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International Conference on  
**NEUROSCIENCE AND  
NEUROLOGICAL  
DISORDERS**

**June 28-29, 2018 | Dublin, Ireland**

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International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

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# KEYNOTE FORUM

International Conference on  
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GIULIO MARIA PASINETTI  
USA

## PRINCIPLES OF INFLAMMASOME PRIMING AND INHIBITION: IMPLICATIONS FOR PSYCHIATRIC DISORDERS

### BIOGRAPHY

Giulio Maria Pasinetti, The Saunders Family Chair and Professor of Neurology, received an M.D. from the Milan University School of Medicine and a Ph.D. from the University of Milan. He is currently the Program Director of the NIH funded Mount Sinai Center for Molecular Integrative Neuroresilience and the Chief of the Brain Institute Center of Excellence for Novel Approaches to Neurodiagnostics and Neurotherapeutics. He is also a Professor of Psychiatry, of Neuroscience, and of Geriatrics and Adult Development. Pasinetti is the recipient of several academic awards including the prestigious Zenith and Temple awards from the Alzheimer's Association. Most recently, Dr. Pasinetti was awarded "The Faculty Council Award" for academic excellence at Mount Sinai School of Medicine and "The Charles Dana Alliance for Brain Research Award" from Dana Foundation, recognizing productivity and worldwide leadership in his field of expertise, which further emphasizes his standing as an academic role model.

The production of inflammatory proteins by the innate immune system is a tightly orchestrated procedure that allows the body to efficiently respond to exogenous and endogenous threats. In my talk I will first discuss accumulating evidence suggesting that disturbances in the inflammatory response system not only provoke autoimmune disorders, but also can have deleterious effects on neuronal function and mental health. As inflammation in the brain is primarily mediated by microglia, the immune inflammatory cells of the brain, there has been an expanding focus on the mechanisms through which these cells initiate and propagate neuroinflammation. Based on this evidence I will debate novel concepts about how microglia can enter persistently active states upon their initial recognition of an environmental stressor and are thereafter prone to elicit amplified and persistent inflammatory responses following subsequent exposures to stressors. In view of the recent evidence suggesting that primed microglia may be respond to environmental insults through mechanisms involving the NLRP3 inflammasome; in my presentation I will then discuss new concepts supporting the activation of NLRP3 inflammasome mechanisms responsible for the generation of inflammatory interleukins into functional forms that elicit a number of consequential effects in the local neuronal environment. This evidence supports the principle that within primed neuroimmune systems a lowered threshold for NLRP3 activation can cause persistent neuroinflammation or the amplified production of inflammatory cytokines. Collectively, the take home message of my presentation will provide novel evidence suggesting that targeting the NLRP3 inflammasome complex may represent an innovative approach to limit neuroinflammatory states in psychiatric disorders.

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ANN MARIE LEONARD-ZABEL  
USA

## EXPLORING THE NEUROPSYCHOLOGICAL ASSESSMENT PROCESS INVOLVING PSYCHIATRIC IMPACT OF SUBSTANCE USE DISORDER AMONG YOUTH

### BIOGRAPHY

Leonard-Zabel is a full professor of Psychology at Curry College in Massachusetts, USA. She is president of private clinic specializing in international School Neuropsychology and Clinical Forensic Counselling. She holds diplomat and fellow certifications in the field of Neuropsychology, Forensics, Autism, Psychotherapy, Addictions, CBT, Disability Analysis, and Homeland Security. She was recognized in the American Psychological Association-Monitor on Psychology Journal under the personality and achievement section.

Substance Use Disorder (Addiction) is prevalent throughout the world and is making a profound impact on Neurocognitive-Neurobehavioral development among youth. This presentation will explore the neurocognitive theories of understanding the morphology and functioning of the addicted brain involved in the psychological process of learning, emoting and behaving. We will explore specific areas including the following: (a) the impact of substance use on neurobiological brain development, (b) Understanding the neuropsychological effects and consequences of substance abuse on the hijacked brain utilizing a neuro-profiling approach within a neuropsychological assessment model and (c) Review several methodologies focusing on treatment outcomes and evidence-based practices involving home, school and community as an outgrowth of the neuropsychological profile to improve psychiatric outcomes.

