

CINP 2022 World Congress of Neuropsychopharmacology

Thursday, Jun 09 09:15 AM - 10:45 AM

S01 - Mechanisms of Stress Response at the Single Cell Resolution

Gustavo Turecki, Juan Pablo Lopez, Michael Meaney, Cristiana Cruceanu

Symposium

Session Abstract:Individual differences in stress reactivity, which are the single most powerful endophenotype for mood and anxiety disorders, are defined by the quality of early life experience. Increased stress reactivity associates with stable patterns of gene transcription and connections within a stress neural circuitry that includes, in addition to the hypothalamus-pituitary-adrenal axis, areas of the amygdala, hippocampus and prefrontal cortex. Early life stress affects patterns of gene expression that shape the development and function of this stress circuit, rendering individuals vulnerable to stress-induced mood and anxiety disorders. Recent technical developments have allowed the study of transcriptomics and regulatory mechanisms at ...

Thursday, Jun 09 09:15 AM - 10:45 AM

WS01 - Optimizing OCD Treatment in the Post COVID Era

Michael Van Ameringen, Bernardo Dell'Osso, Naomi Fineberg, Eric Hollander

Workshop

Abstract: Obsessive Compulsive Disorder (OCD) is a debilitating, chronic psychiatric disorder which typically emerges early in life and often manifests a chronic, impairing course, (Bürgy, 2019). Changes are taking place in OCD management in terms of conceptualization, diagnosis, assessment and interventions for optimizing the efficacy of pharmacotherapy along with exploration of novel therapeutic interventions. Despite the availability of effective treatments, the duration of untreated illness (DUI) in OCD is among the longest across psychiatric disorders (up to 10 years in adults), being associated with considerable suffering for patients and caregivers (Bürgy, 2019). Dr Dell'Osso will summarize literature studies on DUI ...

Thursday, Jun 09 09:15 AM - 10:45 AM

WS02 - Updates in the Guideline in Treatment Resistance in Bipolar Disorder

Kostas Fountoulakis

Workshop

Chair: Dr. Kostas Fountoulakis, , Greece

Thursday, Jun 09 11:00 AM - 12:00 PM

ISS01 - Satellite Symposium sponsored by Servier

Anxiety symptoms in depression: contemporary treatment approaches

Satellite Symposium

Chairman:Professor Tung-Ping SuCheng Hsin General Hospital · Dept of PsychiatryNo. 45, Zhenxing St., Beitou Dist., Taipei City 112401, Taiwan (R.O.C.)Speakers:Professor Dan J. Stein (Psychiatrist)University of Cape Town, South AfricaProfessor Malcolm Hopwood, (Prof of Psychiatry)Albert Road Clinic, AustraliaProfessor Chia-Ming Chang Gung Memorial Hospital, Taiwan (R.O.C.)Agenda:Introduction (5 mins)The Challenge Anxiety Symptoms Treatment in Major Depressive Disorder (15 mins)Evidence-based Pharmacotherapy of Anxiety Symptoms in Major Depressive Disorder (15 mins)What do Patient want in the Treatment of Major Depressive Disorder? (Taiwan's Tailor Survey) (15 mins)Discussion and Closing (5 mins)

Thursday, Jun 09 12:15 PM - 01:45 PM

WS03 - 2021 International Update on Acute and Long-term Treatment of Schizophrenia: New Data and New Approaches

Ira Glick, Christoph Correll, Leslie Citrome, W. Wolfgang Fleischhacker

Workshop

Abstract: Although there continues to be slow progress in understanding the etiology of schizophrenia, there have been important advances in acute and long term treatment. This symposium will cover some of these changes – with a focus on "dos and don'ts" of management. At the conclusion of this symposium, participants will be aware of: • new data and new management approaches for the effects of dose decrease on relapse risk, risk factors for relapse, and medication treatment with oral antipsychotics and LAIs • data on dosing and choice of drug for acute and maintenance treatment • treatment of agitation and ...

Thursday, Jun 09 12:15 PM - 01:45 PM

WS04 - Advancing Psychopharmacology Research in Autism Spectrum Disorder

Antonio Persico, Benedetto Vitiello, Celso Arango, Hilgo Bruining

Workshop

Abstract: Psychotropic medications are frequently prescribed in clinical practice to manage the behavioral correlates encountered in autism spectrum disorder (ASD), but no medication has as yet proven effective on core symptoms of the disorder. This is due to the heterogeneity of ASD, but also to the paucity of appropriate experimental data. Because of its high emotional burden, parents are often prone to use treatments that have little or no scientifically confirmed basis. Efforts are underway to develop ASD targeted medications that are built on a mechanism-based rationale, rather than serendipity.1 This symposium will summarize state-of-the-art knowledge on the clinical psychopharmacology ...

Thursday, Jun 09 12:15 PM - 01:45 PM

WS05 - PTSD Prevention Meets the Golden Hours

Eric Vermetten, Kerry Ressler, Joseph Zohar, Katharina Schultebraucks, Iryna Frankova

Workshop

Asbtract: Are there "Golden Hours" in the aftermath of exposure to terror? What is unique about PTSD is that many times we can pin-point exactly when it started. Intervention which may change the consolidation of the traumatic memory has the potential to be used as secondary prevention and to alter favorably the trajectory. In this symposium, presentations from both pre-clinical and clinical domains will be used to illustrate the importance of the concept of the "Golden Hours", creating opportunities for early assessment and intervention. Dr Kerry Ressler will present on the science of fear consolidation. Decades of work has expanded ...

