Immunological Aspects of Metabolic Syndrome
August 12-17, 2018
Base Village Conference Center, Snowmass, CO

Co-Organizers

Suneil Koliwad, MD, PhD
UCSF

Julie Jameson, PhD
CSU San Marcos

Dongsheng Cai, MD, PhD
Albert Einstein College of Medicine

Mark Febbraio, PhD
Garvan Institute of Medical Research
Program Agenda

SUNDAY August 12

4:00-9:00 PM
Conference Registration

5:00-6:00 PM
FASEB SRC Welcome Reception

6:00-7:00 PM
Dinner

7:00-8:00PM
Keynote Address: Regulation of organismal metabolism by T cells
Diane Mathis, PhD
Harvard Medical School, Boston, MA

MONDAY August 13

8:30-11:30 AM
Session 1: Nutritional aspects of immunity and inflammation
Chair: Barbara Kahn, MD
Beth Israel Deaconess Medical Center, Boston, MA

Speaker 1: Joel Schilling, MD, PhD
Washington University, St. Louis, MO
Lysosomal biology and cardiac function

Speaker 2: Barbara Kahn, MD
Beth Israel Deaconess Medical Center, Boston, MA
Modified fatty acids and metabolic regulation

Speaker 3: Satchidanada Panda, PhD
Salk Institute, La Jolla, CA
Time restricted feeding and manipulation of the microbiome
Speaker 4: Wally Wang, PhD  
UC Berkeley, Berkeley, CA  
*Nutrition, lipolysis, and metabolic control across all organ types*

+Two short talks chosen from abstracts

11:30-12:15 PM 5 minute ePoster presentations Part 1

12:30-1:30 PM Lunch  
1:30-4:00 PM Free time

**4:00-5:50PM**  
**Session 2: Cellular Immunometabolism**  
Chair: Mark Febbraio, PhD  
Garvan Institute of Medical Research, Sydney, Australia

**Speaker 1:** Mark Febbraio, PhD  
Garvan Institute of Medical Research, Sydney, Australia  
*Macrophage function in high-fat diet and insulin resistance*

**Speaker 2:** Andrew Murphy, PhD  
Baker Heart and Disease Institute, Melbourne, Australia  
*A high salt diet accelerates atherosclerosis by modulating haematopoiesis*

**Speaker 3:** Janelle Ayres, PhD  
Salk Institute, La Jolla, CA  
*Inflammasome activation in infection*

**Speaker 4:** Vishwa Deep Dixit, DVM, PhD  
Yale, New Haven, CT  
*Integrative cell signaling and metabolism*

**Dinner 6-7pm**  
7:00-9:00 PM Poster session 1
TUESDAY August 14

At breakfast: Meet the expert mentoring session #1, “Taking the Path from Trainee to Faculty: How to Navigate Successfully” This session will feature the Assistant Professors that are presenting and attending the meeting. Post-doctoral fellows and students that are interested in getting guidance in successfully applying for academic positions will sign up to sit for breakfast with Assistant Professors who have just finished this process. The group will be divided into one expert per group of five trainees. Together they will discuss topics such as chalk talks, applications, interviews, and successfully finding funding.

9:00-11:00 AM
Session 3: Immunometabolism in diabetes
Chair: Dongsheng Cai, MD, PhD
Albert Einstein College of Medicine, NY

Speaker 1: Gokhan Hotamisligil, MD, PhD
Harvard School of Public Health, MA
Inflammation in insulin resistance and diabetes

Speaker 2: Carey Lumeng, MD, PhD
University of Michigan, MI
Adipose macrophages in type 2 diabetes

Speaker 3: Alexis Stranahan, PhD
Medical College of Georgia, GA
Augusta University
Cognitive impairment in obesity/diabetes via neural inflammation

Speaker 4: Dongsheng Cai, MD, PhD
Albert Einstein College of Medicine, NY
Hypothalamic inflammation in diabetes

11:00-12:15 PM
Industry Career Workshop

12:30-1:30 PM Lunch
1:30-6:00 PM Free time (White water rafting 12:30-5:00pm)

Dinner 6-7pm

7:00-8:30 PM
Session 4: Immune signals, lipid disorders and complications
Chair: Liangyou Rui, PhD
University of Michigan, MI

Speaker 1: Liangyou Rui, PhD
University of Michigan, MI
Inflammatory pathways in nonalcoholic fatty liver disease

Speaker 2: Allison Xu, PhD
University of California San Francisco, CA
Leptin in control of lipid metabolism and fatty liver

Speaker 3: Klaus Ley, PhD
La Jolla Institute for allergy and Immunology, CA
Immunity and vaccine for atherosclerosis

WEDNESDAY August 15

At breakfast: Meet the expert mentoring session #2, “Pursuing a career in biotechnology” This session will follow a similar format as the previous session, however the featured experts will include scientists from the biotechnology community. The group will be divided into one expert per group of five trainees.