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MERVAT WAHBA  
USA

## CATASTROPHIC ANTIPHOSPHOLIPID ANTIBODY SYNDROME

### BIOGRAPHY

Associate Professor of Neurology UTHSC since July 1st 2012 to current. Assistant Professor of Neurology UTHSC since February 1st 2006 to June 30 2012. Vascular Neurology, Fellowship Director September 1st 2010 to October 5th 2015. Medical Director Comprehensive Stroke Center Methodist System Medical Director since September 1st 2010 to March 2nd 2014. Neurology. Clerkship Director May 2008 to current.

A 29 year-old lady presented to the ER in April 2012 with sudden onset right UE weakness & numbness, right LE drift with an NIHSS of 3. While getting CT head scan , she had sudden right eye blindness with NIHSS now of 5. She has a past medical history of Lupus & Lupus Vasculitis diagnosed in 2006, history of TIAs, left above knee amputation and tight big toe amputation. She was on Plaquenil for her SLE as she declined other treatment options. The patient was on LMWH 1mg/Kg body weight BID, however she denied being on it when asked.



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# **SCIENTIFIC TRACKS & ABSTRACTS**

# SESSIONS

June 28-29, 2018

Neurology | Neuropsychiatry | Psychiatry | Neurological Disorders | Psychiatric Disorders | Neuroscience | Neuropharmacology | Cognitive Neuroscience | Neurophysiology | Alzheimers Disease | Autistic Disorders

## Session Introduction

### Session Chair

Giulio Maria Pasinetti  
USA

### Session Co-chair

Ann Marie Leonard-Zabel  
USA

Title: **Principles of Inflammasome Priming and Inhibition: Implications for Psychiatric Disorders**

Giulio Maria Pasinetti, USA

Title: **Exploring the Neuropsychological Assessment Process Involving Psychiatric Impact of Substance Use Disorder Among Youth**

Ann Marie Leonard-Zabel, USA

Title: **Catastrophic Antiphospholipid antibody Syndrome**

Mervat Wahba, USA

Title: **Treatment of restless legs syndrome with selenium**

Jan Ulfberg, Sweden

Title: **Beyond the Art of BART: Sensorimotor Focused EMDR for psychotherapy and peak performance**

Arthur G. O'Malley, UK

Title: **Neuroprotective role of a small peptide derived from neuronal cell cycle like kinase (Cdk5) activator (p35)**

Harish C. Pant, USA

Title: **Computational Modelling for Cognition Expansion: Making the Invisible Visible**

Alice Marascu, Dublin, Ireland

Title: **Immunological grounds on exercise-induced food and physical allergies**

Yi-Sub Kwak, Korea

Title: **Newer Advances in Neuropsychiatry**

Shashita Inamdar, USA

Title: **Difference Participation of Korean Female Physical Activity by Life Cycle**

Younshin Nam, Korea

Title: **Assessment of Effort and Exaggeration During the Neuropsychological Examination**

Bob Gant, USA

Title: **Concurring Work at the carlos 1V Prize for Research in public health and preventive Medicine**

Juan Ariel Jara Guerrero, Peru

Title: **Perspectives of Nano- Interventions in Early Diagnosis and treatment of Alzheimers Disease**

Jerzy Leszek, Poland

Title: **Autistic Spectrum Disorders: The Challenge of Early Detection in the Arab Region**

Ebtihal Elameen Eltyeb, Saudi Arabia

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## Title

**PRINCIPLES OF INFLAMMASOME PRIMING AND INHIBITION: IMPLICATIONS FOR PSYCHIATRIC DISORDERS**

## Name & Country

**Giulio Maria Pasinetti**

USA

## Abstract

The production of inflammatory proteins by the innate immune system is a tightly orchestrated procedure that allows the body to efficiently respond to exogenous and endogenous threats. In my talk I will first discuss accumulating evidence suggesting that disturbances in the inflammatory response system not only provoke autoimmune disorders, but also can have deleterious effects on neuronal function and mental health. As inflammation in the brain is primarily mediated by microglia, the immune inflammatory cells of the brain, there has been an expanding focus on the mechanisms through which these cells initiate and propagate neuroinflammation. Based on this evidence I will debate novel concepts about how microglia can enter persistently active states upon their initial recognition of an environmental stressor and are thereafter prone to elicit amplified and persistent inflammatory responses following subsequent exposures to stressors.