Thursday, Jun 09 02:00 PM - 03:00 PM

ISS02 - Satellite Symposium sponsored by Janssen

ASPIRE to improve the management of MDD with suicidal ideation

Satellite Symposium

Brief Description: This Janssen Asia Pacific symposium at the upcoming 33rd CINP Hybrid World Congress of Neuropsychopharmacology is one you would not want to miss! Presentations will shed light on the role of novel rapidacting antidepressants in the management of major depressive disorder (MDD) with suicidal ideation (MDSI), a condition that represents a particularly vulnerable and hard-to-treat patient population which requires urgent treatment, and where current routine standard of care medications are inadequate. Our distinguished speakers will also share on their real-world experience, and discuss practicalities with the management of MDSI.Chairman:Prof Cheng-Ta LI - TaiwanNational Yang Ming Chiao Tung University, ...

Thursday, Jun 09 03:15 PM - 03:45 PM

Opening and Awards Ceremony

Thursday, Jun 09 03:45 PM - 04:45 PM

PL01 - Plenary Lecture 1

Pierre Blier, Francesco Benedetti

Plenary Lecture

Speaker: Prof. Francesco Benedetti, University Vita-Salute San Raffaele, MilanoChair: Prof. Pierre Blier, University of Ottawa Institute of Mental Health Research, CanadaAbstract: Immunopsychiatry can be defined as the study of immune-inflammatory pathways in order to identify pathogenetic mechanisms, and targets for treatment in psychiatric conditions. We can affirm that COVID-19 survivors show persistent psychopathology and neurocognitive impairment in around 35% of patients. The cluster of Post-Acute Sequelae of COVID-19 (PASC) symptoms typically emerge after the acute phase of illness, when patients are no longer positive to SARS-CoV-2, including dyspnoea, hypoxia, joint and muscle pain, paraesthesia, dysgeusia, anosmia, fatigue. Unrelated to the ...

Friday, Jun 10 06:15 AM - 07:15 AM

PL02 - Plenary Lecture 2

Noriko Osumi, Masashi Yanagisawa

Plenary Lecture

Speaker: Prof. Masashi Yanagisawa, The University of Tsukuba, JapanChair: Prof. Noriko Osumi, Tohoku University, Japan

Friday, Jun 10 07:30 AM - 09:15 AM

S02 - Strategies for Precision Prescribing in Psychiatry

Daniel Mueller, Siegfried Kasper, Chad Bousman, Miriam Schiele, Nlna Kraguljac

Symposium

Abstract: Prof. Siegfried Kasper: Title: Clinical Subtypes in prescribing precision psychopharmacology Presentation overview: A staging model for precision psychopharmacology will be provided including insufficient response, treatment resistant depression, refractory depression and chronic depression. RCTs demonstrated that augmentation with D2/5HT2 antagonists, formerly called atypical antipsychotics, improved the treatment outcome of patients demonstrating insufficient response to a first antidepressant trial. Based on the data obtained from the European Group for the Study of Resistant Depression (GSRD) on 2.762 patients it is evident that specific illness characteristics are associated with treatment resistant depression, a condition which has been demonstrated in RCTs to respond ...

Friday, Jun 10 07:30 AM - 09:15 AM

S03 - Impulsive-Compulsive Disorders: Where Neurobiology Meets Evidencebased Treatment

Samuel Chamberlain, Dan Stein, Naomi Fineberg, Jon Grant

Symposium

Abstract: Impulsivity (tendency towards unduly hasty, premature behaviors with untoward consequences) and compulsivity (tendency towards repetitive habits), occur across multiple prevalent but neglected mental disorders, and also in the background population. Professor Chamberlain would introduce the concepts of impulsivity and compulsivity, including current diagnostic conceptualizations and complementary measurement approaches using questionnaires and cognitive testing (including newly developed clinical outcome scales). He would present new as yet unpublished data from a longitudinal epidemiological cohort of young adults, demonstrating the existence of latent phenotypes of impulsivity and compulsivity, which are separable and have different longitudinal antecedents and genetic associations. Professor Stein would ...

Friday, Jun 10 07:30 AM - 09:15 AM

S04 - Unprecedented Roles of α6 Subunit-containing GABAA Receptors in Neuropsychiatric Disorders

Toshitaka Nabeshima, Lih-Chu Chiou, Akihiro Mouri, Jung-Chieh Du, Ming Tatt Lee

Symposium

Asbtract: For decades since its discovery, the $\alpha 6$ subunit-containing GABAA receptor ($\alpha 6$ GABAAR) was thought to be limitedly expressed in cerebellar granule cells, and its role is the nervous system was largely unknown, partly due to the absence of $\alpha 6$ GABAAR-selective ligands. In 2014, with the discovery of the first $\alpha 6$ GABAAR-selective positive allosteric modulators (PAMs) – pyrazoloquinolinones (PQ), especially using Compound 6, a multinational research consortium was formed to unravel the physiological and/or pathological roles of $\alpha 6$ GABAARs. Our findings, combined with previous relatively scattered literatures of $\alpha 6$ GABAAR, was recently compiled into a review article and has been accepted by the reputable Pharmacological ...

