

2016 Molecular Psychiatry Meeting Schedule

Thursday October 6th

6:30 AM to 7AM Continental Breakfast

7:00 to 9:00 AM Concurrent Session 1: Lahaina 2&3

Modeling Neurodevelopment: Chair, Carrie Bearden, UCLA and Co-Chair, Alex Urban, Stanford

Induced Neurons Reveal Molecular Effects of Large CNVs Associated with Aberrant Neurodevelopment, Alex Urban, Stanford

22q11 Gene Dose-Dependent Effects on Brain Development: Chair: Carrie Bearden, UCLA

Chromatin Organization Driving Neurogenesis in the Developing Human Brain, Jason Stein, University of North Carolina

General Population Manifestations of Genetic risk for Autism Spectrum Disorders, Elise Robinson, Harvard

7:00 to 9:00 AM Concurrent Session 2: Lahaina 1

Neural Circuits Mediating Motivated Behaviors: Chair, Rob Malenka, Stanford and Co-Chair, Vikaas Sohal, UCSF

Frontostriatal Circuitry Regulates Anxiety-Like Behaviors, Anatol Kreitzer, UCSF

Plasticity of Hippocampal Inputs to the Nucleus Accumbens and the Regulation of Reward, Scott Thompson, University of Maryland

Input-Specific Mechanisms of Drug-Evoked Plasticity in the Mesolimbic Dopamine System, Stephan Lammel, UC Berkeley

Prefrontal Circuit Control of Cognitive Flexibility, Vikaas Sohal, UCSF

9:00 to 9:15 AM Break

9:15 to 11:15 AM Concurrent Session 1: Lahaina 2&3

Genetic Insights into Autism: From Gene Regulation to Synapses: Chair, John Rubenstein, UCSF and Co-Chair, Ben Cheyette, UCSF

Method to Assay the Function of ASD Alleles In Vivo, John Rubenstein, UCSF

Spine and Glutamatergic Synapse Phenotypes Downstream of Wnt/Catenin Signaling in a Mouse Psychiatric Model, Ben Cheyette, Co-Chair, UCSF

Linking Chromatin Remodeling and Neurodevelopmental Pathology in the Mouse, Alex Nord, UC Davis

Identifying ASD Convergence in Model Systems, Jeremy Willsey, UCSF

9:15 to 11:15 AM Concurrent Session 2: Lahaina 1

Clinical, Cognitive, and Genetic Biomarkers in Mood Disorders: Chair, Katherine Burdick, Mt Sinai and Co-Chair, Faith Gunning, Cornell

Temperament, Affective Processing and Psychotic Symptoms in Bipolar Disorder, Mercedes Perez-Rodriguez, Mt. Sinai

Measuring and Modulating Neural Mechanisms of Pathological Sensory Phenomena, Emily Stern, Mt Sinai

Using Neuroimaging to Inform Treatment Development for Late-life Depression, Faith Gunning, Cornell

Imaging the Effects of Common and Rare Genes on the Risk of Bipolar Disorder Versus Schizophrenia, Steven Lawrie, University of Edinburgh

The Pharmacogenomics of Bipolar Disorder Study: Genomic and Stem cell Results Support Lithium Responsive Bipolar as a Distinct Form of Illness, John Kelsoe, UCSD

11:15 to 11:30 AM Break

11:30 AM to 1:30 PM Concurrent Session 1: Lahaina 2&3

Biomarkers of Antipsychotic Drug Response: Chair, Anil Malhotra, Hofstra Northwell and Co-Chair, James, Kennedy, University of Toronto

Iterative Optimization of a Gene Panel for Prediction of Antipsychotic Response, James Kennedy, University of Toronto

Using Multimodal Brain Imaging to Better Understand the Heterogeneity of Schizophrenia and to Predict Individual Responses to Antipsychotic Medications, Adrienne Lahti, University of Alabama

