# 2019 Kern Lipid Conference

# "Signaling Lipids In Health and Disease"

# Monday, August 12, 2019 - Wednesday, August 14, 2019 Vail, Colorado

Organizers:

Russell DeBose-Boyd, PhD, UT Southwestern Medical Center Rebecca Haeusler, PhD, Columbia University J. Mark Brown, PhD, Cleveland Clinic Lerner Research Institute

<b>Conference Regis</b>	tration	Monday, August 12, 2019
7:30-9:00am	Conference Check-In and Breakfast	

Grand Ballroom Foyer and Registration Desk

#### **Kern Lecturer**

R. Isam	<b>Introduction and Presentation of the Kern Lectureship Award</b> Moshe Levi, MD, President, Kern Lipid Conference, Georgetown University – USA
8.725am	<b>Kern Lecture: "Lysophospholipid Signaling Pathways at the CNS- Immunology Interface"</b> Benjamin F. Cravatt III, PhD, Scripps Research Institute – USA

#### Session 1: Neuronal Lipid Signaling

#### Session Chair: Russell DeBose-Boyd, PhD

9:15am	<b>"Lipid Sensing from the Periphery to the CNS"</b> Gary Schwartz, PhD, Albert Einstein – USA	
9:45am	<b>"Apolipoproteins in Neurodegenerative Disease"</b> Cheryl Wellington, PhD, The University of British Columbia – Canada	
10:15am	Coffee Break	
10:30am	"Lipid Sensitive Immunologic Modulators of Hypothalamic Function" Suneil Koliwad, MD, PhD, University of California, San Francisco, USA	
11:00am	"Resolution of 13C and deuterium isotopes allows high-sensitivity lipid fluxomics analysis and gives new insight into post-prandial lipid metabolism" Matthew Mitsche, PhD, UT Southwestern Medical Center - USA	
11:15am	"PPARgamma deacetylation, the promise for cardiometabolic syndrome" Li Qiang, PhD, Columbia University - USA	
11:30am	<b>"UBIAD1 modulation of ERAD and sterol metabolism"</b> Brittany Johnson, PhD Candidate, UT Southwestern Medical Center - USA Young Investigator Short Talk	
12:00pm	<b>Lunch</b> Mountain View Patio	
1:00-4:15pm	Afternoon Break	

## Session 2: Therapeutic Strategies Targeting Lipid Metabolic Pathways

### Session Chair: John Parks, PhD

4:15pm	<b>"Targeting Liver Lipid Metabolism with AMPK Activators"</b> Russell Miller, PhD, Pfizer – USA
4:45pm	<b>"New Therapeutics in Cardiometabolic Disease"</b> Laura Michael, PhD, Eli Lilly – USA
5:15pm	<b>"Cardiovascular and Metabolic Effects of Lipoprotein (a) Antisense Oligonucleotides"</b> Rosanne Crooke, PhD, IONIS Pharmaceuticals – USA
5:45pm	<b>"Genome Editing Approaches in Lipid Metabolic Disturbances"</b> Kiran Musunuru, MD, PhD, MPH, ML, University of Pennsylvania – USA
6:15pm	Poster Session and Reception Grand Ballroom, Salons F-J

Tuesday, August 13, 2019

7:30-9:00am Breakfast Buffet Grand Ballroom Foyer

## Session 3: Strategies for Targeting Aberrant Lipid Signaling in Cancer

#### Session Chair: John Stafford, MD, PhD

8:30am	<b>"The Role of Lipid Metabolism in Antiangiogenic Drug Resistance"</b> Yihai Cao, PhD, Karolinska Institutet – Sweden
0.00	
9:00am	"Altered Lipid Metabolism in Myc-Transformed Cancers"
	M. Celeste Simon, PhD, University of Pennsylvania – USA
9:30am	"Long Chain Fatty Acid Metabolism is a Critical Epigenetically-Driven Dependency in Glioma
	Stem Cells"
	Jeremy Rich, MD, University of California San Diego – USA
10:00am	Coffee Break
10:30am	"Mutant GNAS Drives Pancreatic Cancer Progression via Lipid Metabolic Reprogramming"
	Nabeel Bardeesy, PhD, Massachusetts General Hospital, Harvard Medical School- USA
11:00am	"Srebps and regulation of cholesterol metabolism in colon cancer"
	Luke Engelking, MD, PhD, UT Southwestern Medical Center-USA
11:15am	"MBOAT7-driven Phosphatidylinositol remodeling promotes the progression of clear cell renal
	cell carcinoma"
	Chase Neumann, PhD Candidate, Cleveland Clinic-USA
	Young Investigator Short Talk
11:30pm	Lunch
	Mountain View Patio
1:15pm	Introduction and Presentation of the Roger Davis Lecturer
	Robert H. Eckel, MD, University of Colorado Denver – USA