Friday, Jun 10 07:30 AM - 09:15 AM

TSBPN A - Neuroinflammation in Mood Disorder: Epidemiology, Neuroimaging, Cognition, Genetic and Treatment

Ya-Mei Bai, Po See Chen, Kuan-Pin Su

TSBPN Sessions

Agenda:Neuroinflammation in Mood disorder: epidemiology, neuroimaging and cognitionYa-Mei Bai, Department of Psychiatry, National Yang Ming Chiao-Tung University and Taipei Veterans General Hospital, TaiwanRoles of CRP polymorphisms and life event changes on cognitive function in bipolar patients receiving valproatePo See Chen, Department of Psychiatry, National Cheng Kung University Interplay between Stress, Inflammation and Nutrition in DepressionKuan-Pin Su, Department of Psychiatry, College of Medicine, China Medical University & College of Medicin

Friday, Jun 10 09:30 AM - 10:30 AM

ISS03 - Satellite Symposium sponsored by Otsuka

Understanding Long-Acting Injectable Antipsychotics for Optimal Management of Mental Disorders

Satellite Symposium

Brief Description:Long-Acting Injectable (LAI) antipsychotics are commonly used in the treatment of psychotic disorders (Schizophrenia or Bipolar Disorders) to improve clinical outcomes. Compared with oral administration, there is growing evidence of their effectiveness in preventing relapse and rehospitalization, and in decreasing the negative consequences of poor adherence during the early phases of the illness. However, multiple barriers to using LAI in patients have been identified due to the lack of knowledge about LAI.Shared Decision-Making (SDM) is a health communication approach focusing on patient-clinician interactions around treatment decisions, with the goals of improving clinical and functional outcomes and providing personalized care.Prof. ...

Friday, Jun 10 10:45 AM - 11:45 AM

FT01 - Full Psychedelic Dose or Microdosing

Tomas Palenicek, Katrin Preller, Kim Kuypers, Zachary Walsh, Manoj Doss, Rafael Dos Santos

Focus Topics

Abstract: Serotonergic psychedelics are recently gaining lots of attention as potential therapeutic agents in a variety of neuropsychiatric disorders. Most intriguing results have been observed in depression, where they technically defined a novel class of drugs, so-called "rapid-onset acting antidepressants". These drugs are characteristic with an onset of effect within hours or days after one dosing session with a fully psychoactive dose. Even though several hypotheses on underlying mechanisms such as effects on neuroplasticity or brain entropy were postulated, our understanding of this domain is limited. In contrast to the standard dosing with full psychedelic doses, the relatively new phenomenon ...

Friday, Jun 10 10:45 AM - 11:45 AM

MTE01 - Meet the Expert 1 - NbN

Joseph Zohar

Meet the Experts

Speaker: Prof. Joseph Zohar, Chaim Sheba Medical Center, Israel

Friday, Jun 10 10:45 AM - 11:45 AM

Rafaelsen Symposium

Rafaelsen Symposium

Friday, Jun 10 10:45 AM - 11:45 AM

TSBPN B - Biomarker Neurofilament Light Chain in Neuropsychiatric Diseases

Yu-Li Liu, Mu-Hong Chen, Ming-Chyi Huang

TSBPN Sessions

Friday, Jun 10 12:00 PM - 01:00 PM

ISS04 - Satellite Symposium sponsored by Sumitomo Pharma

Peripheral and Central Biological Substrates Associated with Cognitive Deficits in Patients with Mental Disorders: Novel Targets for Pharmacological Interventions

Satellite Symposium

Brief Description: Exposure to stress early life represents a major environmental factor for the development of psychiatric disorders later in life and represents also the most impactful and established clinical risk factor for cognitive dysfunction across diseases. Moreover, several studies have highlighted the association between exposure to stress and alterations in sleep architecture as well as in the functionality of the immune system, suggesting that their alterations could represent an early biological substrate for the onset of several psychiatric disorders. Annamaria Cattaneo will first show how sleep disorders occur at a high rate in early onset psychosis, and in affective ...

Friday, Jun 10 01:15 PM - 03:00 PM

S05 - Opioid Pharmacology Updates: Toward Precision Pharmacotherapy

Kazutaka Ikeda, Henry Kranzler, Tuan Trang, Yu-Li Liu

Symposium

Abstract: Opioids provide potent pain relief, but they also produce clinically significant adverse effects, including respiratory depression and dependence. The widespread use of opioids is a major problem in many countries. In the Philippines, extreme measures are being used to address drug problems. In the United States, there were over 69,000 opioid-related deaths in 2020 and efforts are being made on multiple levels to address the epidemic. Although appropriate prescribing of opioids is a key element in addressing opioid-related deaths, there are large individual differences in opioid sensitivity, limiting the potential for personalized dosing. Understanding the mechanisms underlying opioid effects ...

