

# KEYSTONE SYMPOSIA

on Molecular and Cellular Biology

## Heart Failure: Mechanisms and Therapies (Q7)

Scientific Organizers: David A. Kass and Saptarsi M. Haldar

Supported by the Directors' Fund

## Mitochondria, Metabolism and Heart (Q8)

Scientific Organizers: Elizabeth Murphy and Zoltan Arany

February 26-March 1, 2022 • Beaver Run Conference Center • Breckenridge, CO, USA

Supported by the Directors' Fund

Global Health Travel Award Deadline: February 7, 2022 / Scholarship Deadline: November 16, 2021 / Abstract Deadline: November 22, 2021 / Discounted Registration Deadline: January 3, 2022

### SATURDAY, FEBRUARY 26

#### Arrival and Registration

### SUNDAY, FEBRUARY 27

#### Keynote Address (Joint)

**Marcia C. Haigis**, Harvard Medical School, USA  
*Mitochondria and Metabolism*

**Eric M. Verdin**, Buck Institute for Research on Aging, USA  
*Immunological Aging and its Metabolic Control*

#### HF, Metabolic Syndrome, and Altered Substrate Metabolism (Joint)

**Rong Tian**, University of Washington, USA  
*NAD<sup>+</sup> Redox Balance and Heart Failure*

**Zoltan Arany**, University of Pennsylvania, USA  
*Metabolism in Heart Failure*

**Christoph Maack**, Universitätsklinikum des Saarlandes, Germany  
*Mechano-Energetic Uncoupling in Hereditary Cardiomyopathies*

#### Short Talks Chosen from Abstracts

#### Workshop (Q7)

#### Short Talks Chosen from Abstracts

#### Gene and Protein Regulation (Q7)

**Saptarsi M. Haldar**, Amgen Inc., USA  
*Targeting Gene Regulatory Machinery in Heart Failure*

**Paula da Costa Martins**, Maastricht University, Netherlands  
*Noncoding RNAs and Cell-Cell Communication in Heart Failure*

**Bianca Brundel**, VU University Medical Center, Netherlands  
*Proteostasis and Atrial Remodeling with Afib*

#### Short Talks Chosen from Abstracts

#### Regulation of Mitochondrial Ion Homeostasis (Q8)

**Diego De Stefani**, University of Padova, Italy  
*Mitochondrial ATP-Sensitive Potassium Channels*

**Donald M. Bers**, University of California, Davis, USA  
*Mitochondrial Ca Homeostasis in Health and Disease*

**Elizabeth Murphy**, Cardiac Physiology Section Vascular Medicine Branch, NHLBI, NIH, USA  
*Mitochondrial Calcium and Cell Death*

#### Short Talks Chosen from Abstracts

#### Poster Session 1

### MONDAY, FEBRUARY 28

#### HFpEF - Where Are We Now? (Q7)

**Gregory D. Lewis**, Massachusetts General Hospital, USA  
*Roles of Obesity and Peripheral Muscle*

**Barry A. Borlaug**, Mayo Clinic, USA  
*Perspectives on Therapeutics: SGLT2 and Beyond*

**Kavita Sharma**, Johns Hopkins University School of Medicine, USA  
*Human HFpEF - Clinical Molecular and Cellular Phenotyping*

**David A. Kass**, Johns Hopkins Hospital, USA  
*HFpEF and Sarcomeres: The Obesity Connection*

#### Short Talks Chosen from Abstracts

#### Mitochondria and Cell Death (Q8)

**Jeffery D. Molkentin**, Cincinnati Children's Hospital Medical Center, USA  
*Role of Adenine Nucleotide Translocator in Mitochondrial Permeability Pore and Death*

**Roberta A. Gottlieb**, Cedars-Sinai Medical Center, USA  
*Mitochondrial Autophagy*

**Elizabeth A. Jonas**, Yale University, USA  
*Role of the F1-F0-ATPase in Regulating Cell Death*

**Richard N. Kitsis**, Albert Einstein College of Medicine, USA  
*Integrating Mitochondrial Cell Death Programs*

#### Short Talks Chosen from Abstracts

#### Inflammation and Immune Regulation (Q7)

**Kory J. Lavine**, Washington University School of Medicine, USA  
*Determinants and Impact of Monocyte Fate Specification in the Diseased Heart*

**Pilar Alcaide**, Tufts University School of Medicine, USA  
*T-Cell Modulation of Myocardial Injury*

**Andrés Hidalgo**, Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III, Spain  
*Macrophages and Cardiac Mitochondrial Homeostasis*

#### Short Talks Chosen from Abstracts

#### Mitochondria Energetics and Shape (Q8)

**Gia K. Voeltz**, University of Colorado Boulder, USA  
*ER-Mitochondrial Contacts*

**John W. Calvert**, Emory University School of Medicine, USA  
*DJ1 Mitochondria and Cell Death*

**Brian Glancy**, NHLBI and NIAMS, National Institutes of Health, USA  
*Sustaining Power: Building Energy Networks in Striated Muscle Cells*

#### Short Talks Chosen from Abstracts

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### Poster Session 2

#### TUESDAY, MARCH 1

##### Mitochondria and HF (Joint)

**Jared Rutter**, University of Utah, USA  
*Mitochondrial Metabolism in the Heart*

**John W. Elrod**, Lewis Katz School of Medicine at Temple University, USA

*Mitochondrial Calcium and Epigenetics*

**Asa B. Gustafsson**, University of California, San Diego, USA  
*Mitophagy and Heart Failure*

**E. Dale Abel**, University of Iowa, Carver College of Medicine, USA  
*Mitochondria in Heart Failure, Metabolism and Beyond*

##### Short Talks Chosen from Abstracts

##### Fibroblasts and Stroma and Myocyte Crosstalk (Q7)

**Christine L. Mummery**, Leiden University Medical Center, Netherlands

*Stromal Cell-Myocyte Crosstalk in Engineered Tissues*

**Jennifer Davis**, University of Washington, USA  
*Modulation of Myocardial Fibrosis*

**Jonathan A. Epstein**, University of Pennsylvania, USA  
*Cell-Therapeutics to Counter Fibrosis*

##### Short Talks Chosen from Abstracts

##### Mitochondria and Metabolism (Q8)

**Rui-ping Xiao**, Peking University, China  
*RIP Kinase Mediated Death*

**Paul S. Brookes**, University of Rochester Medical Center, USA  
*Mitochondrial Energetics in Cardiac Ischemia-Reperfusion Injury*

**Morris J. Birnbaum**, Pfizer Inc., USA  
*Metabolic Targets in Heart Failure*

##### Short Talks Chosen from Abstracts

##### Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Q7)

##### Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Q8)

#### WEDNESDAY, MARCH 2

##### Departure