

8:00 a.m. – 9:15 a.m.  
Mini Panel  
Diplomat Ballroom 1 & 2

**Beyond Ketamine, Can Selective Targeting of the NMDA  
Receptor Produce Antidepressant Response without  
Psychotomimetic Effects: Clinical Results with Three Novel  
Compounds**

Chair: Gerard Sanacora

- 8:00 a.m.      Beyond Ketamine: Next Generation NMDA Antagonists Show  
Rapid Antidepressant Effects, without Psychotomimetic Effects  
*Nancy Diazgranados*
- 8:25 a.m.      A Phase 2, Randomized, Double Blind, Single Intravenous Dose  
Study of GLYX-13, an NMDA Receptor Glycine Site Functional  
Partial Agonist, in Subjects with Major Depressive Disorder with  
Inadequate Response to Antidepressant Medication  
*Ronald M. Burch*
- 8:50 a.m.      Randomized Trial of AZD6765, an N-methyl-D-aspartate  
(NMDA) Channel Blocker, as Adjunct Treatment for Major  
Depression  
*Sanjeev Pathak*

MP

9:15 a.m. – 10:30 a.m.

Mini Panel

Diplomat Ballroom 1 & 2

## **Beyond the NMDA Receptor-Alternative Glutamatergic Targets for Antidepressant Treatment**

Chair: Yogesh Dwivedi

Co-Chair: P. Jeffrey Conn

9:15 a.m.      Altered Affective Behavior in Kainate Receptor Knockout Mice  
*Anis Contractor*

9:40 p.m.      RNA Editing of an AMPA Receptor Subunit is Altered in Major  
Depression and Suicide  
*Monsheel Sodhi*

10:05 a.m.      Selective mGlu5 NAMs for the Treatment of MDD  
*Carrie K. Jones*

MP

8:00 a.m. – 10:30 a.m.

Panel

Regency Ballroom 3

## Hippocampus and Addiction: New Neurons, New Circuits, and New Responses

Chair: Rita A. Fuchs

- 8:00 a.m.      Role of the Dorsal Hippocampus in the Reconsolidation and Utilization of Associative Memories that Maintain Drug Context-induced Cocaine Seeking  
*Rita A. Fuchs*
- 8:30 a.m.      Individual Differences in Substance Abuse Liability: Implicating the Hippocampus  
*Huda Akil*
- 9:00 a.m.      Ventral Hippocampal Regulation of Medial VTA Dopamine System and its Role in Addiction  
*Anthony A. Grace*
- 9:30 a.m.      Linking Context with Reward: Hippocampal and Septal Circuit Projections to Ventral Tegmental Area Play Critical Roles in Cocaine Relapse  
*Gary Aston-Jones*
- 10:00 a.m.     Discussant: *Nora D. Volkow*

PA

8:00 a.m. – 10:30 a.m.

Panel

Regency Ballroom 2

## Neural Networks across Development in Health, Anxiety/ Depression, and Treatment Implications

Chair: Monique Ernst

8:00 a.m. Overcoming the Detrimental Effects of Motion on Resting State fMRI

*Michael Milham*

8:30 a.m. Altered Intrinsic Connectivity and Error-processing Function of Salience Network in Pediatric Obsessive Compulsive Disorder

*Kate D. Fitzgerald*

9:00 a.m. What can Amygdala Functional Connectivity Tell Us about the Development of Anxiety Disorders?

*Amy K. Roy*

9:30 a.m. From Correlation to Causation in Resting-state fMRI: Network Dynamics in Psychopathology and with Concurrent TMS/fMRI

*Amit Etkin*

10:00 a.m. Discussant: *Angus W. MacDonald*

PA

8:00 a.m. – 10:30 a.m.

Panel

Regency Ballroom 1

## Harnessing Cortical Plasticity for Therapeutic Purposes

Chair: Sophia Vinogradov

- 8:00 a.m.      Shaping Brain Circuits with Auditory Experience  
*Etienne de Villers-Sidani*
- 8:30 a.m.      Directing Cortical Plasticity to Understand and Treat  
Neurological Disease  
*Michael P. Kilgard*
- 9:00 a.m.      Long-lasting Enhancement of Visual Perceptual Learning in  
Healthy Humans by the Cholinesterase Inhibitor Donepezil  
*Michael A. Silver*
- 9:30 a.m.      Harnessing Prefrontal Plasticity through Videogame Training to  
Address Multitasking Deficits across the Adult Lifespan  
*Adam Gazzaley*
- 10:00 a.m.     Discussant: *Akira Sawa*

PA

8:00 a.m. – 10:30 a.m.