Friday, Jun 10 01:15 PM - 03:00 PM

S06 - Sex/Gender Differences in Adolescent Brain, Behavior, and Mental Health

Jay Giedd, Lara Wierenga, Amber Ruigrok, Lia Ferschmann

Symposium

Abstract: Sex/Gender Differences in Adolescent Brain, Behavior, and Mental Health The topic of sex/gender differences in brain and behavior is one of the most prominent, enduring, and controversial themes in all of neuroscience. Books and media for the general public or educators often overplay the extent of the differences with sweeping generalizations and little regard for data. Even if the science is sound there is a substantial risk that the results will be misinterpreted or oversimplified in ways that bring harm. Despite reasons to avoid this area of inquiry there are also compelling reasons to pursue it. It is not ...

Friday, Jun 10 01:15 PM - 03:00 PM

S07 - Synaptopathy Mechanisms in Psychiatric Disorders

Eunjoon Kim, Yi-Ping Hsueh, Zhen Yan, Shawn Je

Symposium

Abstract: Neuronal synapses mediate synaptic transmission at excitatory and inhibitory synapses. Various synaptic proteins mediate the development, function, and plasticity of neuronal synapses. In addition, many synaptic proteins have been implicated in diverse neuropsychiatric disorders including intellectual disability (ID), ADHD, schizophrenia, autism spectrum disorders (ASD), and emotional disorders. This session is composed of four speakers who have been studying the fundamental neurobiological functions of various synaptic proteins as well as the mechanisms underlying the neuropsychiatric disorders associated with these synaptic proteins. This session will thus emphasize the emerging notion that defects in synaptic proteins can cause psychiatric disorders, namely "synaptopathies", ...

Friday, Jun 10 01:15 PM - 03:00 PM

TSBPN C - New Insights into the Mechanisms and Treatment of Methamphetamine Use Disorder

Ming-Chi Huan, Rebeccan McKetin, Hiroko Kotajima-Murakami, Shin-Chang Kuo, Yen-Feng Lin

TSBPN Sessions

Friday, Jun 10 03:15 PM - 04:15 PM

PL03 - Absolutely on Mental Health: Conversations between Audrey Tang and Pierre Blier

Kazutaka Ikeda, Audrey Tang, Pierre Blier

Plenary Lecture

Speakers:Minister Audrey Tang, Digital Minister, TaiwanProf. Pierre Blier, University of Ottawa Institute of Mental Health Research, CanadaChair: Prof. Kazutaka Ikeda, Tokyo Metropolitan Institute of Medical Science, JapanAbstract: As a world-renowned genius and the world's first nonbinary and openly transgender cabinet member, Taiwan's Digital Minister Audrey Tang successfully applies the technology in the COVID-19 prevention in Taiwan. She develops digital social innovation tools to help Taiwan health and disease control government officials efficiently and quickly track and control the spread of the virus. At the 33rd CINP world congress of neuropsychopharmacology, Minister Tang will have a brilliant conversation with CINP President ...

Friday, Jun 10 04:30 PM - 05:30 PM

FOA01 - Featured Oral Session 1

Tung Ping Su, Chih-Ming Cheng, Ming-Chyi Huang, Jane Pei-Chen Chang, Fan-Hsuan Kung

Features Oral Abstracts

Chair: Prof. Tung Ping Su, Department of Psychiatry, Faculty of Medicine, National Yang Ming Chiao Tung University, TaiwanAgenda:Antidepressant and Anti-anxiosomatic Effect of Prolonged Intermittent Theta-Burst Stimulation Monotherapy for Medication and Conventional TMS-Resistant Major Depression: A Three-Arm, Randomized, Double-Blind, Sham-controlled StudyMr. Chih-Ming Cheng, Taipei Veterans General Hospital, TaiwanIncreased Neuroaxonal Injury in Ketamine-dependent Patients Comorbid with Major Depressive Disorder (MDD) Relative to Drug-naïve Patients with MDDDr. Ming-Chyi Huang, Taipei City Psychiatric Center, TaiwanInflammation in children with ADHD: from HPA axis, Inflammatory biomarkers to neurotrophinsDr. Jane Pei-Chen Chang, China Medical University Hospital, TaiwanProspective risk and protective factors associated with progression from major depression ...

Friday, Jun 10 04:30 PM - 05:30 PM

FOA02 - Featured Oral Session 2

Lucie Bartova, Eliyahu Dremencov, Helen Collins, Lucie Bartova, Benjamin Eggerstorfer

Features Oral Abstracts

Chair: Dr. Lucie Bartova, Medical University of Vienna, AustriaAgenda: Sex-specific effect of perinatal mirtazapine administration and pregestational stress on the excitability of serotonergic neurons in ratsDr. Eliyahu Dremencov, Center of Biosciences, Slovak Academy of Sciences, Slovak RepublicInvestigation of the effect of paroxetine discontinuation on extracellular 5-HT using in vivo microdialysis in miceMs. Helen Collins, University of Oxford, United KingdomSocio-demographic and Clinical Correlates of Late-onset Depression - Results from the European Group for the Study of Resistant Depression Dr. Lucie Bartova, Medical University of Vienna, Austria Neuroinflammation in major depression: a meta-analysis of molecular imaging studies of translocator proteinDr. Benjamin Eggerstorfer, ...

