

2023 Kern Lipid Conference

“Lipids in Aging, Lifespan and Aging-associated Diseases”

Monday, August 14, 2023 – Wednesday, August 16, 2023

Manor Vail Lodge, Vail, Colorado

Organizers:

Zoltan Arany, MD, PhD, University of Pennsylvania

Ebru Erbay, MD, PhD, Altos Labs

Morgan Levine, PhD, Altos Labs

Monday, August 14, 2023	
7-10am	Breakfast <i>Mt Powell</i> - Guest breakfast served daily from 7am-10am
Conference Check-In	
7:15-8:15am	Conference Check-In <i>Check-in is in the boardroom, across from the Piney Mountain Meeting Room.</i>
Opening Kern Lecturer Location: Piney Mountain Meeting Room	
8:15am	Welcome Remarks & Opening Kern Lecturer Introduction Moshe Levi, MD, President, Kern Lipid Conference, Georgetown University – USA
8:25am	Opening Kern Lecture: "Lipid homeostasis and aging" Anne Brunet, PhD, Stanford University - USA
Session 1: Droplets, Lipophagy and Aging Session Chair: Morgan Levine, PhD Session Co-chairs: Katharina Papsdorf, PhD, Stanford University & Debajyoti Das, PhD, University of California Los Angeles Location: Piney Mountain Meeting Room	
9:15am	“Extracellular mitochondria in inter-organ signaling” Clair Crewe, PhD, Washington University School of Medicine - USA
9:55am	“Selective autophagy regulates fate of lipid droplets” Susmita Kaushik, PhD, Albert Einstein College of Medicine - USA
10:35am	Morning Break
10:55am	<i>Cytek Biosciences-sponsored talk:</i> “Cell-to-cell transfer of mitochondria in adipose tissues in obesity and aging” Jonathan R. Brestoff, MD, PhD, Washington University School of Medicine – USA
11:15am	“The Phase of Fat: The Biology of Cellular Lipid Storage” Tobias Walther, PhD, Sloan Kettering Institute - USA
11:55am	<i>Nanolive-sponsored talk:</i> “Label-free visualization and quantification of lipid droplet dynamics with Nanolive imaging” Mathieu Frechin, PhD, Nanolive - Switzerland
12:10pm	Lunch

	<i>Mount Powell</i>
1:10-3:35pm	Afternoon Break
Session 2: Membrane Lipids in Aging Session Chair: Moshe Levi, MD Session Co-chairs: Christy Gliniak, PhD, University of Texas Southwestern Medical Center & Roxan Stephenson, PhD, National Institutes of Health Location: Piney Mountain Meeting Room	
3:35pm	“Chemical Biology and Lipidomics Characterization of Functional Lipids” Alan Saghatelian, PhD, Salk Institute - USA
4:15pm	“Role of aging in shaping cell structure and function” Dorota Skowronska-Krawczyk, PhD, University of California-Irvine - USA
4:55pm	“Apolipoproteins in Aging and Neurodegeneration” Zachary Levine, PhD, Altos Labs - USA
5:35pm	“Obesity driven NAFLD-NASH in liver regeneration and aging” Carlos Fernandez-Hernando, PhD, Yale University - USA
6:15-8:00pm	Poster Session and Reception cosponsored by LUCA Science Inc. & Lipotype Inc. <i>Notch and Mt Powell</i>
Tuesday, August 15, 2023	
7-10am	Breakfast <i>Mt Powell</i>
Session 3: Lipidomics, Genomics, Epigenomics in Aging Session Chair: Zoltan Arany, MD, PhD Session Co-chairs: Alessandra Ferrari, PhD, UCLA & Aleeptha Guha Ray, PhD, University of Chicago Location: Piney Mountain Meeting Room	
8am	“The interplay between circadian clocks and metabolism” Gad Asher, MD, PhD, Weizmann Institute of Science - Israel
8:40am	“Interpreting trajectories in feature space to extract biological time: Exploring lipid clocks of ageing” Jan Gruber, DPhil, Yale-NUS - Singapore
9:20am	“DNA methylation Biomarkers of Aging” Morgan Levine, PhD, Altos Labs - USA
10am	Morning Break
10:30am	“Role of Ribosome Heterogeneity in Regulating Aging” Eric Greer, PhD, Washington University in St. Louis - USA
11:10am	“Connecting the lipid universe to aging through big data and machine learning” Max Unfried, PhD Candidate, National University of Singapore - Singapore
11:50am	<i>Columbus Instruments-sponsored talk:</i> “Clambake: decoding metabolic cage data to derive components of energy expenditure” Jonathan R. Brestoff, MD, PhD, Washington University School of Medicine – USA
12pm	Introduction and Presentation of the Roger Davis Award Lecture sponsored by Lipotype Inc. Robert H. Eckel, MD, University of Colorado Anschutz Medical Campus – USA
12:05pm	Roger Davis Award Lecture sponsored by Lipotype Inc.: “Aberrant Lipid Metabolism Pinpoints Rational Parkinson’s Disease Therapeutic Targets and Strategies” Saranna Fanning, PhD, Harvard Medical School & Brigham & Women's Hospital - USA

