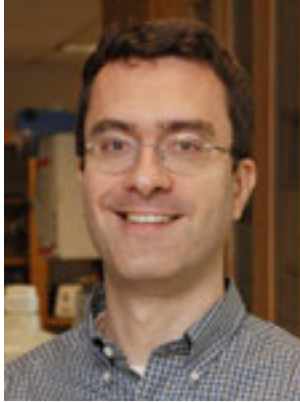


## Mechanisms of Heart Muscle Proliferation

**Presenter:** Bernhard Kühn, MD, Children's Hospital Boston, Boston, MA



*Dr. Bernhard Kühn is Associate in Cardiology at Children's Hospital Boston and Assistant Professor of Pediatrics at Harvard Medical School. He is a physician-scientist with special interests in cardiac regeneration. Dr. Kühn received his medical and graduate degrees from the Freie Universität in Berlin, Germany, in 1999 and completed a residency in pediatrics at Yale in 2002 and a clinical and research fellowship in pediatric cardiology at Children's Hospital Boston in 2005. Dr. Kühn's honors include the Young Investigator Award of the American College of Cardiology (Pathology and Physiology) in 2007 and a Basil O'Connor Starter Award from the March of Dimes Foundation in 2008.*

### **Abstract**

Dr. Kühn's laboratory at Children's Hospital Boston studies the mechanisms of heart muscle cell proliferation during development and regeneration, with the goal of stimulating this process for treating heart failure. Researchers in Dr. Kühn's laboratory have extensively studied two extracellular factors that stimulate heart muscle cell proliferation and promote heart muscle regeneration: a peptide of periostin, a component of the extracellular matrix, and neuregulin1, a growth factor. Dr. Kühn's research may provide new regenerative strategies for the treatment of heart failure.