1:20pm	"Illuminating fatty acid metabolism: Insights into fatty acid signaling and triacylglycerol	
	metabolism"	
	Roger Davis Lecture: Emilio P Mottillo, PhD, Henry Ford Hospital - USA	
1:50pm Introduction and Presentation of the Journal of Lipid Research (JLR) Junior Inves		
	JLR Associate Editor Russell DeBose-Boyd, PhD, UT Southwestern Medical Center-USA	
	<b>JLR Junior Investigator Award Lecture: "Regulation of PCSK9 and LDLc by Glucagon Signaling"</b> Lale Ozcan, MD, Columbia University – USA	
2:20pm	"ApoC3: at the intersection of intestinal lipid absorption and immune cell metabolism" Alison Kohan, PhD, University of Connecticut – USA	
2:50pm	Afternoon Break	

Wednesday, August 14, 2019

 Breakfast Buffet Grand Ballroom Foyer

## Session 4: Mechanisms Regulating Intracellular Lipid Storage and Mobilization

### Session Chair: Rebecca Haeusler, PhD

8:30am	<b>Franz Simon Poster Award/Introduction – Recipient To be Announced</b> Moshe Levi, MD, President, Kern Lipid Conference, Georgetown University – USA
8:40am	<b>"Epigenetic Regulation of Brown Adipose Tissue Function"</b> Hei Sook Sul, PhD, University of California-Berkeley – USA
9:10am	<b>"Adipose-liver signaling and adaptive thermogenesis"</b> Claudio J. Villanueva, PhD, UCLA - USA
9:40am	" <b>Lipid droplets and lipotoxic cell death in cancer</b> " James A. Olzmann PhD, University of California-Berkeley – USA
10:10am	Coffee Break
10:25am	<b>"Interplay between ChREBP and SREBP Coordinates Glucose and Lipid Metabolism"</b> Guosheng Liang, PhD, UT Southwestern Medical Center – USA
10:55am	<b>"Dynamic Interactions at the Lipid Droplet Surface"</b> Robert Farese Jr., MD, Harvard University – USA
11:25am	<b>"Imaging Lipids, Lipid Dynamics, and Lipid-Protein Interactions "</b> Enrico Gratton, PhD, University of California-Irvine – USA
	"PNPLA3, CGI-58, and inhibition of hepatic triglyceride hydrolysis"
11:55am	Yang Wang, PhD, UT Southwestern Medical Center-USA Young Investigator Short Talk
12:15pm	Lunch Mountain View Patio

Session 5: Microbe-Host Interactions Impacting Lipid Metabolism & Cardiometabolic Disease

### Session Chair: J. Mark Brown, PhD

1:30pm	<b>"Microbiome Nutrition Therapy: Opportunities for Precision Medicine"</b> Tzu-Wen L. Cross, PhD, RD, Purdue University – USA
2:00pm	<b>"Microbe-Driven Tryptophan Metabolism in Cardiometabolic Disease"</b> Kyongbum Lee, PhD, Tufts University – USA
2:30pm	<b>"Microbial Metabolites Regulate Host Lipid Metabolism through NR5A- Hedgehog Signaling"</b> Meng C. Wang, PhD, HHMI, Baylor College of Medicine – USA
3:00pm	Coffee Break
3:15pm	<b>"Regulation of macrophage lipid metabolism by fatty acids"</b> AH (Sander) Kersten, PhD, Wageningen University – The Netherlands
3:45pm	<b>"Intestinal NAPE biosynthesis in the prevention of cardiometabolic disease"</b> Sean Davies, PhD, Vanderbilt University – USA
4:15 pm	<b>Introduction to David L. Williams Lecture and Award</b> Mary Sorci-Thomas, PhD, Medical College of Wisconsin – USA
4:20pm	"Peroxisomal lipid metabolism and the control of energy homeostasis" David L. Williams Lecture: Irfan Lodhi, PhD, Washington University in St. Louis - USA
4:50pm	Afternoon Break
6:30pm-10:00pm	Dinner Reception Grand Ballroom Adjourn