WEDNESDAY SEPTEMBER 12

6:00 - 7:00**DINNER IN SUNSET RESTAURANT** 11:45-12:45 REGISTRATION-LUNCH IN SUNSET RESTAURANT 12:45 MOVE TO SANTA CRUZ ROOM Keynote Address Introduction by Andreas Stahl 7:00 - 8:00INTRODUCTION Anders Näär UC Berkeley The Exciting First Session CHAIRED BY SUNIEL KOLIWAD & ANDREAS STAHL SESSION 1 1.00 - 2.30Poster Session & Cocktails¹ New Brighton & La Silva Rooms 8:00 - 9:30Chaired by Frederic Van Gool Esther Paulo Wang Lab, UCSF CVRI - Defective mitochondria in brown adipocytes promote metabolic benefits Social Hour & Games Santa Cruz Room 9:30 - 11:00 Thomas Hennings Ku Lab, UCSF Diabetes Center – In vivo deletion of beta cell Drp1 impairs insulin secretion without affecting islet oxygen consumption **THURSDAY SEPTEMBER 13** William Krause Ingraham Lab, UCSF - Coordinating female metabolism and reproduction: estradiol drives Mc4r expression in the ventromedial 8:00 - 9:00BREAKFAST - SUNSET RESTAURANT hvpothalamus Martin Vadearcos-Contreras UCSF Diabetes Center - The role of hypothalamic microglia in the regulation of energy and glucose Developmental Biology and More CHAIRED BY ALLISON XU & WALLY WANG **SESSION 4** homeostasis 9:00 -10:30 2:30 - 2:45 **BREAK** Annalise Vonderembse Merrill Lab, UC Davis - A cold look at DDT: How developmental exposure to the pesticide may have obesogenic roots in the New Pathways to Therapy¹
CHAIRED BY MARK HUISING & AUDREY PARENT **SESSION 2** nervous system 2.45 - 4.15 Ronan Russell Hebrok Lab, UCSF Diabetes Center - Pancreatic islet-cell development in humans - a primary role for MAFB? Aeid Igbaria Papa Lab, UCSF - Targeting T1D with new class of NLRP3 Truc Nguven Olzmann Lab. UC Berkelev – Mechanisms and functions of inflammasome inhibitors lipid droplet-mitochondria tethering Jordan Bisanz Turnbaugh Lab, UCSF - The effects of very low-calorie Daniel Wong Sneddon Lab, UCSF Diabetes Center - A novel endocrine diet on gut microbiome composition and function progenitor population as revealed by single-cell RNA- sequencing Chester Chamberlain German Lab, UCSF Diabetes Center – Pathways Ajit Shah Bhushan Lab, UCSF Diabetes Center - Targeted elimination of to synthetic lethal combinations and new drug therapies for pancreatic islet senescent beta cells prevents Type 1 Diabetes cell tumors Jessica Cortez Marson Lab. UCSF Diabetes Center - CRISPR screen in 10:35 -11:00 **GROUP PHOTO** regulatory T cells identifies ubiquitin-modifying enzyme Usp22 as key regulator of Foxp3 expression Harnessing Human Genetics in Metabolic Diseases **SESSION 5** Isha Jain Sandler Fellow, Physiology, UCSF - Turning the oxygen dial as CHAIRED BY MIKE GERMAN & NADAV AHITUV 11:00 -12:30 a therapy: Hypoxia as a treatment for mitochondrial dysfunction Yuanyuan Qin Krauss Lab, CHORI -TMEM55B regulates LDLR lysosomal **BREAK** 4:15 - 4:30decay through PI(4.5)P2 Jeremy Warshauer Anderson Lab - A novel mendelian model of Physiological Determinants in Diabetes & Obesity CHAIRED BY MATTHIAS HEBROK & MARTIN MYERS **SESSION 3** autoimmune diabetes 4:30 - 6:00Fanny Comblain Vaisse Lab, UCSF Diabetes Center - Monoallelic expression as a contributor to phenotypic variability in obesity Carlos Henrique Kajimura Lab, UCSF Diabetes Center - Phospholipid Bryan Gonzalez Leibel Lab, Columbia University - HNF1A deficiency (MODY3) transfer protein (PLTP): the new batokine in control lipid and glucose impairs β-cell granule maturation and function homeostasis Dimitre Simeonov Marson Lab, UCSF Diabetes Center - Decoding Marta Vuckovic Napoli Lab, UC Berkeley – Retinol metabolism in brown IL2RA regulatory circuits in autoimmune diabetes adipose contributes to optimal lipid homeostasis during fasting and feeding Kevin Corbit Weiss Lab, UCSF – Adipocyte JAK2 mediates hepatic LUNCH - SUNSET RESTAURANT 12:30 - 1:30 insulin sensitivity and hepatocellular carcinoma Jessica Huang Huising Lab, UC Davis - Role of somatostatin in beta cell functional maturity

