Kern Lipid Conference
2012 Program Agenda
Systems Biology, Lipidomics and Cardiometabolic Diseases
July 12 – 15, 2012, Vail, CO

All scientific sessions will be held in the Vail Cascade Conference Center, 2nd Floor, Centennial Ballroom D

Conference Co-Chairs:
Jake Lusis, Ph.D., Roger Newton, Ph.D., Margrit Schwarz, Ph.D.

**Thursday July 12, 2012, 1:30 pm - 7:30 pm**

12:45-1:30 PM Conference Check-In
*Conference Center, 2nd Floor, Centennial Foyer*

**Session I: Global Analyses of Lipids**
*Session Chairs: Dawn Brasaemle, Ph.D. and Joachim Herz, M.D.*

1:30 PM **Introduction and Comments**
Robert H. Eckel, M.D., President, Kern Lipid Conference
University of Colorado Denver, Anschutz Medical Campus, Aurora, Colorado

1:35 PM **“Metabolite profiles and the risk of diabetes”**
Robert E. Gerszten, M.D., Massachusetts General Hospital, Boston, MA

2:25 PM **“Metabolomics studies and discovery of pathways in atherosclerosis”**
Stanley Hazen, M.D., Ph.D. Cleveland Clinic, Cleveland, OH

3:15 PM **“Metabolic markers of insulin resistance predict progression of IGT and T2D”**
Walter Gall, Ph.D., Metabolon, Inc., Durham, NC

4:05 PM **Break**
*Conference Center, 2nd Floor, Centennial Ballroom, Rooms A-C*

4:20 PM **“Systems biology of the macrophage lipidome”**
Shankar Subramaniam, Ph.D., University of California San Diego, San Diego, CA

5:10 pm **“Proteome Dynamics: Measuring the Kinetics of Complex Networks in Cardiometabolic Disease”**
Marc Hellerstein, M.D., Ph.D., University of California, Berkeley, CA

6:00 PM **Roger Davis Lecture**
Amnon Schlegel, M.D., Ph.D., University of Utah, Salt Lake City, UT

6:40 PM **Poster Session & Reception**
Rocky Mountain Garden, north tent

7:30 PM Session Adjourns
All scientific sessions will be held in the Vail Cascade Conference Center, 2nd Floor, Centennial Ballroom D

Friday July 13, 2012, 7:30 AM - 10:00 PM

### Session II: Systems biology and genetics for analysis of complex traits
*Session Chairs: Mary Sorei-Thomas, Ph.D. and Roger Newton, Ph.D.*

**7:30 AM**  
**Breakfast Buffet**  
*Conference Center, 2nd Floor, Centennial Ballroom, Rooms A-C*

**8:25 AM**  
**Introduction of the Journal of Lipid Research Lectureship**  
Ira J. Goldberg, M.D., Columbia University, New York, New York

**8:30 am**  
Robert Hegele, M.D., Robarts Research Institute, University of Western Ontario, Ontario, Canada

**9:20 AM**  
“Systems genetic dissection of cardiac remodeling”  
Stuart Cook, Ph.D., Imperial College, London, England

**10:10 AM**  
**Break**  
*Conference Center, 2nd Floor, Centennial Ballroom, Rooms A-C*

**10:30 AM**  
“microRNAs in glucose and lipid metabolism”  
Markus Stoffel, M.D., ETH Zurich, Zurich, Switzerland

**11:25 AM**  
“Fractal genetics and systems biology of diet-induced metabolic disease”  
Joseph H. Nadeau, Ph.D., Institute for Systems Biology, Seattle, WA

**12:15 PM**  
**Lunch & Small Group Discussions**  
*Rocky Mountain Garden, Tents*

**1:30 PM**  
**Poster Session**  
*Rocky Mountain Garden, north tent*

**3:30 PM**  
Afternoon Session Adjourns

### Session II (Evening):

**6:00 PM**  
**Introduction and Presentation of the Kern Lectureship Award**  
Robert H. Eckel, M.D., University of Colorado Denver Anschutz Medical Campus, Aurora, Colorado

**Kern Lecture: “Systems Medicine, Emerging Technologies, and Proactive P4 Medicine (Predictive, Preventive, Personalized, and Participatory)”**  
Leroy Hood, M.D, Ph.D. Institute for Systems Biology, Seattle, WA

**7:00 PM**  
**Reception & Dinner - Creekside Room & Deck, Vail Cascade Main Lodge**

**10:00 PM**  
Evening Session Adjourns
Session III: Epigenetics, complex interactions and lipids
Session Chairs: Sudha Biddinger, M.D., Ph.D. and Russell DeBose-Boyd, Ph.D.

