

MONDAY NOVEMBER 18

11:30 REGISTRATION-
12:00 - 12:45 LUNCH – SUNSET RESTAURANT
12:45 MOVE TO SANTA CRUZ ROOM

SESSION 1

1:00 – 2:30

Cellular Energetics and Stress

CHAIRS: SUNEIL KOLIWAD & MICHELLE LA MERRILL

Nick Yiv Ku Lab, UCSF – In vivo screen for primary human beta cell proliferation and survival

Sneha Damal Villivalam Kang Lab, UCB – *The role of skeletal muscle DNMT3A in endurance exercise*

Ryo Higuchi-Sanabrai Dillin Lab, UCB – *Promoting ER stress resistance and longevity in the absence of the UPR*

Ajit Shah Bhushan Lab, UCSF – *BET proteins are required for transcriptional activation of the senescent islet cell secretome in type 1 diabetes*

Kevin Tharp Weaver Lab, UCSF – *Biophysical signaling induces mitochondrial remodeling and oxidative stress resistance via HSF1*

2:30 - 2:45

COFFEE BREAK

SESSION 2

2:45 - 4:15

All About the Fat

CHAIRS: KATRIN SVENSSON AND CHRISTOPHER NEWGARD

Melissa Roberts Olzmann Lab, UCB – *A genetic strategy to identify lipid droplet protein degradation pathways*

Liang Li Feldman Lab, UCSF – *Feeding the Fat Clock*

Esther Paulo Mirasol Wang Lab, UCSF – *Proteome turnover fuels thermogenesis in brown adipocytes*

Garrett Dempsey Stahl Lab, UCB – *Mechanobiological regulation of beige adipocyte formation and metabolic activity*

Emily Goldberg New Faculty, UCSF – *Dysregulation of the adipose-resident immune compartment during aging*

4:15 – 4:30

COFFEE BREAK

SESSION 3

4:30 – 6:00

In Vivo Metabolism & Physiology

CHAIRS: ERIC VERDIN AND ALLISON XU

Allison Ho Kowalsky U of Michigan – *Sestrin2 activates Akt through GATOR2-mTORC2*

Koike Shinichiro Haj Lab, UC Davis – Soluble epoxide hydrolase deficiency and pharmacological inhibition improve pancreatic islets function

Ritwik Datta Atabai Lab, UCSF – *Self-regulation of insulin receptor signaling through activation of Mfge8-β5 integrin axis*

Yunshin Jung, Svensson Lab, Stanford – *A single-cell atlas of non-alcoholic fatty livers uncovers high hepatocyte heterogeneity and a loss of periportal zonation*

Dennis Titov New Faculty UCB – *New approaches for studying the role of energy metabolism in physiology and disease*

6:00 – 7:00

DINNER IN SUNSET RESTAURANT

7:00 – 8:00

KEYNOTE PRESENTATION Eric Verdin Buck Institute

“NAD metabolism and Aging” (Santa Cruz Room)

Introduction by Suneil Koliwad

8:00 – 9:30

Poster Session & Cocktails New Brighton & La Silva Rooms

Chaired by Audrey Parent and Martin Contreras

9:30 - 11:00

Social Hour & Games Santa Cruz Room

TUESDAY NOVEMBER 19

8:00 – 9:00

BREAKFAST – SUNSET RESTAURANT

SESSION 4

9:00 -10:30

The Functional Development of Metabolic Tissues

CHAIRS: BRUCE VERCHERE AND GREGORY KU

David Scheel German Lab, UCSF – *Patterning of the definitive endoderm in gut development*

Alex Mawla Huisling Lab, UC Davis – *Navigating the Depths and Avoiding the Shallows of Pancreatic Islet Cell Transcriptomes*

Youngjin Kim, Hebrok Lab, UCSF – *Investigation of the role of GLIS3 on human beta cell development and maturation*

Sean de La O Sneddon Lab, UCSF – *A Transcriptional Atlas of the Developing Pancreas at Single-Cell Resolution*