Impact of OPRM1 on Metabolic consequences of atypical use, Vicki Ellingrod, Michigan

Genomic and Connectomic Biomarkers of Treatment Response, Anil Malhotra, Hofstra Northwell

11:30 AM to 1:30 PM Concurrent Session 2: Lahaina 1

Genetics of Sleep Disorders and Application to Psychiatry: Chair, Emmanuel Mignot, Stanford and Co-Chair, Richa Saxena, Broad Institute/MGH

Large-Scale GWAS of Sleep & Circadian Phenotypes in the UK Biobank, Richa Saxena, Broad Institute/MGH

Human PER3 Mutations Are a Nexus for Genetic Regulation of Sleep Schedule and Affect, Louis Ptacek, UCSF

Genetic Investigation of Sleep and Circadian Phenotypes in Pedigrees Ascertained for Severe Bipolar Disorder, Nelson Freimer, UCLA

Kleine Levine Syndrome and its Genetic Overlap with Psychiatric Disorders, Ryan Hillary, Stanford

1:30 to 7:00 PM Open

7:00 to 8:00 PM Plenary: Lahaina 2&3

Using Whole Genome Sequencing to Characterize the Developmental Trajectory of ASD Risk, Matt State, UCSF. Introduction, Martin Schalling, Karolinska Institutet

Friday October 7th

6:30 AM to 7AM Continental Breakfast

7:00 to 9:00 AM Concurrent Session 1: Lahaina 2&3

Sleep, Circadian Rhythms and Genetics in Psychiatric Disorders: Chair, Shaun Purcell, Mt Sinai and Co-Chair, Richa Saxena, Broad Institute and MGH

Detection and Characterization of Sleep Spindles in 11,603 Individuals, Shaun Purcell, Mt. Sinai

Automatic PSG Analysis as Biomarkers, Emmanuel Mignot, Stanford

Sleep EEG and Risk of Psychiatric Disease, Fabio Ferrarelli, Pittsburgh

Importance of Molecular Rhythms in the Brain in Aging and Psychiatric Disorders, Collen McClung, Pittsburgh

7:00 to 9:00 AM Concurrent Session 2: Lahaina 1

Omics and Systems Biology: Chair, Daniel Martins-de-Souza, University of Campinas and Co-Chair, Chris Turck, Max Planck

Digging Deeper and Deeper: Subproteomes for Understanding Schizophrenia, Daniel Martins-de-Souza, University of Campinas

Early Protein Processing and the ER-Golgi Secretory Pathway in Schizophrenia, James H. Meadow-Woodruff, University of Alabama, Birmingham

Pathway Illumination for Disease Research – Psychiatric Disorders and Antidepressant Treatment Response, Chris Turck, Max Planck

Integrating Genetic, Clinical, Cognitive and Brain Imaging Data in the Study of Mood Disorders, Andrew Macintosh, University of Edinburgh

9:00 to 9:15 AM Break

9:15 to 11:15 AM Concurrent Session 1: Lahaina 2&3

Neuropsychiatric Genetics of Childhood: Chair, Elise Robinson, Harvard and Co-Chair, Mike Talkowski

Genetics and Autism Spectrum Disorder Heterogeneity, Elise Robinson, Harvard

The Landscape of Genomic Structural Variation Contributing to Autism, Mike Talkowski, Harvard

Sex-Biased Risk for Autism Spectrum Disorder and the Role of the Female Protective Effect, Donna Werling, UCSF

Sex-specific effects in common variant genome-wide analyses of ADHD, Joanna Martin, Cardiff University

9:15 to 11:15 AM Concurrent Session 2: Lahaina 1

Precision Medicine in Psychiatry: Chair: Bob Niculescu, Indiana University and Co-Chair, J. Licinio, South Australian Health and Medical Research Institute

Working Memory Deficits and Cellular Autofluorescence as a Marker of the Deficits, Akira Sawa, Johns Hopkins