Saturday, Jun 11 09:00 AM - 05:30 PM

In-person Live in Taiwan

Happening Live in Chang Yung-Fa Foundation International Convention Center (10th Floor), Taiwan

Saturday, Jun 11 12:00 PM - 01:00 PM

ISS05 - Satellite Symposium sponsored by Sumitomo

Reasons Why People with Schizophrenia Do Not Socially Engage: Problems in Ability versus Deficits in Motivation

Satellite Symposium

Brief Description: Individuals with schizophrenia exhibit impaired ability to process social information, also referred to as social cognition. Types of social cognitive impairments include difficulty in identifying emotions, inferring people's thoughts, and reacting in an emotionally appropriate way to others. These impairments interfere with social connections and are strong determinants of impaired daily functioning for individuals with schizophrenia. In addition to social processing problems, people with schizophrenia also have deficits in social motivation – that is, they are less inclined to engage socially with their environment and do not look forward to social interactions as much as other people do. ...

Saturday, Jun 11 01:15 PM - 02:15 PM

FT02 - Bias in Reporting of Research in Psychiatry

Mark Weiser, Alexandra Philipsen, Andreas Meyer-Lindenberg, Marcus Munafò

Focus Topics

Abstract: Publication bias occurs when study results influence whether or not a study is published; outcome reporting bias occurs when authors selectively report or change outcomes. Both undermine clinical research by distorting the biomedical evidence base towards positive studies. Publication bias and outcome-reporting bias may overestimate treatment effects, and damage clinical practice with unproven therapies, expose patients unnecessarily to the risks and inconveniences of research procedures, and hinder drug development, as scientists are unable to learn from one another's experiences, repeat unpublished negative studies, in addition to wasting funding and resources. This symposium will present an overview of this issue, ...

Saturday, Jun 11 01:15 PM - 02:15 PM

MTE02 - Meet the Experts 2 - TSBPN

Shigeto Yamawaki, Tung Ping Su

Meet the Experts

Chair: Dr. Shigeto Yamawaki, Hiroshima University, JapanSpeaker: Prof. Tung Ping Su, Department of Psychiatry, Faculty of Medicine, National Yang Ming Chiao Tung University, Taiwan

Saturday, Jun 11 01:15 PM - 02:15 PM

FOA03 - Featured Oral Session 3

Ming-Chyi Huang, Chau-shoun Lee, Kotaro Hatta, Laidi Kan, Malcolm Hopwood

Features Oral Abstracts

Chair: Dr. Ming-Chyi Huang, Taipei City Psychiatric Center, TaiwanAgenda:Alcohol use and risk of Parkinson disease using multi-state process analyses: a community-based population studyDr. Chau-shoun LEE, Mackay Memorial Hospital and Mackay Medical College, TaiwanReal-world effectiveness of antipsychotic patches on delirium prevention in 103 patients with delirium on the night before a consultation and with refusal to oral medicationsProf. Kotaro Hatta, Juntendo University Nerima Hospital, JapanEffects of left DLPFC rTMS across neuropsychiatric disorders: a systematic review and meta-analysis of randomized controlled trialsMs. Laidi KAN, The Hong Hong Polytechnic University, ChinaTarget Antidepressant Initiation choice to unlock better patient Outcomes and Response (TAILOR): Patterns ...

Saturday, Jun 11 02:30 PM - 03:30 PM

PL04 - Neural Mechanisms Underlying Ketamine's Mode of Action

Gabriella Gobbi, Hailan Hu

Plenary Lecture

Speaker: Dr. Hailan Hu, Zhejiang University, ChinaChair: Prof. Gabriella Gobbi, McGill University, Montreal, CanadaAbstract: Ketamine, the N-methyl-D-aspartate receptor (NMDAR) antagonist, has revolutionized depression treatment because of its robust, rapid and sustained antidepressant effects. Recently, it was discovered that ketamine inhibits the NMDAR-dependent burst firing of the brain's anti-reward center, the lateral habenula (LHb). By silencing the LHb bursts, ketamine can disinhibit the aminergic reward circuits downstream of LHb to exert its rapid antidepressant effects. However, at least three key questions have remained unaddressed. Firstly, does blockade of LHb burst firing contribute to ketamine's sustained antidepressant effects? Despite of its rapid metabolic ...

Saturday, Jun 11 03:45 PM - 05:30 PM

S08 - Neurobiology of Rapid Antidepressant Response

Siegfried Kasper, Carlos Zarate, Chiara Fabbri, Irina Esterlis, Tomi Rantamaki

Symposium

Abstract: New medications will be presented by Carlos Zarate, a pioneer in the field. The underlying genetics will be presented by Chiara Fabbri based on European as well as US studies on clinical as well as genetic variables. Anissa Abi-Dargham will uncover the imaging results which may underly the rapid antidepressant response. Furthermore Tomi Rantamaki will elaborate on the sleep wake chicly which promises to further understand the rapid antidepressant effect and possible mechanisms to block this effect. Chair: Prof. Siegfried Kasper, Medical University Vienna, Center for Brain Research, AustriaAgenda: New Medication for Rapid Antidepressive EffectDr. Carlos Zarate, NIMH, Center for Brain