7:30 AM Breakfast Buffet
Conference Center, 2nd Floor, Centennial Ballroom, Rooms A-C

8:30 AM “Using single-cell imaging and Selective Reaction Monitoring (SRM) mass spectrometry to unmask the feedback loops controlling adipogenesis”
Mary Teruel, Ph.D., Stanford University, Stanford, CA

9:20 AM “Genomic variation from the ground up: mechanisms underlying macrophage-specific transcriptional responses to metabolic and inflammatory signaling”
Sven W. Heinz, Ph.D., University of California San Diego, San Diego, CA

10:10 AM Break
Conference Center, 2nd Floor, Centennial Ballroom, Rooms A-C

10:30 AM “Nutrigenomics, Signal Transduction and Lipid Metabolism”
Jeffrey Bland, Ph.D., Metagenics Inc., San Clemente, CA

11:25 AM “The X Files: The role of sex chromosomes in metabolic disease”
Karen Reue, Ph.D. University of California Los Angeles, Los Angeles, CA

12:15 PM Lunch & Small Group Discussions
Rocky Mountain Garden, Tents

2:00 PM Poster Session
Rocky Mountain Garden, north tent

Session IV Genetic dissection of cardiometabolic disease
Session Chair: Jake Lusis, Ph.D.

4:00 PM “Common, rare, and regulatory variants associated with lipids and metabolic traits”
Karen Mohlke, Ph.D., University of North Carolina School of Medicine, Chapel Hill, NC

4:50 PM “The Joy of Genes: Genetic dissection of type 2 diabetes”
Alan D. Attie, Ph.D., Univ of Wisconsin, Madison, WI

5:40 PM Introduction and Presentation of the David L. Williams Lectureship Award
Mary Sorci-Thomas, Ph.D., Wake Forest Baptist Medical Center, Winston-Salem, NC

5:50 PM David L Williams Lecture
J. Mark Brown, Ph.D., Wake Forest University, School of Medicine

6:30PM Session Adjourns
Sunday July 15, 2012, 7:00 AM - 12:30 PM

**Session V: Pharmacogenomics and metabolic/cardiovascular diseases**

*Session Chairs: Margrit Schwarz, Ph.D. and Bob Eckel, M.D.*

7:00 AM

**Breakfast Buffet**

*Conference Center, 2nd Floor, Centennial Ballroom, Rooms A-C*

8:15 AM

“Alternative Splicing in Regulation of Cholesterol Homeostasis”

Marisa Wong Medina, Ph.D., Children’s Hospital Oakland Research Institute

8:45 AM

“Predicting Diabetes: The utility of lipid metabolites and protein markers in monitoring the progression to disease”

Steven Watkins, Ph.D., Tethys Biosciences, Emeryville, CA

9:15 AM

“Lipidomics in cardiovascular research and drug development”

Reijo Laaksonen, M.D., Ph.D., Zora Biosciences, Espoo, Finland

9:45 AM

“Hypercholesterolemia-induced oxidant stress accelerates hematopoietic stem cell aging and impairs immnosurveillance against colorectal neoplasia in mice”

Louis M. Messina, M.D., University of Massachusetts Medical School, Worcester, MA

10:30 AM

**Break**

*Conference Center, 2nd Floor, Centennial Ballroom, Rooms A-C*

10:45 AM

“Organizing Big Biological Data Using Predictive Network Modeling Approaches”

Eric Schadt, Ph.D., Institute for Genomics and Multiscale Biology, Mount Sinai Medical Center, New York, NY

11:30 AM

“ApoAI as a novel modulator of glucose homeostasis and mitochondrial function”

Susanna Hofmann, M.D., Helmholtz Centre Munich, Neuherberg, Germany

12:15 PM

Closing Remarks

12:30 PM

Conference Adjourns