Molecular Mechanisms of Li Response in Bipolar Disorder, Martin Schalling, Karolinska

Pharmacogenetics Approaches to Depression, Julio Licinio, South Australian Health and Medical Research Institute

Understanding, Predicting and Improving Suicidality, Bob Niculescu, Indiana University

11:15 to 11:30 AM Break

11:30 AM to 1:30 PM Concurrent Session 1: Lahaina 2&3

Molecular Approaches to Autism, FXS and Addiction: Chair, Lu Chen, Stanford and Co-Chair, Craig Powell, UT Southwestern

Modeling Neuropsychiatric Disorders in Human Neurons, Tom Sudhof, Stanford

Curb Your Cravings – Dopamine/GABA Co-release in Alcohol addiction, Jun Ding, Stanford

Genetic Models of Autism: Molecules to Potential Therapeutic Targets, Craig Powell, UT Southwestern

Synaptic Retinoic Acid Signaling in Fragile-X syndrome, Lu Chen, Stanford

11:30 AM to 1:30 PM Concurrent Session 2: Lahaina 1

Genetics of Mood Disorders: Chair, Nelson Freimer, UCLA and Co-Chair, Kathleen Merikangas, NIMH

PGC Bipolar GWAS- shared loci and genetic correlations with psychiatric and other traits, Eli Stahl, Mt. Sinai

Bipolar and Unipolar Depression: Two Poles or One?, Kathleen Merikangas, NIMH

Brain-Behavior Intermediate Phenotypes of Bipolar Disorder in a Genetically Isolated Population, Carrie Bearden, UCLA

1:30 to 5:30 PM Open

5:00 to 6:30 PM Poster Session: Lahaina 4

7:00 to 8:00 PM Plenary: Lahaina 2&3

Genetic and Single-Cell-Resolution Analyses of Brain and Schizophrenia, Steve McCarroll, Harvard. Introduction, James Kennedy, University of Toronto

Saturday October 8th

6:30 AM to 7AM Continental Breakfast

7:00 to 9:00 AM Concurrent Session 1: Lahaina 2&3

Postmortem Brain Genomics in Psychiatric Disorders: Chair, Andrew Jaffe, Lieber Institute and Co-Chair, Amanda Myers, University of Miami

Very Deep Whole Genome Sequencing Based Detection and Analysis of Mosaic Transposable Element Insertions in Human Brain Tissue, Alexander Urban, Stanford

The Human Brainome: Genome, Transcriptome, Proteome, and Phenome Interaction in the Human Cortex, Amanda Myers, University of Miami

Developmental and Genetic Regulation of the Human Frontal Cortex in Schizophrenia, Andrew Jaffe, Lieber Institute

7:00 to 9:00 AM Concurrent Session 2: Lahaina 1

Cellular Models for Neuropsychiatric Disorders: Chair, Sergiu P Pasca, Stanford and Nicola Allen, Salk Institute

Astrocyte Regulation of Neuronal Glutamate Receptors, Nicola Allen, Salk Institute

Exploring the Maturation and Function of Human Astrocytes in 3D Cerebral Cortical Cultures, Sergiu Pasca, Stanford University

The role of Glia in Brain Function and Dysfunction, Richard Daneman, UCSD

What Do Reactive Astrocytes Do?, Ben Barres, Stanford University

9:00 to 9:15 AM Break

9:15 to 11:15 AM Concurrent Session 1: Lahaina 2&3

Inflammatory Signaling in Psychosis: Translation into Neuronal Signaling: Chair, Martin Schalling, Karolinska Institutet and Sophie Erhardt, Karolinska Institutet

Targeting GRK-3 Identifies Glia-Derived Signaling Leading to Psychosis, Sophie Erhardt, Karolinska Institutet

Decoding the Links Between Immune Signaling and Psychosis- Focus on SNX7, Carl Sellgren, Broad Institute