Saturday, Jun 11 03:45 PM - 05:30 PM

S09 - Advances from the AIMS-2-TRIALS Consortium: Identifying and Validating Stratification Biomarkers and Mechanisms Underpinning Symptomatology to Enhance Clinical Trials in Autism

Grainne McAlonan, Christine Ecker, Viola Hollestein, Celso Arango

Symposium

Abstract: Autism Spectrum Disorder (ASD) is a lifelong, heterogeneous neurodevelopmental condition, with estimated prevalence of at least 1%. Despite their impact on everyday functioning and quality of life, there are currently no pharmacological intervention options for autism core symptoms; and limited treatment options for frequently co-occurring medical (e.g. epilepsy) and mental problems. To make progress, it is necessary that we: i) identify stratification markers – objective tests or measures that can parse autism into more clinically relevant biological subgroups to better target treatments; ii) develop a better understanding of the mechanisms underpinning symptoms and how these may be modulated with ...

Saturday, Jun 11 03:45 PM - 05:30 PM

S10 - Novel Brain Imaging Strategies to Assess Pathophysiology and Treatment Effects in Neuropsychiatric Disorders

Hiroyuki Uchida, Takuya Takahashi, Euitae Kim, Michael Bloomfield

Symposium

Abstract: Recent advances in brain imaging techniques have drastically moved the field forward and enhanced our understanding of mechanisms underlying psychosis and treatment. In this session, the presenters will show the most recent evidence on AMPA, glutamate, and dopamine in neuropsychiatric disorders to provide new insights into pathophysiology of these disorders and potentially new treatment approaches. While the brain imaging technique has become a very popular tool for the research of neuropsychiatric disorders, this symposium will provide the knowledge on, not only brain imaging itself, but also its application to clinical practice and research. Since the cloning of AMPARs approximately ...

Saturday, Jun 11 05:45 PM - 07:30 PM

S11 - Ketamine, MDMA and Psilocybin: New Uses of Psychedelic Compounds in Treatment of Anxiety and PTSD

Eric Vermetten, Joshua Woolley, Adriana Feder, Jennifer Mitchell



Abstract: There are few medications with demonstrated efficacy for the treatment of posttraumatic stress disorder (PTSD). Treatment guidelines have designated psychotherapy as a first line treatment for PTSD. Yet, even after psychotherapy, PTSD often remains a chronic illness, with high rates of psychiatric and medical comorbidity. Meanwhile, the search for and development of drugs with new mechanisms of action has stalled. Therefore, there is an urgent need to explore not just novel compounds but novel approaches for the treatment of PTSD. Promising new approached involves the use of psychedelic drugs. This panel presents 3 types of compounds: 3,4-methylenedioxymethamphetamine, ketamine, and ...

Saturday, Jun 11 05:45 PM - 07:30 PM

S12 - Regulation of NMDA Receptor-mediated Neurotransmission, its Role in CNS Disorders and Novel Therapeutic Interventions

Joseph Coyle, Emil Tsai, Sukhvir Wright, Toru Nishikawa

Symposium

Abstract: N-methyl-D-aspartic receptor (NMDAR) is the paramount regulator of neuroplasticity. It is required for long-term potentiation)/depression (LTP/LTD), cognition, learning and memory. D-serine is the primary co-agonist for the NMDAR in the mammalian forebrain. D-serine is synthesized by serine racemase (SR), which is encoded by SRR gene, a risk gene for schizophrenia, and catabolized by D-amino acid oxidase (DAAO). While historically considered a "glial transmitter," immunocytochemical and molecular studies have provided compelling evidence that SR is expressed by neurons in the forebrain, implying that it is a "co-transmitter" with glutamate. Recent immunocytochemical studies indicate that SR is localized to dendrites and ...

Saturday, Jun 11 05:45 PM - 07:30 PM

S13 - Biological Markers in Depression: From Animals to Humans

Gabriella Gobbi, Gustavo Turecki, Argel Aguilar-Valles, Stefano Comai, Jennifer L. Phillips

Symposium

Abstract: Depression is a mental disease characterized by low mood, anhedonia, anxiety, fatigue, negative thoughts, and depressive disorders are among the most common psychological conditions. They have significant implications for the quality of life of affected individuals and their families and are associated with elevated health care costs. Recently, several preclinical and clinical studies highlighted that several biomarkers, cytokines, neurotransmitters and genetic factors can influence brain function and behavior with correlative implications for diagnosing and treating patients with depression. Combining behavioral, neurophysiological and biomolecular techniques, this symposium in the context of the 32nd Congress of Collegium International Neuropsychopharmacology will offer, ...

Saturday, Jun 11 07:45 PM - 08:45 PM

PL05 - Inflammation and Depression: Questions of Causality

John Krystal, Edward Bullmore

Plenary Lecture

Speaker: Dr. Edward Bullmore, University of Cambridge, United KingdomChair: Dr. John Krystal, Yale School of Medicine, USAAbstract: Inflammation is robustly associated with depression and other mental health disorders. However, there are many open questions about the causal relationships that might explain the increasing mass of largely correlational findings. I will review several approaches to causality in the context of human research, including neuroimaging studies, meta-analyses of anti-depressant effects of anti-inflammatory drugs, and epigenetic activation of GWAS variants for risks of mental health disorders. I will also explore the hypothetical model that early life adversity and other social stressors could perturb ...

