**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+ Redox Balance and Heart Failure
- **Zoltan Arany**, University of Pennsylvania, USA
  - Metabolism in Heart Failure
- **Christoph Maack**, Universitätsklinikum des Saarlandes, Germany
  - Mechanono-Energetic Uncoupling in Hereditary Cardiomyopathies
- **Priya Umapathi**, Johns Hopkins, USA
  - Short Talk: The Intersection of O-GlcNAc and YAP – a Novel Molecular Axis in Heart Failure
- **Giacomo von Alvensleben**, EPFL, Switzerland
  - Short Talk: Identification of Dietary and Genetic Regulators of Heart Failure by a Systems Genetics Approach

**Workshop (Q7)**
- **Anthony Cammarato**, Johns Hopkins University, USA
  - The ACTC A331P Hypertrophic Cardiomyopathy Mutation Enhances Basal Contractile Activity and Causes Resting Muscle Dysfunction
- **Aly Elezaby**, Stanford University, USA
  - A Noncanonical Mitochondrial Role for Cardiac Troponin I: Implications for Ischemia-Reperfusion Injury
- **Ashley Francois**, Ohio State University, USA
  - The Role of Sertad4 in Post-MI Cardiac Remodeling

**Poster Session 1**

**MONDAY, FEBRUARY 28**

**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
- **Robert 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

**Regulation of Mitochondrial Ion Homeostasis (Q8)**
- **Diego De Stefani**, University of Padova, Italy
  - Mitochondrial ATP-Sensitive Potassium Channels

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*Session Chair † Invited but not yet accepted. Program current as of February 14, 2022. Meal formats are based on meeting venue. For the most up-to-date details, visit https://www.keystonesymposia.org.*
HFpEF - Where Are We Now? (Q7)
Gregory D. Lewis, Massachusetts General Hospital, USA
Roles of Obesity and Peripheral Muscle
Timothy A. McKinsey, University of Colorado Denver, USA
A Lysine Demethylase Controls Pathological Fat-to-Heart Crosstalk
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
Elizabeth K. Prazinsky, University of Pennsylvania, USA
Short Talk: Receptor Interacting Protein 140 (RIP140) Modulates Cardiac Hypertrophic Remodeling and Muscle Endurance Fitness
Sasha Smolgovsky, Tufts University, USA
Short Talk: Proinflammatory T Cells with Downregulated Unfolded Protein Response Genes Contribute to Experimental Heart Failure with Preserved Ejection Fraction

Career Roundtable (Joint)
Mitochondria Energetics and Shape (Q8)
Gia K. Voeltz, University of Colorado Boulder, USA
Unraveling the Mechanism of ER-associated Mitochondrial Constriction
John W. Calvert, Emory University School of Medicine, USA
DJ-1 Protects Mitochondria from Glycative Stress in the Setting of Myocardial Ischemia
Brian Glancy, NHLBI and NIAMS, National Institutes of Health, USA
Sustaining Power: Building Energy Networks in Striated Muscle Cells
Dillon Chung, NIH, USA
Short Talk: Impact of Ischemia-Reperfusion Injury on Three-Dimensional Mitochondrial Networks in the Murine Heart
Shubhi Srivastava, University of Illinois at Chicago, USA
Short Talk: Nuclear Translocation of Selective Mitochondrial TCA Cycle Dehydrogenases Acts as an Adaptive Mechanism in Cardiac Stress

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
Edward Thorp, Northwestern University, USA
Macrophage Mitochondrial Metabolism Enhances Cardiac Repair

Xavier Revelo, University of Minnesota, USA
Short Talk: Cardiac Resident Macrophages Prevent Fibrosis and Stimulate Angiogenesis
Joel G. Rurik, University of Pennsylvania, USA
Short Talk: CAR T Cells Produced in vivo to Treat Cardiac Injury

Poster Session 2
TUESDAY, MARCH 1
Mitochondria and HF (Joint)
Jared Rutter, University of Utah, USA
Mitochondrial Metabolism in the Heart
John W. Eirod, 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, David Geffen School of Medicine and UCLA Health, USA
Mitochondria in Heart Failure, Metabolism and Beyond
Pieterjan Dierickx, University of Pennsylvania, USA
Short Talk: Circadian REV-ERBs Repress E4bp4 to Activate NAMPT-dependent NAD+ Biosynthesis and Sustain Cardiac Function
Guo Huang, University of California San Francisco, USA
Short Talk: Neurohormonal Pathways Drive Postnatal Thermogenesis and Loss of Cardiac Regenerative Potential

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 for Heart Failure
Derek P. Narendran, National Institutes of Health, USA
Short Talk: OMA1 Mediates Local and Global Stress Responses Against Protein Misfolding in CHCHD10 Mitochondrial Myopathy and Cardiomyopathy

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
Junedh Mahesh Amrute, Washington University School of Medicine in St. Louis, USA
Short Talk: The Inflammatory-Fibrosis Axis in Human Ischemic Heart Disease
MEETING POSTPONED: Mitochondria, Metabolism and Heart (Q8)
Scientific Organizers: Elizabeth Murphy and Zoltan Arany
Sponsored by Moderna and Novo Nordisk A/S

MEETING POSTPONED: Heart Failure: Mechanisms and Therapies (Q7)
Scientific Organizers: David A. Kass and Saptarsi M. Haldar
February 26-March 1, 2022 • Beaver Run Conference Center • Breckenridge, CO, USA
Sponsored by AstraZeneca, Ionis Pharmaceuticals, Inc. and Merck & Co., Inc.
Anne-Katrine Z. Johansen, CCHMC, USA

Short Talk: Fibroblast-specific Ablation of Cytoplasmic Actins
Promotes Myofibroblast Differentiation and Cardiac Dysfunction

Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Q8)
Meeting Wrap-Up: Outcomes and Future Directions (Organizers) (Q7)

WEDNESDAY, MARCH 2

Departure