**LIPIDOMICS IMPACT ON CANCER, METABOLIC AND INFLAMMATORY DISEASES:**

**LIPID MAPS Annual Meeting ⬥ MAY 12-13, 2015**

**Tuesday, May 12 Scripps Seaside Forum – UCSD**

*7:15 – 8:30 AM* – *Registration and* *Breakfast Buffet / Poster Setup*

**8:30 – 8:45 AM – Welcome** [Edward A. Dennis (University of California, San Diego), Chair]

**8:45 – 10:15 AM – Metabolomics** [Shankar Subramaniam (University of California San Diego), Chair]

* 8:45 Michael Snyder (Stanford University) – Dynamic global changes during disease onset and dietary perturbations revealed using multiomics profiling
* 9:15 David Wishart (Human Metabolomics, Canada) – Translational Lipidomics: Linking Lipidomics to Laboratory Medicine
* 9:45 Daniel K. Nomura (University of California, Berkeley) – Mapping dysregulated metabolic pathways in disease using functional metabolomic platforms

*10:15 – 10:45 AM* – *Coffee* *Break*

**10:45 – 12:45 PM – Lipidomics of Cancer** [Alfred H. Merrill, Jr. (Georgia Institute of Technology), Chair]

* 10:45 Tony Futerman (Weizmann Institute, Israel) – The role of sphingolipids with different acyl chains in human disease
* 11:15 Marion B. Sewer (University of California, San Diego) – Deoxysphinganines as regulators of breast cancer cell growth
* 11:45 Huiyong Yin (Shanghai Institutes for Biological Sciences, China) – Lipidomics of Human Heptacellular Carcinoma (HCC): New insights into the roles of lipid metabolism and mitochondrial function
* 12:15 Christian Metallo (University of California, San Diego) – Regulation of lipid and mitochondrial metabolism by the microenvironment

*12:45 – 1:00PM – Group Photo*

*1:00 – 2:00 PM – Lunch*

**2:00– 3:30 PM – Eicosanoids and the Inflammatory Response** [Takao Shimizu (University of Tokyo and National Center for Global Health and Medicine, Tokyo), Chair]

* 2:00 Nicolas G. Bazan (Louisiana State University) – Omega-3 fatty acid metabolites and neurodegeneration
* 2:30 Valerie O’Donnell (Cardiff University, UK) – Mapping the diversity of the human platelet lipidome
* 3:00 Ian A. Blair (University of Pennsylvania) – Monitoring dysregulated mitochondrial metabolism using human platelets

**3:30 – 4:00 PM – Lightning Talks from Poster Abstracts** [Mohit Jain (University of California, San Diego), Chair]

*4:00 – 6:00 PM – Poster session & Reception*

*6:00 – 8:30 PM – Dinner*

**Lightning Talks**

**Tuesday, May 12, 3:30 - 4:00 PM**

* 3:30 Aditi Das (University of Illinois Urbana-Champaign, IN) – Elucidating the metabolism of omega-3 and omega-6 endocannabinoids by cardiac CYP2J2 epoxygenase in Nanodiscs – *Poster #5*
* 3:35 William H. Gerwick(University of California, San Diego, CA) – Mooreamide A: A cannabinomimetic lipid from the marine cyanobacterium *Moorea bouillonii* – *Poster #9*
* 3:40 Berit Johansen (Norwegian University of Science and Technology, Norway) – **Novel inhibitor of cytosolic group IVA phospholipase A2 (cPLA2**α**) ameliorate mesangial inflammation and kidney fibrosis development in diabetic neuropathy** – *Poster #17*
* 3:45 Samira Khakpour (University of California, San Francisco, CA)– The endocannabinoid *N-*arachidonoyl dopamine (NADA) regulates endothelial prostanoid metabolism – *Poster #19*
* 3:50 Matthew A. Mitsche (UT Southwestern Medical Center, TX)– Isotopomer spectral analysis of cholesterol biosynthesis *in vivo* reveals multiple tissue-specific, flux-dependent pathways – *Poster #27*
* 3:55 Ryo Morimoto (National Center for Global Health and Medicine and The University of Tokyo, Japan) – Regulatory mechanisms of platelet-activating factor (PAF) production in macrophages and identification of a specific inhibitor for PAF synthetic enzyme (LPCAT2) by high-throughput screening – *Poster #29*