Joanna Kelley Visiting Scientist, McManus Lab, Washington State – *Grizzly bears as an unexpected evolutionary model of insulin resistance*

10:30 -11:00

GROUP PHOTO

SESSION 5

11:00 -12:30

The brain in metabolic control

CHAIRS: MIKE GERMAN AND KAREN RYAN

Viana Pham Xu Lab, UCSF – *Metabolic Dysregulation in Advanced Aging*

Min Hyun Kim, U Michigan – *Hypothalamic Slug promotes leptin resistance and obesity*

Adelaide Bernard, Vaisse Lab, UCSF – *MRAP2 regulates energy homeostasis by promoting primary cilia localization of MC4R*

Greg Timblin Saijo Lab, UCB – *Hydroxyestrogens alter macrophage mitochondrial function to restrict inflammatory responses*

Qili Liu New Faculty UCSF – *Multidimensional hunger networks and nutritional balance*

12:30 - 1:30

LUNCH – SUNSET RESTAURANT

1:30-5:00

NETWORKING, SPORTS AND SIGHT SEEING

SESSION 6

5:00 – 6:30

Big Data: from Single Cells to Metabolism and Beyond

CHAIRS: MARTIN MYERS AND ANDREAS STAHL

Homa Majd Fattahi Lab, UCSF – Modeling and treating fatty acid induced enteric neuropathies using human pluripotent stem cells

Cate Schneider Hellerstein Lab, UCB – Interaction of diet with the metabolic flux signatures of the unfolded protein response

Wei Wei Long Lab, Stanford - Chemogenetic In Vivo Mapping of Endocrine Circuits Regulating Tissue Metabolism

Jiehan Li Ingelsson Lab, Stanford- CRISPR meets single-cell RNA-sequencing in adipocytes

Vasilis Ntranos New Faculty UCSF Diabetes Center - Information at the interface between Biology and Computation

6:30 - 8:00

DINNER IN SUNSET RESTAURANT

8:00 - 9:30

Poster Session & Cocktails New Brighton & La Silva Rooms
Chaired by Audrey Parent and Martin Contreras

9:00

Retreat Party Seascape Room

WEDNESDAY NOVEMBER 20

8:00 – 9:00

BREAKFAST – SUNSET RESTAURANT

SESSION 7

9:00 - 10:15

Hosts, Immunity and Metabolic Disease

CHAIRS: MATTHIAS HEBROK AND JANELLE NOBLE

Shen Dong Bluestone Lab, UCSF –A Phase I Trial of CD4+CD127lo/-CD25+ Polyclonal Treg Adoptive Immunotherapy with Interleukin-2 for the Treatment of Type 1 Diabetes

Zoe Quandt Anderson Lab, UCSF – Immune Checkpoint Inhibitor Diabetes Mellitus: A Novel Form of Autoimmune Diabetes

Diana Alba Koliwad Lab, UCSF–Adipose tissue function vs. fibrosis in health, obesity, and HIV

James Bayrer New Faculty UCSF –Regulating the hormone-producing gut epithelium

10:15 – 10:30

CHECK-OUT BREAK

10:30 - 12:00PM

STUDENT & FACULTY NETWORKING IN FOCUS GROUPS

(Locations will be assigned prior)

Venue 1 – Probing the Development and Dysfunction of Beta Cells:
Hebrok, Verchere, Parent, German, Huising, Bhushan, Ku, Grodsky, Noble

Venue 2 – Adipocyte Biology and Adipose tissue Function: Koliwad, Raffai, Napoli, Stahl, Feldman, McManus, Kelley, Long

Venue 3 - Central Regulation of Energy Homeostasis: Valdearcos, Myers, Xu, Ryan, Vaisse, Liu, La Merrill

Venue 4 – New Tools to Study Systemic Metabolism: Svensson, Titov, Goldberg, Bayrer, Atabai, Ntranos

12:00PM **LUNCH – SUNSET RESTAURANT**

