

COMMENTARY

JACC: Basic to Translational Science 2017 Young Author Award Winners



Douglas L. Mann, MD, FACC, *Editor-in-Chief, JACC: Basic to Translational Science*

On March 10, 2018, during the *JACC Journals'* Editorial Board and reception, *JACC: Basic to Translational Science* was proud to recognize and congratulate the following recipients of the *JACC: Basic to Translational Science* 2017 Young Author Award.

Winner: Elisabeth A. Kaza, MD, Dsc

Paper: *P2Y₁₂ Receptor Function and Response to Cangrelor in Neonates With Cyanotic Congenital Heart Disease*



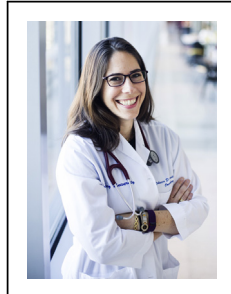
Elisabeth Kaza, MD, DSc, is currently an Attending Neonatologist at Brigham and Women's Hospital, Department of Newborn Medicine, and an Instructor in Pediatrics at Harvard Medical School. Dr. Kaza completed a fellowship in neonatal/perinatal medicine at New York Presbyterian/Morgan Stanley Children's Hospital-Columbia University Medical Center with a particular interest in the improvement of care of neonates with congenital heart disease and care process guidelines.

Mentor: Thomas G. Diacovo, MD

Thomas Diacovo, MD, is professor of pediatrics and pharmacology, Chief of the Division of Newborn Medicine at Children's Hospital of Pittsburgh, and the Director of Neonatal Cardiovascular Research at the Heart Institute at University of Pittsburgh Medical Center. He completed a fellowship in neonatology and postdoctoral training in cell biology at Children's Hospital of Boston and the Center for Blood Research at Harvard Medical School. Dr. Diacovo has been a champion for the development of pharmacological agents and devices specifically designed for NICU patients, and in particular those with congenital heart disease who are at high risk for forming blood clots.

Winner: Rebecca D. Levit, MD

Paper: *A Minimally Invasive, Translational Method to Deliver Hydrogels to the Heart Through the Pericardial Space*



Dr. Rebecca Levit is an assistant professor of cardiology at Emory University in Atlanta, Georgia. She completed her undergraduate training at Dickinson College and medical school at the University of Pennsylvania School of Medicine. Prior to medical school, she was awarded a Fulbright Fellowship to study animal physiology at the University of Wollongong in Australia. After medical school, Dr. Levit completed residency, fellowship, and post-doctoral research training at Emory University. There, she spent 3 years in the lab of Dr. W. Robert Taylor, who remains a close collaborator and mentor.

The Levit Lab is interested in translatable strategies to treat heart disease (medicine.emory.edu/levit-lab). One portion of the lab focuses on immunomodulatory capabilities of mesenchymal stem cells (MSCs) with a focus on their effects on the most common innate immune cell, the neutrophil. Experiments have shown that supporting MSCs with biocompatible hydrogels, optimizes the retention of viable cells in the heart as well as their anti-inflammatory effects. In order to translate biomaterial-supported therapies into clinical use, the lab developed a minimally invasive method utilizing the pericardial space due to its close anatomic proximity to the heart, physiologic fluid that could support transplanted cells, and non-vascular nature that limits embolic and thrombotic risk. The feasibility, hemodynamic stability, and inflammatory effects of pericardial biomaterial delivery were described in the October issue of *JACC: Basic to Translational Science*. Biomaterials delivered to the heart using this method could carry many types of advanced therapeutics including stem cells, cytokines, microRNA, viral vectors, and others.

Mentor: W. Robert Taylor, MD, PhD

Bob Taylor is a professor of medicine and biomedical engineering at Emory University School of Medicine. He is the Marcus Chair in Vascular Medicine and the Director of the Division of Cardiology. Dr. Taylor received his MD from Harvard Medical School and his PhD from The Johns Hopkins University. After completing his internal medicine training at Harvard, he went to Emory University for subspecialty training in cardiovascular disease. Dr. Taylor's research interests are focused on vascular biomechanics, inflammation, and regenerative medicine. His work has been funded by the NIH, American Heart Association, NSF, and the Department of Veterans Affairs.