9:00-11:00 AM
Session 5: Immunological aspects governing the function of fat
Chair: Shingo Kajimura, PhD
UCSF, San Francisco, CA
Speaker 1: Lev Becker, PhD
University of Chicago, Chicago, IL
*Proteomics in the study of adipocytes and inflammation*

Speaker 2: Shingo Kajimura, PhD
UCSF, San Francisco, CA
*Engineering fat cells to fight obesity*

Speaker 3: Michael Rodeheffer, PhD
Yale, New Haven, CT
*Sex specific adipogenic programs and fat distribution*

Speaker 4: Karen Clement, MD
Institut National de la Sante et de la Recherche Medicale (INSERM), France
*Fat distribution and metabolic control in people*

11:30-12:15 PM 5 minute ePoster presentations Part 2

12:30-1:30 PM Lunch

1:30-4:00 PM Career Development Session (Biotech/Industry/Academic)

**4:00-5:50PM**
**Session 6: Neuroinflammation**
Chair: Suneil Koliwad, MD, PhD
UCSF, San Francisco, CA

Speaker 1:
TBD

Speaker 2: Josh Thaler, MD, PhD
University of Washington, Seattle, WA
*Astrocytes and microglia in males and females*
Speaker 3: Min-Seon Kim, PhD  
University of Ulsan College of Medicine, Seoul, Korea  
*Nitric oxide signaling in the brain*

Speaker 4: Suneil Koliwad, MD, PhD  
UCSF, San Francisco, CA  
*Microglial control of metabolic function*

Dinner 6-7pm  
7:00-9:00 PM Poster session 2

**THURSDAY August 16**

9:00-12:15 AM  
**Session 7: Inflammation, vasculature and hypertension**  
Chair: Zhongjie Sun, MD, PhD  
University of Oklahoma, OK

Speaker 1: Colin N. Young, Ph.D.  
George Washington University, Washington DC  
*Stress and Inflammation in central mechanism of hypertension*

Speaker 2: Barbara Alexander, PhD  
University of Mississippi Medical Center, MS  
*Early-life nutrition, inflammation and hypertension*

Speaker 3: Alan Johnson, PhD,  
University of Iowa, IA  
*Leptin, Immunity and blood pressure regulation*

Speaker 4: Zhongjie Sun, MD, PhD  
University of Oklahoma, OK  
*Cytokines and anti-aging genes in hypertension and diabetes*
Two short talks chosen from abstracts

12:30-1:30 PM Lunch
1:30-4:00 PM Free time (Group Activity- River Rafting)

4:00-5:50PM
Session 8: Cellular Immunometabolism II

Chair: Julie Jameson, PhD
CSU San Marcos, San Diego, CA

Speaker 1: Marjana Tomic-Canic, PhD
University of Miami, Miami, FL
Chronic inflammation in wound repair

Speaker 2: Craig Walsh, PhD
University of California, Irvine, CA
Regulation of mitochondrial metabolism by DRAK2 in effector T cells

Speaker 3: Lydia Lynch, PhD
TBD

Speaker 4: Julie Jameson, PhD
CSU San Marcos, San Diego, CA
Mechanisms of epidermal T cell dysfunction in obesity

Dinner 6-7pm
7:00-9:00 PM Social Event

FRIDAY August 17

9:00-12:00 AM
Session 9: Obesity, Inflammation and Cancer
Chair: TBD
TBD

Speaker 1: TBD
TBD

**Speaker 2: David Guertin, PhD**
University of Massachusetts Medical Center, Worcester, MA
*The role of mTOR in obesity and cancer*

**Speaker 3: Michael Karin, PhD**
UC San Diego, San Diego, CA
*Oxidative stress and liver cancer*

**Speaker 4: Doug Green, PhD**
St. Jude Children’s Research Hospital
*Mitochondrial pathways and cancer*