Sunday, Jun 12 09:00 PM - 10:00 PM

PL06 - Unraveling the mystery of central nervous system consequences of COVID-19: What do we know and what do we need to learn?

John Krystal, Serena Spudich

Plenary Lecture

Speaker: Dr. Serena Pudich, Yale University, United StatesChair: Dr. John Krystal, Yale School of Medicine, USABackground: During acute COVID-19, patients can experience ischemic cerebrovascular disorders, encephalopathy, and prolonged unconsciousness and altered mental states, including psychosis and delirium. Some individuals also develop a loss of smell and taste, myalgias and fatigue, or neuromuscular disorders. Many patients also experience post-acute COVID neurologic and psychiatric issues. These include prolonged symptoms of fatigue, memory concentration disorder, headache, pain, insomnia, anxiety, and depression. Aims & Dejectives This talk will cover neurologic reports in acute COVID-19, existing knowledge regarding acute COVID-19 neuropathogenesis, and describe the clinical syndromes and ...

Sunday, Jun 12 10:15 PM - 11:59 PM

TSBPN D - Updates on Treatment-Resistant Depression (TRD) and Advanced Interventions: Non-Invasive Brain Stimulation and Ketamine

Cheng-Ta Li, Paul Fitzgerald, Chris Baeken, Tung-Ping Su

TSBPN Sessions

Sunday, Jun 12 10:15 PM - 11:59 PM

S14 - Moving Forward in Discovering Pharmacological Treatments for Psychiatric Disorders

Pierre Blier, Anthony Phillips, Wayne Drevets, Fei Li, Nora Volkow

Symposium

Abstract: Schizophrenia, depression, epilepsy, dementia, alcohol dependence and other mental, neurological and substance-use (MNS) disorders constitute 13% of the global burden of disease, greater than both cardiovascular disease and cancer (Collins et al 2011). In any given year, nearly 40% of the population in 30 European countries is affected by mental health disorders. And yet, the world is experiencing a crisis in drug development for mental illness due to drug companies having withdrawn from the field or having redirected their investments (Insel et al,2012; Anderson et al 2014). Given the cost and time to develop new treatments, there is a ...

Sunday, Jun 12 10:15 PM - 11:59 PM

S15 - Advancing Drug Discovery for Unmet Medical Needs in Schizophrenia: From Cell Lines, Brain Organoids, Mouse Models to Patients

Wen-Sung Lai, Toshitaka Nabeshima, Kiyofumi Yamada, Bin Xu

Symposium

Abstract: Schizophrenia is a costly and devastating mental disorder that affects up to 1% of the population worldwide. However, there have been no major breakthroughs in the treatment of schizophrenia in the last 60 years. This debilitating brain disorder typically emerges in late adolescence and early adulthood which characterized by three main symptoms: positive symptoms (e.g., delusions, hallucinations, disorganized speech, catatonic or bizarre behaviors etc.), negative symptoms (e.g., affective flattening, anhedonia, alogia, avolition, asociality etc.), and cognitive deficits. Generally speaking, positive symptoms of schizophrenia often respond well to antipsychotic drugs. Negative symptoms of schizophrenia can often linger or worsen over ...

Sunday, Jun 12 10:15 PM - 11:59 PM

S16 - Novel Mechanisms Linking Stress and Mental Illness

Maurizio Popoli, Tomoyuki Furuyashiki, Isabelle Mansuy, T.Z. Baram

Symposium

Abstract: This session will focus on emerging crucial and complementary mechanisms linking stress and mental illness including neuroinflammation, roles of sex and estrogen, synaptic/circuitry dysfunction and transgenerational epigenetics. Furuyashiki will show how chronic stress due to aversive social/environmental stimuli induces inflammatory responses in the brain, which underlie neuronal and behavioral consequences of chronic stress. Using repeated social defeat stress, they recently identified crucial roles of innate immune receptors TLR2/4 in prefrontal microglia for stress-induced neuronal and behavioral changes. They will present their recent findings about how chronic stress activates innate immune signaling in microglia, augments microglial activation through transcriptional and ...

Monday, Jun 13 12:15 AM - 01:15 AM

TSBPN E - Using Genomic Data and Machine Learning Approaches to Tackle Psychiatry Disorders

Yen-Feng Lin, Yen-Chen Anne Feng, Jun-Ding Zhu, Chen-Jung Chang

TSBPN Sessions

Monday, Jun 13 12:15 AM - 01:15 AM

FT03 - Racial/Ethnic Differences in Pharmacogenetics

Shih-Ku Lin, Rachel Tyndale, Chin Bin Eap, Mark A. Frye

Focus Topics

Abstract: Genetic variation accounts for a substantial degree of risk for psychiatric disorders, and also the treatment response and side effects. Racial and ethnic genetic differences may play an important role in psychopharmacology. Genetic variation substantially impacts many drug dependences, illustrated here by Dr Tyndale using smoking. Nicotine is inactivated by the hepatic enzyme CYP2A6; slow (vs fast) metabolizers are less likely to be smokers, smoke fewer cigarettes per day, inhale less deeply, and have reduced neuroplastic changes. CYP2A6 also alters spontaneous, behaviorally-assisted and pharmacotherapy-assisted smoking cessation. The loss of function CYP2A6 alleles differ substantially in frequencies among ancestral groups ...