**Wednesday, May 13, 12:00 - 12:30 PM**

* 12:00 Jaewoo Choi (Linus Pauling Institute, OR) – Untargeted lipidomics reveals loss of key phospholipids and several lysophospholipids from vitamin E-deficient zebrafish brains – *Poster #4*
* 12:05 Mikhail Y. Golovko (University of North Dakota, ND) – Tissue metabolomic analysis of bioactive lipids requires tissue fixation with focused microwave irradiation – *Poster #10*
* 12:10 Zoe Hall (MRC Human Nutrition Research, UK) – Mass spectrometry imaging reveals lipid biochemistry aberrations in Myc-dependent lung tumours – *Poster #12*
* 12:15 Andrew Kim (University of California, San Francisco, CA)– TMEM16F plays a crucial role in membrane lipid scrambling, hemostasis/thrombosis and lipid metabolism – *Poster #18*
* 12:20 Lior Mayo (Brigham and Women’s Hospital, MA) – B4GALT6 regulates astrocyte activation during CNS inflammation – *Poster #28*
* 12:25 Rushdia Z. Yusuf (Harvard Stem Cell Institute, MA) – Aldehyde dehydrogenases as a source of fatty acids in cancer stem cells – *Poster #44*



2014 LIPID MAPS Meeting *Photo by Alvin Angeles*

**LIPID MAPS Meeting 2009**

**Wednesday, May 13 Scripps Seaside Forum – UCSD**

*7:45-8:30 AM* – *Breakfast Buffet*

**8:30 – 10:00 AM – Lipidomics and Metabolic Disease** [Dennis Vance (University of Alberta), Chair]

* 8:30 Hiroyuki Arai (University of Tokyo, Japan) – Remodeling of fatty acyl chains in phosphatidylinositol
* 9:00 Jean Vance (University of Alberta, Canada) – Phosphatidylserine and phosphatidylethanolamine in Lenz-Majewski Syndrome and mitochondrial function
* 9:30 George M. Carman (Rutgers University) – Physiological functions and regulation of phosphatidate phosphatase

*10:00 – 10:30 AM* – *Coffee* *Break*

**10:30 – 12:00 PM – Lipid Interactions with Membrane Proteins** [William Gerwick (Scripps Institution of Oceanography, University of California, San Diego), Chair]

* 10:30 Shelagh Ferguson-Miller (Michigan State University) – Crystal structures of Translocator Protein 18 kDa (peripheral benzodiazepine receptor) reveal membrane lipid and ligand binding sites
* 11:00 Robert M. Stroud (University of California, San Francisco) – Effective lipids on membrane proteins
* 11:30 Marcia E. Newcomer (Louisiana State University) – The structural basis for the control of lipoxygenase activity

**12:00 – 12:30 PM – Lightning Talks** [Christopher K. Glass(University of California, San Diego), Chair]

*12:30 – 2:30 PM – Lunch and Poster session*

**2:30 – 4:30 PM – Lipids and Immunity** [Oswald Quehenberger (University of California, San Diego), Chair]

* 2:30 Jason G. Cyster (University of California, San Francisco) – Lipid mediators guide the adaptive immune response
* 3:00 Steven Bensinger (University of California, Los Angeles) – Understanding the role of sterol metabolism in immunity
* 3:30 Hugh Rosen (The Scripps Research Institute) – S1PR1 modulators: Screening, structure and clinical solutions
* 4:00 Alan Aderem (Seattle Biomedical Research Institute) – A systems approach to dissecting immunity

*4:30 PM* – *Closing Remarks and Adjournment*

*4:45 – 5:15 PM – Coffee*