Prenatal Kynurenine Pathway Metabolism: Links to the Immune System and to Psychiatric Diseases, Ana Pocivavsek, University of Maryland

Deficient Regulation of Kynurenine Metabolites Underlies Vulnerability for Depression and Suicidal behavior, Lilly Schwieler, Karolinska Institutet

Discussant, Martin Schalling, Karolinska Institutet

9:15 to 11:15 AM Concurrent Session 2: Lahaina 1

Mitochondrial Dynamics and Function in Psychiatric Disorders: Chair, Ron Davis, Scripps and Co-Chair Zu-Hang Sheng, NIDNS

Mitochondrial Bionergetics in Bipolar Disorder, Ana Andreazza, University of Toronto

Search For Functional Mitochondrial Variants in Psychiatric Disorders, Marquis Vawter, UC-Irvine

Axonal Mitochondrial Transport: New Insights in Synaptic Variability and Psychiatric Disorders, Zu-Hang Sheng, NIDNS

Developmental Inhibition of Mitochondrial Calcium Entry Leads to Memory Impairment in Adult Drosophila, Ron Davis, Scripps

11:15 to 11:30 AM Break

11:30 to 1:30 PM Concurrent Session 1: Lahaina 2&3

Cracking Neural Circuits in Motivated Behaviors: Chair, Kay Tye, MIT and Co-Chair, Garret Stuber, UNC

Neural Circuits in Valence Processing, Kay Tye, MIT

Hypothalamic-VTA Circuits for Motivated Behaviors, Garret Stuber, UNC

Identifying Neural Circuit Changes Underlying OCD-Like Behaviors, Susanne Ahmari, University of Pittsburgh

A Ventral VTA Neuropeptide and Receptor System That Tonicly Regulate Reward Seeking, Michael Bruchas, Washington University

11:30 to 1:30 PM Concurrent Session 2: Lahaina 1

Identification of Mechanisms and Circuitry That Contribute to the Development and Treatment of Bipolar Disorder: Colleen McClung, University of Pittsburgh and Co-Chair Jared Young, UCSD

Seasonal Photoperiod Length-Induced Switching Between Bipolar-Like States in Genetically Susceptible Mice, Jared Young, UCSD

A Corticolimbic Mesoscale Network Adapts Differently in Response to Challenging Experiences in a Mouse Model of Bipolar Disorder, Kafui Dzirasa, Duke University

Contribution of FXR1P to Mood Regulation, From Models to Humans, Jean-Martin Beaulieu, Laval University

HDAC Inhibitors are Potential Novel Therapeutics for Bipolar Disorder, Ryan Logan, University of Pittsburgh

1:30 to 7:00 PM Open

7:00 to 8:00 PM Plenary: Lahaina 2&3

Integrated Brainwide Structural and Functional Analysis, Karl Deisseroth, Stanford. Introduction, Rob Malenka, Stanford

Sunday October 9th

6:30 AM to 7AM Continental Breakfast

7:00 to 9:00 AM Concurrent Session 1: Lahaina 2&3

Modeling Psychiatric Disease with Stem Cells: Chair, Kristen Brennand, Mt. Sinai and Co-Chair, Hongjun Song

Modelling Genetic Predisposition to Schizophrenia Using Stem Cells, Kristen Brennand, Mt Sinai

Understanding the Function of Risk Genes for Mental Disorders Using Human iPSCs, Guo-Li Ming, Johns Hopkins

iPSC Models to Study Bipolar Disorder, Sue O'Shea, University of Michigan

Modeling Autism Using Pluripotent Stem Cells, Carol Marchetto, Salk Institute

Synaptic dysfunction in iPSC models of autism, James Ellis, University of Toronto

7:00 to 9:00 AM Concurrent Session 2: Lahaina 1

The Role of Neuropeptides in Social and Emotional Functioning: Chair: Karen Parker, Stanford and Co-Chair, Larry Young, Emory

