

2024 Kern Lipid Conference

“Lipids and Mitochondria in Metabolic Disease”

Monday, August 12 - Wednesday, August 14, 2024

Viceroy Snowmass - Snowmass, Colorado

Organizers:

Jonathan Brestoff, MD, PhD, Washington University in St. Louis

Nada Abumrad, PhD, Washington University in St. Louis

Gregory Steinberg, PhD, McMaster University

All talks held in Grand Ballroom, Level 1

Monday, August 12, 2024	
<i>Conference Check-In</i>	
7:00-8:00am	Conference Check-In <i>Foyer of the Grand Ballroom Salons 2-4, Level 1</i>
<i>Opening Kern Lecture</i>	
8:05am	Welcome Remarks & Opening Kern Lecturer Introduction Moshe Levi, MD, President, Kern Lipid Conference, Georgetown University
8:15am	Opening Kern Lecture: "How do cells make heat?" Shingo Kajimura, PhD, Beth Israel Deaconess Medical Center/Harvard Medical School & HHMI
<i>Session 1: Lipids and Mitochondrial Metabolism in the Brain</i>	
9am-12:15pm	
	“Lipid metabolism defects in Alzheimer’s and Parkinson’s disease models” Hugo Bellen, DVM, PhD, Baylor College of Medicine
	“Targeting Microglial Lipid and Lipoprotein Metabolism in Neurodegenerative Disease” Kimberley Bruce, PhD, University of Colorado Anschutz Medical Campus
	“Mitochondria, energy constraints, and cellular aging” Martin Picard, PhD, Columbia University
	Morning Break <i>Salon 1 & Ballroom Terrace, Level 1</i>
	“Importance of Hippocampus Lipid Remodeling in Behavior” Nada Abumrad, PhD, Washington University in St. Louis
	<i>Nanolive-sponsored short talk:</i> Title: TBA Mathieu Frechin, PhD, Nanolive - Switzerland
	“Metabolic imaging of brain lipid metabolism during aging and diseases” (short talk) Yajuan Li, PhD, University of California-San Diego
	Introduction and Presentation of the Roger Davis Award Lecture

	Roger Davis Award Lecture: "Desmosterol regulates liver myeloid cell identity controlling immunometabolic functions in MAFLD/MASH" Pablo Fernandez-Tussy, PhD, Yale University
	Lunch <i>Salon 1 & Ballroom Terrace, Level 1</i>
	Afternoon Break
Session 2: Immune Cells and Lipids in Metabolic Disease 4-6pm	
	"Immunometabolic crosstalk between energy and nutrient sensing pathways" Morgan Fullerton, PhD, University of Ottawa
	"Unconventional role of T cells and the skin in controlling systemic lipid metabolism" Taku Kambayashi, MD, PhD, University of Pennsylvania
	TBA
	SHORT TALK TBD
	"Targeting hepatic oxalate overproduction to treat MASH by modulation of fatty acid β-oxidation and monocyte chemotaxis" (short talk) Oren Rom, PhD, LSU Health Shreveport
Poster Session & Reception 6:15-8:15 pm Nest Patio & Deck, Level 3 (weather backup is Summit Meeting Rooms 1&2, Level 3)	
Tuesday, August 13, 2024	
Session 3: Mitochondria Transfer in Metabolic Disease 8am-12pm	
	"Regulated Extracellular Vesicle Secretion by Adipocytes" David Bernlohr, PhD, University of Minnesota
	"Adipocyte extracellular vesicles in metabolic regulation" Clair Crewe, PhD, Washington University in St. Louis
	"Innate immune cell regulation of brown fat thermogenesis" Jonathan Brestoff, MD, PhD, Washington University in St. Louis
	Morning Break <i>Salon 1 & Ballroom Terrace, Level 1</i>
	"Secretion of Mitochondria in Extracellular Vesicles in Response to Lysosomal Dysfunction" Åsa Gustafsson, PhD, University of California, San Diego
	"Macrophages, keepers of mitochondrial health" Andres Hidalgo, PhD, Yale
	Introduction and Presentation of the David L. Williams Lecture & Award
	David L. Williams Award Lecture & Award: "Regulation of postprandial lipid handling and fuel selection with long-acting glucose-dependent insulinotropic peptide" Jacqueline Beaudry, PhD, University of Toronto
	SHORT TALK TBD
	"A Role for Macrophages in Tissue Mitochondrial Homeostasis Via Heterophagy" (short talk) Jose Angel Nicolas Avila, PhD, University of California - San Francisco
12pm	Lunch

