specific location in the heart in lieu of broader anti-rejection medications

Primary Investigator: Kunal Patel
AHA - Medical University of South Carolina

July 2017 - MicroRNA Biomarkers of Allograft Rejection in Cardiac Transplantation:
Testing the efficacy of an alternative non-invasive method of detecting rejection

Primary Investigator: Palak Shah
AHA - Inova Fairfax Hospital

July 2017 - Functional consequences of antigen specificity in CMV-responsive T cells:
Functional consequences of antigen specificity in CMV-responsive T cells

Primary Investigator: Lauren Higdon
AHA - Stanford University School of Medicine

September 2017 - En Bloc Donor Thymus Co-transplantation to Achieve Tolerance in Pediatric Heart Recipients:
Research into modifying pediatric transplantation method to improve the host's acceptance of the transplanted heart

Primary Investigator: Jane Miha O
ISHLT - Massachusetts General Hospital at Harvard Medical School

September 2017 - Defining Tissue-Resident Endothelial Heterogeneity and Plasticity after Inflammatory Insult in Solid Organ Transplantation:
Research of the role that a very specific inflammatory response plays in the rejection of a transplanted heart

Primary Investigator: Nicole M Valenzuela
ISHLT - University of California at Los Angeles
**December 2017 - Cell-free DNA for the Diagnosis of Rejection After Heart Transplantation:**
Testing the efficacy of an alternative non-invasive method of detecting rejection.

Primary Investigator: Steven Greenway

Direct - University of Calgary

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**July 2018 - Antibody Mediated Allograft Injury Following Pediatric Heart Transplantation: Mechanistic Insights and Predictive Modeling:**
This proposal will be an important component of our ongoing efforts to understand the factors affecting longer-term graft survival with the anticipation that these efforts will results in future interventions to maximize graft survival in children receiving heart transplants, consistent with the mission of the Enduring Hearts Foundation.

Primary Investigator: Stephen K Webber

Direct - Monroe Carell Jr. Children's Hospital at Vanderbilt University

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**July 2018 - Developing a Comprehensive Biomedical Imaging Informatics Tool for Precision Care of Pediatric Heart Transplant Patients:**
The goal of this pilot project is to develop clinical decision support systems (CDSSs) that can assist in making rejection staging decisions by quantifying morphological properties in biopsy slides for heart transplant patients.

Primary Investigators: May Dongmei Wang, Ph.D, Shriprasad R. Deshpande, M.D., M.S.

Direct - Georgia Institute of Technology and Emory University