Panel

Atlantic Ballroom 3

**Balancing Benefits, Risks and Cost for New Treatments in  
Vulnerable Populations: Lessons from Child Psychiatry on the  
Need for a New Standard of Diverse Methodologies**

Chair: Christoph U. Correll

Co-Chair: John W. Newcomer

- 8:00 a.m.      One Year Follow-up Longitudinal Study with a Large Sample of  
Antipsychotic-naïve Children and Adolescents  
*Celso Arango*
- 8:30 a.m.      The Value of Randomized Clinical Trials: Data from the  
Metabolic Effects of Antipsychotics in Children (MEAC) Study  
*Ginger E. Nicol*
- 9:00 a.m.      Mixed Methods in Health Services Research to Understand  
Real-world Acceptance of Safety Recommendations for  
Psychopharmacologic Treatments  
*Elaine H. Morrato*
- 9:30 a.m.      Economic Evaluation in Child Psychiatry---An Example from  
the Metabolic Effects in Antipsychotic Treatment of Children  
Study  
*Steven M. Kymes*
- 10:00 a.m.      Discussant: *John W. Newcomer*

PA

8:00 a.m. – 10:30 a.m.

Panel

Atlantic Ballroom 2

## Metabotropic Glutamate Receptors (mGluRs) and Addiction

Chair: Jill B. Becker

- 8:00 a.m.      Estradiol Influences Dopamine and GABA Release in the Striatum via mGluR5  
*Jill B. Becker*
- 8:30 a.m.      Estrogen Receptors Located at the Surface Membrane Activate Metabotropic Glutamate Receptor Signaling  
*Paul G. Mermelstein*
- 9:00 a.m.      Unique Roles for Ventral and Dorsal Striatum mGluR5 in Extinction Learning and Relapse to Cocaine Seeking  
*Lori A. Knackstedt*
- 9:30 a.m.      Restoration of Infralimbic mGluR2 Deficit Rescues Control Over Drug Seeking in Alcohol Dependence  
*Wolfgang H. Sommer*
- 10:00 a.m.     Discussant: *M. Foster Olive*

PA

8:00 a.m. – 10:30 a.m.

Panel

Atlantic Ballroom 1

**Affective Neuroscience of Young Monkeys to Developing  
Population: Translational Studies of Brain Function Informing  
Interventions**

Chair: Mani Pavuluri

Discussant: Richard Davidson

- 8:30 a.m. Identification of Novel Targets in the Developing Primate  
Amygdala for the Early Treatment of Childhood Anxiety  
*Ned H. Kalin*
- 8:30 a.m. Translational Imaging Studies of Natural Products as Treatments  
for Pediatric Depression  
*Perry Renshaw*
- 9:00 a.m. Brain Functional Mechanisms of Treating Pediatric Mania  
*Mani Pavuluri*
- 9:30 a.m. Amygdala Activation and Prefrontal Cortex Functional  
Connectivity: Potential Targets for Treatment of Autism  
Spectrum Disorders  
*Christopher S. Monk*
- 10:00 a.m. Discussant: *Richard Davidson*

PA

12:00 p.m. – 2:30 p.m.  
Panel  
Diplomat Ballroom 1 & 2

## **Functional and Structural Alterations in the Insula are Central to the Pathophysiology of Both Anorexia Nervosa and Obesity**

Chair: Guido KW. Frank

Co-Chair: Walter Kaye

- 12:00 p.m.     The Role of the Insular Cortex in Flavor Preference Formation  
*Dana Small*
- 12:30 p.m.     Pain and Pending Pictures: Increased Insula Response in  
Anorexia Nervosa  
*Alan Simmons*
- 1:00 p.m.     Regional Gray Matter Volumes in the Insula Distinguish  
Anorexia Nervosa and Obesity  
*Guido KW. Frank*
- 1:30 p.m.     Circuits Connecting Somatic/Visceral-Related Insular Areas with  
Eating/Reward Areas in the Ventromedial Prefrontal Cortex  
*Joseph L. Price*
- 2:00 p.m.     Discussant: *Martin Paulus*

PA

12:00 p.m. – 2:30 p.m.

Panel

Atlantic Ballroom 2

## Neuroimaging Predictors of Treatment Effects in High-risk and Bipolar Individuals across the Lifespan

Chair: Caleb Adler

- 12:00 p.m.      Neurobiological and Genetic Risk Factors for Antidepressant-induced Mania in Youth at Risk for Bipolar Disorder  
*Kiki Chang*
- 12:30 p.m.      Neurofunctional Effects of Ziprasidone in Manic Adolescents with Bipolar Disorder  
*Melissa DelBello*
- 1:00 p.m.        Neurophysiological Effects of Bipolar Medications across Mood State  
*Caleb Adler*
- 1:30 p.m.        White Matter Correlates of Antipsychotic and Lithium Response in Bipolar Disorder: A Meta-analysis and Meta-regression of Diffusion Tensor Imaging findings  
*Sophia Frangou*
- 2:00 p.m.        Discussant: *Ellen Leibenluft*

PA

12:00 p.m. – 2:30 p.m.