Neural Mechanisms of Social Attachment and Empathy Related Behaviors: Implications for Autism, Larry Young, Emory University

The Influence of Oxytocin on the Neurocircuitry of Social Stress and Fear in Humans, Rene Hurlemann, University of Bonn

Oxytocin and Vasopressin: Biomarkers and Therapeutics for Social Deficit Disorders, Karen Parker, Stanford

Oxytocin Effects on Social Cognition and Behavior in Humans and in Psychiatric Conditions: Theoretical and Treatment Implications, Adam Guastella, University of Sydney

9:00 to 9:15 AM Break

9:15 to 11:15 AM Concurrent Session 1: Lahaina 2&3

Neurobiological Basis of Psychiatric Disorders: Chair: Brady Maher, Lieber Institute and Co-Chair Bryan Luikart

Functional and Structural Study of Gtf2i-Deletion in Forebrain Excitatory Neurons as a Mouse Model for Williams Syndrome, Boaz Barak, MIT

Modeling Mental Disorders with Patient-Specific Induced Pluripotent Stem Cells (iPSCs), Zhexiong Wen, Emory

Kit, a Receptor Tyrosine Kinase Linked to Autism and Intellectual Disability, Regulates Developmental Synapse Formation, Michael R. Williams, Dartmouth

Functional Analysis of the Psychiatric Risk gene TCF4 in the Developing Neocortex, Brady J. Maher, Lieber Institute

Increased Expression of CACNB4 Contributes to Selective Loss of Smaller Spines in Schizophrenia, Matthew MacDonald, University of Pittsburgh

9:15 to 11:15 AM Concurrent Session 2: Lahaina 1

Neurobiological Pathways in Bipolar Disorder: Chair: John Nurnberger, Indiana University and Co-Chair, Marquis Vawter, UC-Irvine

Biological Pathways in Lithium Response, John Kelsoe, UCSD

Pathway Studies of Rare Variants in Bipolar Disorder, Seth Ament, Institute for Systems Biology

Circadian Genes in Pathways Related to Bipolar Disorder, Michael McCarthy, UCSD

Pathway Studies Related to Bipolar Subtypes, John Nurnberger, Indiana University

11:15 to 11:30 AM Break

11:30 to 1:30 PM Concurrent Session 1: Lahaina 2&3

From Prodrome to Chronic Schizophrenia: Abnormalities in Brain Structure and Connectivity: Chair, Akira Sawa and Co-Chair, David Schretlen

Saliency-Associated Networks Underlying Psychosis: Their Dynamic Changes in the Pathological Trajectory, Jun Miyata, Kyoto University

Does Pallidal Hypertrophy Represent a Compensatory Neural Response to Schizophrenia? David Schretlen, Johns Hopkins

Baseline Striatal Functional Connectivity as a Predictor of Response to Antipsychotic Drug Treatment, Deepak Sarpal, Zucker Hillside Hospital

Multifaceted Study of Patients with First Episode Psychosis: Brain Imaging Perspectives, Andreia Falia, Johns Hopkins

11:30 to 1:30 PM Concurrent Session 2: Lahaina 1

Molecular Mechanisms of Psychiatric Disease: Chair, William Byerley, UCSF and Co-Chair, Kathryn Roeder, Carnegie Mellon

Obstetric Complications, Placental Gene-Expression and the Genetic Risk for Schizophrenia, Gianluca Ursini, Lieber Institute

Expression of a LincRNA in Suicide by Violent Means and Related Aggressive Phenotypes, Giovanna Punzi, Lieber Institute

Behavioral and Immune Alterations in Mice Haploinsufficient for Slc1a1, Parisa Afshari, SUNY

Insights into Schizophrenia From Gene Expression, Gene Networks and Genetic Association Signals, Kathryn Roeder, Carnegie Mellon

Behavioral and Synaptic Effects of Conditional Knockout of Ankyrin-G in Mouse Forebrain, Chris Ross, Johns Hopkins