Lisa Beutler Knight Lab, UCSF – Understanding the nutritional regulation

of feeding circuits

SESSION 6 New Pathways to Therapy²

1:30 – 3:00 CHAIRED BY RUDOLF LEIBEL & ANDERS NAAR

Casey Ward Tang Lab, UCSF – Reversal of diabetes and preservation of pancreatic islet grafts in the extrahepatic space with novel parathyroid gland co-transplantation

Gabriel Eades UCSF Diabetes Center – Targeting recalcitrant tumor persister cells

Leonardo Ferreira Tang Lab, UCSF - Cellules-san-frontières: engineered regulatory T cell therapies for type 1 diabetes

Ching Fang Chang Stahl Lab, UC Berkeley - CoQ deficiency in brown adipose tissues leads to mitochondrial unfolded protein responses and thermogenic dysfunction

Audrey Parent UCSF Diabetes Center - Immunoengineering of stem cell-derived insulin-producing cells for cell therapy and disease modeling

3:00 - 6:30 AFTERNOON AT SANTA CRUZ BEACH BOARDWALK

6:30 - 7:30 DINNER IN SUNSET RESTAURANT

7:30 – 8:30 Keynote Address² Introduction by Mathias Hebrok

Jens C. Brüning, Max Planck Institute

8:30 – 10:00 Poster Session & Cocktails² New Brighton & La Silva Rooms

Chaired by Frederic Van Gool

10:00 – 1:00 Retreat Party Seascape Room

FRIDAY SEPTEMBER 14

8:00 BREAKFAST IN SUNSET RESTAURANT

SESSION 7 Saving the Best for Last 9:00 - 10:30 CHAIRED BY BRUNING & JULIE SNEDDON

Ashley Frakes Dillan Lab, UC Berkeley – Glia regulate ER stress

resistance and longevity

Eirini Vagena Xu Lab, UCSF Diabetes Center - Role of ASB4 in

regulation of energy balance and glucose homeostasis

Ritwik Datta Atabai Lab, UCSF - Mfge8 promotes insulin resistance

through avß5 integrin

Kotdaji Ha Delling Lab, UCSF – Electrical properties of primary cilia

signaling: Implication into islet function

Fred Van Gool UCSF Diabetes Center – A Foxp3 Mutation drives Th2

effector function in regulatory T cells

10:30 – 12:00 STUDENT & FACULTY NETWORKING IN FOCUS GROUPS

Locations will be assigned prior

Venue 1 - Beta Cell development and function: Hebrok, Huising, Bhushan, Ku, Sneddon

Venue 2 - Adipose tissue and Metabolism: Koliwad, Raffai, Napoli, Stahl, Wang, Feldman

Venue 3 - Central regulation of energy Homeostasis: Leibel, Myers, Bruning, Xu, Ryan, Vaisse

Venue 4 - Immunology and type I Diabetes: Marson, Tang, Van Gool, Parent Venue 5 - Genomics and Technology: Ahituv, McManus, Krauss, Smith, Naar,

Gerencser

12:00 LUNCH IN SUNSET RESTAURANT

