

# 2018 Kern Lipid Conference

## *“Metabolic Regulation of Immunity, Cardiometabolic Diseases and Cancer: New Therapeutic Approaches”*

Monday, August 13, 2018 to Wednesday, August 15, 2018 - Vail, Colorado

Organizers: Nada A Abumrad, PhD, Washington University, Susan Kaech, PhD, Salk Institute  
and Roger Newton, PhD, Esperion Therapeutics

### Conference Registration

Monday, August 13, 2018

7:30-8:15am

**Conference Check-In and Breakfast**  
*Grand Ballroom Foyer and Registration Desk*

### Session 1: Metabolic Reprogramming in Homeostasis and Disease

Session Chair: Nada Abumrad, PhD

8:30am

**Introduction and Presentation of the Kern Lectureship Award**  
Moshe Levi, MD, Georgetown University

9:00am

**Kern Lecture: “Nutrient regulation of mTOR Signaling in Metabolism, and Disease”**  
David Sabatini, MD, PhD, MIT Biology and Whitehead Institute

9:45am

**“Cellular Metabolism and Signaling in Cancer”**  
Reuben Shaw, PhD, Molecular and Cell Biology Laboratory, Salk Institute

10:30am

**Break**

10:45am

**“Targeting the Warburg Effect through GAPDH”**  
Jason Locasale, PhD, Pharmacology and Cancer Biology, Duke University

11:20am

**“ATP Citrate Lyase Control of the Glucose to Acetate Metabolic and Epigenetic Switch”**  
Kathryn Wellen, PhD, Cancer Biology, University of Pennsylvania

11:55pm

**Lunch**

1:20pm

**Introduction to David L. Williams Lecture and Award**  
Mary Sorci-Thomas, PhD, Medical College of Wisconsin

**David L. Williams Lecture: TBD**

2:05pm

**“Mapping Human Metabolic Diversity and its Role in Disease Using Untargeted Metabolomics”**  
Mohit Jain, MD, PhD, Medicine, University of California, San Diego

2:40pm

**“Lipids Reprogram Metabolism Providing a Major Source for Histone Acetylation”**  
Matthew Hirschey, PhD, Medicine, Endocrinology, Metabolism, and Nutrition, Duke University

3:15pm

**Break**

3:30pm

**“Nutrient Regulation of Muscle Insulin Sensitivity”**  
Zoltan Pierre Arany, MD, PhD, Medicine, Perelman School of Medicine

- 4:05pm **Trans-Endothelial Insulin Efflux in Skeletal Muscle Capillaries”**  
David Wasserman, PhD, Molecular Physiology and Biophysics, Vanderbilt University
- 4:40pm **“Fatty Acid Sensitive Regulation of the Insulin Receptor and AMPK Pathways”**  
Dmitri Samovski, PhD, Medicine, Nutritional Sciences, Washington University
- 5:15pm **Differential Regulation of TLR and Macrophages by Saturated and Unsaturated Fatty Acids”** Autumn York, PhD, Immunobiology, Yale University
- 5:30  
Talk from abstracts (TBD)
- 6:00 pm **Poster Session and Reception**  
*Grand Ballroom, Salons F-J*

Tuesday, August 14, 2018

8:15am **Breakfast Buffet**  
*Grand Ballroom Foyer*

**Session 2: Metabolism of Endothelial and Immune Cells in Health and Disease**

**Session Chair: Susan Kaech, PhD**

9:00am **“Endothelial Cell Metabolism: Principles and Therapeutic Opportunities”**  
Peter Carmeliet, MD, PhD, Center for Cancer Biology, University of Leuven

9:45am **“Molecular Regulation of Endothelial Permeability and Lipid Transport by VEGF Signaling”**  
Anne Eichmann, PhD, Medicine, and Cellular and Molecular Physiology, Yale University

10:20am **Break**

10:35am **“Metabolic Dysregulation of Cellular Innate Immunity in Inflammatory Vasculitis”**  
Sonia Sharma, PhD, La Jolla Institute for Allergy and Immunology

11:05am **“Characterization of Immune Cell Metabolism in Obesity”**  
Lydia Lynch, PhD, Biochemistry and Immunology, Harvard University

11:45am **Early Career Investigator Presentation (2018 Abstract)**  
TBD

12:00pm **Lunch**

1:20pm **Introduction and Presentation of the Roger Davis Lecturer**  
Robert H. Eckel, MD, University of Colorado Denver  
**Roger Davis Lecture: TBD**

1:55pm **“Store-Operated Ca<sup>2+</sup> Entry in T Cell Immunity and (Lipid) Metabolism: Lessons from STIM1 and ORAI1 Deficient Human Patients and Mice”**  
Stefan Feske, MD, Pathology, NYU

2:30pm **“Adipocyte Precursor Activation During Onset of Obesity”**  
Matthew Rodeheffer, PhD, Yale University

3:05pm **Afternoon Break**

6:00pm **Poster Session**

7:30am **Breakfast Buffet**  
Grand Ballroom Foyer

**Session 3: Old and New Therapeutic Approaches in Metabolic Disease and Cancer**  
Session Chair: Roger Newton, PhD

8:30am **Franz Simon Poster Award/Introduction – Recipient To be Announced**  
Moshe Levi, MD, President, Kern Lipid Conference/Georgetown University

9:00am **“Liver-specific Inhibition of ATP-Citrate Lyase by Bempedoic Acid Decreases LDL Cholesterol and Atherosclerosis”**  
Stephen L Pinkosky, PhD, Esperion Therapeutics

9:35am **“ATP-Citrate Lyase Inhibitor, Bempedoic Acid, Lowers LDL-Cholesterol and Attenuates Atherosclerosis in LDL Receptor Deficient (LDLR +/- and LDLR -/-) Yucatan Miniature Pigs”**  
Murray Huff, PhD, Medicine, University of Western Ontario

10:10am **Break**

10:20am **“Acetyl CoA Carboxylase in the cross-roads of immune-cancer-metabolism regulation, impact on non-alcoholic steatohepatitis (NASH) and cancer”**  
Rosana Kapeller, MD, PhD, Nimbus Therapeutics

10:55am **“Acetyl-CoA Carboxylase Inhibition Reduces Hepatic Steatosis but Elevates Plasma Triglycerides in Mice and Humans: A Bedside to Bench Investigation”**  
Jay D. Horton, MD, University of Texas-Southwestern

11:30pm **Early Career Investigator Presentation (2018 Abstract)**  
TBD

12:00pm **Lunch**

1:20pm **“Metabolic Sensing by AMPK and its Potential as a Therapeutic Target for Treating Metabolic Disease and Cancer”**  
Gregory Steinberg, PhD, McMaster University, Ontario

1:55pm **“Ketone Bodies in Fuel Metabolism, Signaling and Therapeutics”**  
Peter Crawford, PhD, University of Minnesota

2:30pm **“Potentiating Anti-Tumor Response of CD8+ T Cells by Modulating Cholesterol Metabolism”**  
Chenqi Xu, PhD, Shanghai Institute of Biological Sciences, Chinese Academy of Sciences

3:05pm **Break**

3:15pm **“Identification and Validation of New Targets Using Precision Phenotyping and Panomics”**  
Szilard Voros, MD, Global Genomics Group

3:50pm **“In Silico Mendelian Genetics to Identify and Validate Novel Therapeutic Targets”**  
Brian Ference, MD, Wayne State University

4:25pm **Early Career Investigator Presentation (2018 Abstract)**  
TBD

5:15pm

**Break**

6:30pm

**Dinner and Reception**