	<i>Salon 1 & Ballroom Terrace, Level 1</i>
1pm	Afternoon Break
Exhibitor Hall Open 1-4pm Grand Ballroom Foyer List of exhibitors TBA	
Small Group Discussions 1-3pm	
	<u><i>Academic Career Success:</i></u> This table will discuss some of the logistics of succeeding in a scientific career. Common questions about how to sequence grants and papers, how to find the right study section, how to navigate the NIH, and other topics will be open for discussion.
	<u><i>Academic-Industry Partnership:</i></u> We will have a discussion group led by 1-2 industry professionals that focuses on how to navigate collaborations in academia with industry partners.
	<u><i>Diversity, Equity & Inclusion (DEI) in Academic Labs:</i></u> We will have a table that focuses on how to build a lab culture that embraces DEI principles and that maximizes the successes and opportunities for all lab members.
	<u><i>The Faculty Job Search:</i></u> For those who are starting to search for faculty jobs, we will have one table for advice on how to prepare materials for job applications and how to navigate the job search process.
Wednesday, August 14, 2024	
Session 4: Lipids and Mitochondrial Metabolism in Metabolic Disease 8:30-11:45am	
	Presentation of the Franz Simon Poster Award – Recipient To be Announced Moshe Levi, MD, President, Kern Lipid Conference, Georgetown University
	"Adapting to Metabolic Stress" Alan Saltiel, PhD, University of California, San Diego
	Title: TBA Moshe Levi, MD, President, Kern Lipid Conference, Georgetown University
	"Skeletal muscle metabolic (re)programming in obesity and weight loss" Mary-Ellen Harper, PhD, University of Ottawa
	Morning Break <i>Salon 1 & Ballroom Terrace, Level 1</i>
	"Mitochondria Lipid Droplet Interaction" Orlan Shirihi, MD, PhD, UCLA
	"Peroxisomal Regulation of Adipose Tissue Thermogenesis" (short talk) Irfan Lodhi, PhD, Washington University in St. Louis
	"Brown adipose tissue CoQ deficiency activates the ISR and triggers an FGF21- dependent mitohormetic response" (short talk) Amanda Gunawan, PhD Candidate, University of California, Berkeley
	Lunch <i>Salon 1 & Ballroom Terrace, Level 1</i>

Session 5: Lipids in Cancer

1-2:45pm

	"Modulation of fatty acid metabolism enhances tumor immunogenicity" Gregory Steinberg, PhD, McMaster University
	"Metabolic co-option of immune cells in cancer" Sue Kaech, PhD, The Salk Institute for Biological Studies
	"Gene Expression and Fatty Acid Profiling of Metabolically-driven Human Hepatocellular Carcinoma" (short talk) Garrett Anspach, MD, PhD Student, University of Kentucky
	"Mitochondrial Stress Signaling in Aging, Disease and Immunity" Gerald Shadel, PhD, The Salk Institute for Biological Studies

Closing Kern Lecture

2:45-2:55pm	Closing Remarks & Closing Kern Lecturer Introduction Moshe Levi, MD, President, Kern Lipid Conference, Georgetown University
2:55-3:40pm	Closing Kern Lecture: "At the crossroads of lipids and mitochondria: acetyl-CoA in health and disease" Kathryn Wellen, PhD, University of Pennsylvania
3:40-6pm	Afternoon Break

Final Night Dinner & Dancing

6-8pm	Cocktail Reception & Dinner <i>Salon 1 & Ballroom Terrace, Level 1</i>
8-10pm	Music & Dancing <i>Salon 1 & Ballroom Terrace, Level 1</i>