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: Luke O’Neill, PhD**
Trinity College Dublin, Dublin, Ireland
*Metabolic reprogramming and innate immunity*

**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
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: Gokhan Hotamisligil, MD, PhD
Harvard School of Public Health, MA

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: Zhongjie Sun, MD, PhD
University of Oklahoma, OK
*Cytokines and anti-aging genes in diabetes*

Speaker 4: Richard Johnson, MD
University of Colorado, CO
*Immune basis of diabetic kidney disease*

11:00-12:15 PM
Pharmaceutical/Biotechnology Workshop
12:30-1:30 PM Lunch
1:30-4:00 PM Free time

4:00-6:00PM
Session 4: Immune signals, lipid disorders and complications
Chair: Lianyou Rui, PhD
University of Michigan, MI

Speaker 1: Lianyou 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*

Speaker 4: TBD
TBD
*TBD*

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

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: Inflammation, vasculature and hypertension
Chair: Dongsheng Cai, MD, PhD
Albert Einstein College of Medicine, NY

Speaker 1: Dongsheng Cai, MD, PhD
Albert Einstein College of Medicine, NY
Hypothalamic inflammation in 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: Mustafa Lokhandwala, PhD
University of Houston, TX
Oxidative stress and dopamine in diabetes or hypertension

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: Chris Glass, MD, PhD
UCSD, San Diego, CA
Microglial transcriptional identification

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 Social Event

THURSDAY August 16

9:00-12:15 PM
Session 7: 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

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: Immunological aspects of skin and gut in barrier function in obesity and diabetes

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: Remy Burcelin, PhD
Institut National de la Sante et de la Recherche Medicale (INSERM), France
Compromised gut immune microbiota crosstalk and type 2 diabetes

Speaker 3: TBD
TBD
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 PM

Session 9: Obesity, Inflammation and Cancer
Chair: Erica Pearce, PhD
Max Planck Institute, Freiburg, Germany

Speaker 1: Erica Pearce, PhD
Max Planck Institute, Freiburg, Germany
*Metabolism in the regulation of T cell function*

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*