



FASEB

Federation of American Societies
for Experimental Biology

Science Research Conferences

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GLUCOSE TRANSPORT: GATEWAY FOR METABOLIC SYSTEMS BIOLOGY

July 16-21, 2017

Snowmass Village, Colorado

Organizers:

Ann Louise Olson

University of Oklahoma Health Sciences Center
Oklahoma City, OK

Scott Summers

University of Utah
Salt Lake City, UT

Sunday, July 16, 2017

Time	Title/Topic Event	
4:00 p.m. – 9:00 p.m.	Conference Registration	
6:00 p.m. – 7:00 p.m.	Welcome Reception	
7:00 p.m. – 8:00 p.m.	DINNER	
8:00 p.m. - 8:30 p.m.	"Meet the students"	2-minute statement of hypothesis from each trainee.
8:30 p.m. – 9:30 p.m.	Keynote Address: Christopher Newgard <i>Metabolomic profiles during metabolic disease: Causes and consequences</i>	Duke University School of Medicine

Monday, July 17, 2017

Time	Title/Topic Event	
7:30 a.m. – 1:00 p.m., 4:00 p.m. – 6:00 p.m.	Conference Registration	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
9:00 a.m. – 12:15 p.m.	Tools of the Trade: Structure and Cell Biology of GLUTs	Chair: Brian Debosch, Washington University
9:00 a.m. - 9:15 a.m.	<i>Welcome from FASEB</i>	
9:15 a.m. - 9:45 a.m.	<i>Sequence determinants for GLUT structure and transport functions</i>	Anthony Carruthers, University of Massachusetts School of Medicine

9:45 a.m. - 10:15 a.m.	<i>Formation of the insulin-responsive GLUT4 compartment</i>	Kostantin Kandror, Boston University School of Medicine
10:15 a.m. - 10:30 a.m.	<i>Identification of heterotypic endosomal fusion as an initial trigger for insulin-induced GLUT4 translocation in skeletal muscle revealed by comprehensive imaging analyses of GLUT4 behavior</i>	Hiroyasu Hatakeyama, Tohoku University
10:30 a.m. – 11:00 a.m.	FASEB Sponsored Coffee Break	
11:00 a.m. - 11:30 a.m.	<i>Novel RAB10 effectors that regulate Glut4 vesicle biogenesis</i>	Timothy McGraw, Cornell/Weill College of Medicine
11: 30 a.m. - 12:00 p.m.	<i>CH22 and formation of novel intracellular GLUT4 compartments</i>	Frances Brodsky, University College, London and University of California, San Francisco
12:00 p.m. - 12:15 p.m.	<i>Regulation of GLUT4 endocytosis and adipogenesis by ankyrin-B</i>	Damaris Lorenzo, University of North Carolina at Chapel Hill

12:15 p.m. – 1:15 p.m.	LUNCH and Meet the Experts Session	
1:15 p.m. to 4:00 pm	Free time	
4:00 p.m. – 5:00 p.m.	Career Development workshop "You can Have it All? Balancing work and family"	Silvia Corvera and Michael Czech, University of Massachusetts Medical Center
4:00 p.m. – 6:00 p.m.	Poster Session 1	
6:00 p.m. – 7:00 p.m.	DINNER	
7:00 p.m. – 9:45 p.m.	Neuroendocrine regulation of nutrient homeostasis and food intake	Chair: Will Holland, UT Southwestern Medical Center
7:00 p.m. - 7:30 p.m.	<i>Glucose sensing and regulation of feeding behavior</i>	Bernard Thorens, University of Lausanne, Switzerland
7:30 p.m. - 8:00 p.m.	<i>FGF21 regulation of carbohydrate metabolism</i>	Matthew Potthoff, University of Iowa
8:00 p.m. - 8:15 p.m.	<i>Ceramide Accumulation in SF1 Neurons Impairs Glucose Homeostasis by Glucagon Sensitization</i>	Joshua Johnson, University of Texas Southwestern Medical Center
8:15 p.m. - 8:30 p.m.	Break	
8:30 p.m. - 9:00 p.m.	<i>Inflammation at the crossroads of obesity and energy expenditure</i>	Alan Saltiel, University of California, San Diego
9:00 p.m. - 9:30 p.m.	<i>GRP17 function in Satiety control and glucose</i>	Hongxia Ren, Columbia University College of Medicine
9:30 p.m. - 9:45	<i>Investigating the Role of a GLUT1 Protein Kinase C Phosphorylation Motif Using CRISPR Genome Editing</i>	Eunice Lee, University of Texas Southwestern Medical Center

Tuesday, July 18, 2017

Time	Title/Topic Event	
7:30 a.m. – 1:00 p.m., 4:00 p.m. – 6:00 p.m.	Conference Registration	