Monday, Jun 13 12:15 AM - 01:15 AM

MTE03 - Meet the Expert 3

Pierre Blier

Meet the Experts

Monday, Jun 13 12:15 AM - 01:15 AM

FOA04 - Featured Oral Session 4

Noboru Hiroi, Matej Murgaš, Ana Weidenauer, Janet Wozniak, Lynnette Averill

Features Oral Abstracts

Chair: Dr. Noboru Hiroi , United States of AmericaAgenda:Bilateral theta-burst stimulation affects 5-HT1A receptor binding in the dorsolateral prefrontal cortex in treatment resistant depressionMr. Matej Murgaš, Medical University of Vienna, Department of Psychiatry and Psychotherapy, AustriaSeasonal patterns of dopamine receptors: A [11C]-(+)-PHNO PET studyDr. Ana Weidenauer, Medical University of Vienna, AustriaLong Term Outcomes of Pediatric Bipolar-I Disorder: A Prospective Follow-Up Analysis Attending to Full Syndromatic, Subsyndromal and Functional Types of RemissionDr. Janet Wozniak, Massachusetts General Hospital, United States of AmericaClinical Evidence for the Use of Methylone in the Treatment of PTSD: A Case Series with Long-Term Follow-up Dr. Lynnette Averill, ...

Monday, Jun 13 01:30 AM - 03:15 AM

TSBPN F - Glutamate and Mental Health

Yen-Kuang Yang, Li-Chung Huang, Muhammad Abdullah, Shih-Hsien Lin

TSBPN Sessions

Monday, Jun 13 01:30 AM - 03:15 AM

S17 - Antidepressants in Depression: What Do They Do and How Do They Do It?

Fredrik Hieronymus, Susannah Murphy, Jakob Näslund, Soren Dinesen Ostergaard

Symposium

Abstract: The last decade has seen many developments concerning the nature of the short-term response to antidepressant treatment, as well as to the mechanisms potentially underpinning and mediating this response. This symposium will attempt to summarize these new findings by providing an overview of studies addressing the very rapid (hours to days) to short-term (weeks) effects of antidepressant treatment. The symposium will conclude by relating these results to the ongoing controversy regarding the value of antidepressant treatment. The first session will focus on recent developments regarding the very rapid psychological effects of antidepressant treatment and how these relate to affective ...

Monday, Jun 13 01:30 AM - 03:15 AM

S18 - The Interplay of Stress Cascade and NMDAR Dysfunction in the Pathogenesis of Mental Disorders: Identifying Novel Antioxidants and NMDAR Modulators for Treatment and Diagnosis

Hsien-Yuan Lane, Kim Do, Kenji Hashimoto, Chieh-Hsin Lin

Symposium

Abstract: Stress-associated cascades (e.g., immune/inflammation, oxidative stress) and NMDAR-related dysfunction are interdependently involved in the pathogenesis of mental disorders such as schizophrenia, depression, and dementia. This symposium will highlight recent clinical trials (RCT) with antioxidants and NMDAR modulators and their underlying mechanisms in models, paving the way for biomarker guided early detection and treatment. Kenji Hashimoto will review novel strategies such as D-serine, and antioxidant and anti-inflammatory compounds (such as glucoraphanin, TrkB agonist 7,8-dihydroxynflavone (7,8-DHF), soluble epoxide hydrolase inhibitor) for preventing the onset of psychosis in the adult offspring after maternal immune activation (MIA).1-4 Expression of BDNF-TrkB signaling and soluble ...

Monday, Jun 13 01:30 AM - 03:15 AM

S19 - Advances in Multi-scale Approaches to Neuropsychiatric Disease

Anthony A. Grace, Mallar Chakravarty, Gemma Modinos, Akiko Hayashi-Takaqi, Aurina Arnatkeviciute

Symposium

Abstract: Bridging scales in neuroscience, from the level of proteins and molecules to cells to large-scale networks and to behaviour, is an important endeavour in broadening our understanding of how the brain works in health and disease. Modern datasets are arriving with unprecedented, exquisite detail, and are often multimodal in nature, presenting opportunities to study scales and levels concurrently. This session provides an in-depth view into the state-of-the-art of novel tools and approaches bridging the gap between genes and the structural and functional organization of the brain as well as the neuropharmacology of major neuropsychiatric disorders. The symposium will also ...

Monday, Jun 13 03:30 AM - 04:45 AM

PL07 - Our Path from Mental Illness to Mental Health & Closing Remarks

Joseph Zohar, Tom Insel

Plenary Lecture

Speaker: Dr. Tom Insel, National Institutes of Health, United StatesChair: Prof. Joseph Zohar, Chaim Sheba Medical Center, IsraelAbstract: Most of us have embarked on careers in neuropharmacology because we want to develop better treatments for people with mental illness and ultimately contribute to public health. Arguably the last five decades have been a golden era for neuropharmacology with a broad range of compounds (as well as psychological and neuromodulatory interventions) developed for mood, anxiety, and psychotic disorders. With so much progress in science, why have we made so little progress in outcomes for people with mental illness, especially those with ...