12:30pm	Lunch <i>Mount Powell</i>
1:30pm	Afternoon Break
Wednesday, August 16, 2023	
7-10am	Breakfast <i>Mt Powell</i>
<p>Session 4: Lipid Metabolism and Lipid Signaling in Aging Session Chairs: Ebru Erbay, MD, PhD & Robert H. Eckel, MD Session Co-chairs: Rachel Hohe, PhD Candidate, Cleveland Clinic/Case Western Reserve University & Angelina Holcom, PhD, University of Southern California/Buck Institute for Research on Aging & John Moley, BA, Washington University School of Medicine in St. Louis Location: Piney Mountain Meeting Room</p>	
8:30am	Presentation of the Franz Simon Poster Award sponsored by Cayman Chemical – Recipient To be Announced Moshe Levi, MD, President, Kern Lipid Conference, Georgetown University – USA
8:40am	“Lysosomal Lipid Signaling in Longevity Regulation” Meng Wang, PhD, Howard Hughes Medical Institute-Janelia Research Campus - USA
9:20am	"The role of endoplasmic reticulum architecture in metabolic homeostasis and disease" Ana Paula Arruda, PhD, University of California-Berkeley - USA
10:00am	"Turning the Oxygen and Vitamin Dials" Isha Jain, PhD, University of California-San Francisco - USA
10:40am	Morning Break
11:00am	"Correcting Endolysosomal Dysfunction and Autophagy in Alzheimer's disease - The Role of ApoE" Joachim Herz, MD, UTSW - USA
11:40am	Introduction and Presentation of the David L. Williams Lecture & Award sponsored by AMSBIO Roger Newton, PhD, Espervita Therapeutics - USA
11:45am	David L. Williams Lecture & Award sponsored by AMSBIO: "Visualizing lipid metabolic activities in brain during aging processes" Lingyan Shi, PhD, University of California-San Diego – USA
12:15pm	Lunch <i>Mount Powell</i>
1:25pm	“Oligodendrocyte lipid dysregulation in Alzheimer’s disease” Leyla Akay, PhD Candidate, MIT - USA
1:45pm	<i>GemPharmatech-sponsored talk:</i> “Building Real-World Models and Enhanced Preclinical Service Capabilities” Zhiying Li, PhD, GemPharmatech LLC - USA
2:10pm	“Modulating metabolic pathways – impact on disease states” Zhidan Wu, PhD, Pfizer - USA
<p>Closing Kern Lecturer Location: Piney Mountain Meeting Room</p>	
2:50pm	Closing Remarks & Closing Kern Lecturer Introduction Moshe Levi, MD, President, Kern Lipid Conference, Georgetown University – USA

3:00pm	Closing Kern Lecture: “Imaging Interacting Organelles to Understand Metabolic Homeostasis” Jennifer Lippincott-Schwartz, PhD, Howard Hughes Medical Institute-Janelia Research Campus - USA
3:50pm	Afternoon Break
<i>Final Night Dinner & Dancing</i>	
6-8pm	Cocktail Reception & Dinner - Golden Peak Gardens (<i>Cocktails and Dinner will be outside, weather permitting. Colorado evenings tend to be cool after sunset, please bring a jacket/sweater</i>)
8-10pm	Music & Dancing – Ridge & River