7:30 a.m. – 9:00 a.m.	BREAKFAST	
9:00 a.m. - 12:00 p.m.	<i>Regulation of intermediary metabolism and nutrient homeostasis</i>	Chair, Karen Ryan, University of California, Davis
9:00 a.m. - 9:30 a.m.	<i>Regulation of mitochondrial metabolism in cancer</i>	Ralph Deberardinis, UT Southwestern Medical Center
9:30 a.m. - 10 a.m.	<i>Nutrient stress and mitochondrial energetics in the heart</i>	E. Dale Abel, University of Iowa College of Medicine
10:00 a.m. - 10:15 a.m.	<i>Substrate oversupply induces mitochondrial dysfunction in cultured myotubes: Real time measurement of ROS by novel reactive oxygen species sensitive GFP mutants</i>	Joe Brozinick, Eli Lilly and Co.
10:15 a.m. – 10:45 a.m.	FASEB Sponsored Coffee Break and *Group Photo	
10:45 a.m. – 11:15 a.m.	<i>Regulation of mitochondrial solute transport</i>	Jared Rutter, University of Utah
11:15 a.m. - 11:45 a.m.	<i>Signaling pathways that control lipid handling</i>	David Guertin, University of Massachusetts School of Medicine
11:45 a.m. - 12:15 p.m.	<i>New regulation of fat metabolism by PHD3</i>	Marcia Haigis, Harvard University
12:15 p.m. – 1:15 p.m.	LUNCH and Meet the Experts Session	
1:15 p.m.-4:00 p.m.	Free time	
4:00 p.m. -5:30 p.m.	Career Development Workshop: "Deciding on the right career track" "Building a powerful CV"	Tony Carruthers, University of Massachusetts School of Medicine Jeffrey Pessin, Albert Einstein College of Medicine
4:00 p.m. – 6:00 p.m.	Poster session 2	
6:00 p.m. – 7:00 p.m.	DINNER	
7:00 p.m. – 9:45 p.m.	Regulation of adipose differentiation and development	Chair: Susanna Keller, University of Virginia
7:00 p.m. - 7:30 p.m.	<i>Regulation of protein synthesis in adipocytes</i>	Libin Liu, Boston University School of Medicine
7:30 p.m. - 8:00 p.m.	<i>Transcriptional control of adipogenesis</i>	Evan Rosen, Harvard University
8:00 p.m. - 8:15 p.m.	<i>Gene Environment analysis of Insulin Resistance</i>	Jacqueline Stoeckli, University of Sydney
8:15 p.m. - 8:30 p.m.	Break	
8:30 p.m. - 9:00 p.m.	<i>Beige/brite human adipocytes and systemic metabolism</i>	Silvia Corvera, University of Massachusetts School of Medicine
9:00 p.m. - 9:30 p.m.	<i>Oxidative stress in the adipocyte</i>	Philipp Scherer, UT Southwestern Medical Center
9:30 p.m. - 9:45 p.m.	<i>Increased Intestinal Glucose Absorption is an obesity-associated Phenotype preserved in Human Stem Cell-derived Enteroids</i>	Nesrin M. Hasan, Johns Hopkins University School of Medicine

Wednesday, July 19, 2017

Time a.m. – Time p.m.	Title/Topic Event	
7:30 a.m. – 1:00 p.m., 4:00 p.m. – 6:00 p.m.	Conference Registration	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
9:00 a.m. – 12:00 p.m.	<i>Lipid metabolism and lipotoxicity</i>	Chair: Joe Brozinick, Eli Lilly and Company
9:00 a.m. - 9:30 a.m.	<i>Crosstalk between fat metabolism and neuronal signaling</i>	Michael Czech, University of Massachusetts School of Medicine
9:30 a.m. - 10:00 a.m.	<i>Peroxisomal Regulation of Adipose Tissue Thermogenesis</i>	Irfan Lodhi, Washington University
10:00 a.m. - 10:15 a.m.	<i>Liver-derived acylcarnitines fuel adaptive thermogenesis</i>	Claudio Villanueva, University of Utah School of Medicine
10:15 a.m. – 10:45 a.m.	<i>FASEB Sponsored Coffee Break</i>	
10:45 a.m. - 11:15 a.m.	<i>Sphingolipid-Mediated Changes in Glucagon Secretion Critically Link Insulin Resistance to Hyperglycemia</i>	Will Holland, University of Texas Southwestern Medical Center
11:15 a.m. - 11:45 a.m.	<i>mTOR signaling and insulin signaling in the liver</i>	Morris White, Harvard University
11:45 a.m. - 12:00 p.m.	<i>Ablation of Dihydroceramide Desaturase in Liver or Adipose Tissue Improves Systemic Glucose Homeostasis</i>	Bhagirath Chaurasia, University of Utah
12:00 p.m. – 12:30 p.m.	Business Meeting	Scott Summers
12:30 p.m. – 2:00 p.m.	LUNCH and Meet the Experts Session	
1:00 p.m. – 4:00 p.m.	Free time	
4:00 p.m. – 6:00 p.m.	<i>Poster Session 3 with "Open-Mike" session for presentation of 3 slides selected from abstracts</i>	Chair: Ann Louise Olson and Scott Summers
6:00 p.m. – 7:00 p.m.	DINNER	
7:00 p.m. – 9:45 p.m.	<i>Genetic, epigenetic and environmental mechanisms of insulin resistance</i>	Chair: Maureen Charron, Albert Einstein College of Medicine
7:00 p.m. - 7:30 p.m.	<i>Epigenetic markers of insulin resistance</i>	Juleen Zierath, Karolinska Institute
7:30 p.m. - 8:00 p.m.	<i>Epigenetic regulation of obesity in offspring of obese males</i>	Kelle Moley, Washington University
8:00 p.m. - 8:15 p.m.	<i>Sexually dimorphic methylation of CD3+ T-cell DNA in offspring of overweight and obese mothers</i>	Maureen Charron, Albert Einstein College of Medicine
8:15 p.m. - 8:30 p.m.	Break	
8:30 p.m. - 9:00 p.m.	<i>Circadian regulation of metabolism</i>	Selma Masri, University of California, Irvine
9:00 p.m. - 9:30 p.m.	<i>Contribution of Extracellular Matrix Remodeling to Insulin Resistance</i>	David Wasserman, Vanderbilt University
9:30 p.m. - 9:45	<i>Metabolic Reprogramming Maintains Skin Integrity in the Absence of Glucose Transport and Identifies a Therapeutic Vulnerability in Psoriasiform Hyperplasia</i>	Richard Wang, University of Texas Southwestern Medical Center