Panel

Atlantic Ballroom 3

## **Sink or Swim: Take Your Raft and Fyns Down the STEPs to Navigate NMDA Receptor Pools in Neuropsychiatric Disorders**

Chair: Jacqueline F. McGinty

- 12:00 p.m. Genetic Manipulation of Striatal Enriched Phosphatase (STEP) Rescues Behavioral Abnormalities and seizures in a Mouse Model of Fragile X  
*Janice R. Naegele*
- 12:30 p.m. Neuroprotective Role of STEP, a Brain-enriched Tyrosine Phosphatase, in Focal Cerebral Ischemia  
*Surojit Paul*
- 1:00 p.m. Fyn, Tyrosine Phosphatases and Alcohol Drinking Behaviors  
*Dorit Ron*
- 1:30 p.m. The Role of GluN2B Receptors and STEP in the ERK Shutoff Induced by Cocaine Self Administration in Rats  
*Jacqueline F. McGinty*
- 2:00 p.m. Discussant: *Paul J. Lombroso*

PA

12:00 p.m. – 2:30 p.m.

Panel

Regency Ballroom 2

**Non-invasive Brain Modulation to Enhance Inhibitory Control and Drive in Psychiatric Disorders: a Translational Approach with a Focus on Dopaminergic Modulation of Fronto-striatal Pathways**

Chair: Rita Goldstein

- 12:00 p.m.     The Effects of Modafinil and Methylphenidate in Neuropsychiatric Disorders  
*Barbara J. Sahakian*
- 12:30 p.m.     Oral Methylphenidate Improves Inhibitory Control and Resting-state Functional Connectivity in Cocaine Addiction: An fMRI Study  
*Rita Goldstein*
- 1:00 p.m.     Noninvasive Nonpharmacological Approach to Modulate Cognition and Decision Making in Addiction  
*Felipe Fregni*
- 1:30 p.m.     Dopaminergic Modulation in a Preclinical Model of Risky Decision Making  
*Barry Setlow*
- 2:00 p.m.     Discussant: *Ruben Gur*

PA

12:00 p.m. – 2:30 p.m.

Panel

Atlantic Ballroom 1

## Neuronal Mechanisms for Behavioral and Psychiatric Vulnerability in Adolescents

Chair: Bitá Moghaddam

Co-Chair: Patricio O'Donnell

- 12:00 p.m.    Neuronal Processing Differences in the Orbitofrontal Cortex and Striatum of Adolescents and Adults during Motivated Behavior  
*Bitá Moghaddam*
- 12:30 p.m.    Reward Network in Adolescents: Longitudinal Data and Functional Connectivity  
*Monique Ernst*
- 1:00 p.m.    Adolescent Maturation of Cortico-accumbens Circuits and Risk for Addictive Behavior  
*Patricio O'Donnell*
- 1:30 p.m.    Developmental Impairment of Local Prefrontal GABAergic Circuits by Altered Glutamatergic Transmission during Adolescence  
*Kuei Y. Tseng*
- 2:00 p.m.    Discussant: *Linda P. Spear*

PA

12:00 p.m. – 2:30 p.m.

Panel

Regency Ballroom 3

## The Orexins: Bench To Bedside and Beyond

Chair: David Michelson

- 12:00 p.m.     The Hypocretin/Orexin System: Neuropeptides Involved in Sleep/Wake and Multiple Other Functions  
*Thomas S. Kilduff*
- 12:30 p.m.     Role of Hypocretin/Orexin Receptors in Arousal Control  
*Luis de Lecea*
- 1:00 p.m.     Efficacy and Safety of Suvorexant, an Orexin Receptor Antagonist, in Patients with Primary Insomnia: Results from Three Phase 3 Trials  
*W. Joseph Herring*
- 1:30 p.m.     Orexin Agonists and Antagonists Effects beyond Insomnia  
*Thomas Roth*
- 2:00 p.m.     Discussant: *Andrew Krystal*

PA

12:00 p.m. – 2:30 p.m.

Panel

Regency Ballroom 1

## Microdomain-Specific Proteome Abnormalities in Severe Mental Illness

Chair: Robert McCullumsmith

12:00 p.m.    Playing in Traffic: Protein Trafficking and Membrane Domains  
in Polarized Cells

*Bettina Winckler*

12:30 p.m.    Identification and Characterization of a Putative Subcellular  
Microdomain: Evidence for Disruption of the Coupling  
of Glutamate Transporters and Glycolytic Enzymes with  
Mitochondria in Schizophrenia

*Robert McCullumsmith*

1:00 p.m.    Evidence from Proteomic Analysis of Schizophrenia Implicates  
the Cellular Process of Clathrin Mediated Endocytosis in  
Schizophrenia

*David Cotter*

1:30 p.m.    PSD Protein Partitioning is Altered in the DLPFC of  
Schizophrenia

*Chang-Gyu Hahn*

2:00 p.m.    Discussant: *Joseph Coyle*

PA