Thursday, July 20, 2017

Time a.m. – Time p.m.	Title/Topic Event	
7:30 a.m. – 1:00 p.m., 4:00 p.m. – 6:00 p.m.	Conference Registration	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
9:00 a.m. – 12:00 p.m.	<i>Mechanisms and markers of insulin resistance</i>	Chair: Sam Cushman, Diabetes Branch, NIH
9:00 a.m. - 9:30 a.m.	<i>Regulation of SREBP gene regulation in insulin resistance liver</i>	Jeffrey Pessin, Albert Einstein College of Medicine
9:30 a.m. - 10:00 a.m.	<i>The contribution of altered insulin signaling to impaired glucose uptake</i>	David James, University of Sydney
10:00 a.m. - 10:15 a.m.	<i>mTORC2 Phosphorylation of Akt is Required for Insulin Regulation of Glut1-Mediated but not Glut4-Mediated Glucose Uptake</i>	Nazish Abdullah, Weill Cornell Medicine
10:15 a.m. – 10:45 a.m.	FASEB Sponsored Coffee Break	
10:45 a.m. - 11:15 a.m.	<i>Tools for interrogating lipid profiles in models of insulin resistance</i>	Alan Saghetalian, Salk Institute
11:15 a.m. - 11:45 a.m.	<i>Lipid ligands that regulate insulin sensitivity</i>	Barbara Kahn, Harvard University
11:45 a.m. - 12:00 p.m.	<i>Nicotinamide Riboside Supplementation Enhances Muscle Metabolism in Diet-induced Obese Mice</i>	Ashley Williams, Duke University
12:00 p.m. – 1:00 p.m.	LUNCH and Meet the Experts Session	
1:00 p.m. – 6:00 p.m.	<i>Group Activity (optional)</i>	White water rafting excursion
6:00 p.m. – 7:00 p.m.	DINNER	
7:00 p.m. – 9:45 p.m.	<i>Muscle performance and metabolism</i>	Chair: Kristin Stanford, The Ohio State University
7:00 p.m. - 7:30 p.m.	<i>Role of ROS in muscle function</i>	Darrel Neufer, East Carolina University
7:30 p.m. - 8:00 p.m.	<i>Regulation of muscle performance and metabolism by nuclear receptors</i>	Debbie Muoio, Duke University School of Medicine
8:00 p.m. - 8:15 p.m.	<i>Regulation of skeletal muscle metabolism by salt inducible kinase 1</i>	Rebecca Berdeaux, McGovern Medical School, UTHSC at Houston
8:15 p.m. - 8:30 p.m.	<i>Break</i>	
8:30 p.m. - 9:00 p.m.	<i>GLUTs and Skeletal Muscle Hypertrophy</i>	Carol Witczak, East Carolina University
9:00 p.m. - 9:30 p.m.	<i>Mechanisms of insulin signaling and glucose transport in muscle cells</i>	Amira Klip, University of Toronto
9:30 p.m. - 9:45	<i>Novel exercise-induced adaptations to brown adipose tissue</i>	Kristin Stanford, The Ohio State University

Friday, July 21, 2017

Time a.m. – Time p.m.	Title/Topic Event	
7:30 a.m. – 9:00 a.m.	Conference Registration	
7:30 a.m. – 9:00 a.m.	BREAKFAST	
7:30 a.m. – 9:00 a.m.	Conference Registration	

9:00 a.m.	DEPARTURES	
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END OF CONFERENCE

For additional information contact:
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