In view of the recent evidence suggesting that primed microglia may be respond to environmental insults through mechanisms involving the NLRP3 inflammasome; in my presentation I will then discuss new concepts supporting the activation of NLRP3 inflammasome mechanisms responsible for the generation of inflammatory interleukins into functional forms that elicit a number of consequential effects in the local neuronal environment. This evidence supports the principle that within primed neuroimmune systems a lowered threshold for NLRP3 activation can cause persistent neuroinflammation or the amplified production of inflammatory cytokines. Collectively, the take home message of my presentation will provide novel evidence suggesting that targeting the NLRP3 inflammasome complex may represent an innovative approach to limit neuroinflammatory states in psychiatric disorders.

## Biography

Giulio Maria Pasinetti, The Saunders Family Chair and Professor of Neurology, received an M.D. from the Milan University School of Medicine and a Ph.D. from the University of Milan. He is currently the Program Director of the NIH funded Mount Sinai Center for Molecular Integrative Neuroresilience and the Chief of the Brain Institute Center of Excellence for Novel Approaches to Neurodiagnostics and Neurotherapeutics. He is also a Professor of Psychiatry, of Neuroscience and of Geriatrics and Adult Development. Pasinetti is the recipient of several academic awards including the prestigious Zenith and Temple awards from the Alzheimer's Association. Most recently, Pasinetti was awarded "The Faculty Council Award" for academic excellence at Mount Sinai School of Medicine and "The Charles Dana Alliance for Brain Research Award" from Dana Foundation, recognizing productivity and worldwide leadership in his field of expertise, which further emphasizes his standing as an academic role model.



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## Title

**EXPLORING THE NEUROPSYCHOLOGICAL ASSESSMENT PROCESS INVOLVING  
PSYCHIATRIC IMPACT OF SUBSTANCE USE DISORDER AMONG YOUTH**

## Name & Country

**Ann Marie Leonard-Zabel**

USA

## Abstract

**Substance Use Disorder (Addiction) is prevalent throughout the world and is making a profound impact on Neurocognitive-Neurobehavioral development among youth. This presentation will explore the neurocognitive theories of understanding the morphology and functioning of the addicted brain involved in the psychological process of learning, emoting and behaving. We will explore specific areas including the following: (a) the impact of substance use on neurobiological brain development, (b) Understanding the neuropsychological effects and consequences of substance abuse on the hijacked brain utilizing a neuro-profiling approach within a neuropsychological assessment model and (c) Review several methodologies focusing on treatment outcomes and evidence-based practices involving home, school and community as an outgrowth of the neuropsychological profile to improve psychiatric outcomes.**

## Biography

**Ann Marie Leonard-Zabel is a full professor of Psychology at Curry College in Massachusetts, USA. She is president of private clinic specializing in International School Neuropsychology and Clinical Forensic Counseling. She holds diplomat and fellow certifications in the field of Neuropsychology, Forensics, Autism, Psychotherapy, Addictions, CBT, Disability Analysis, and Homeland Security. She serves on the Learning Disabilities Worldwide Congress-Board of Directors. She was awarded the Curry College Excellence in Teaching 'Researcher of the Year' and 'Person of the Year' from Curry College acknowledging excellence in teaching, mentorship, leadership and community service. Recently, she was awarded the Jerrold Simon Award for Distinguished Lifetime Career Achievement from both the American Board of Disability Analysts and the American Board of Medical Psychotherapists and Psychodiagnosticians of which she is the third recipient to ever receive the award from both organizations.**

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## Title

**CATASTROPHIC ANTIPHOSPHOLIPID ANTIBODY SYNDROME**

## Name & Country

**Mervat Wahba**

USA

## Abstract

**A 29 year-old lady presented to the ER in April 2012 with sudden onset right UE weakness & numbness, right LE drift with an NIHSS of 3. While getting CT head scan, she had sudden right eye blindness with NIHSS now of 5. She has a past medical history of Lupus & Lupus Vasculitis diagnosed in 2006, history of TIAs, left above knee amputation and tight big toe amputation. She was on Plaquenil for her SLE as she declined other treatment options. The patient was on LMWH 1mg/Kg body weight BID, however she denied being on it when asked.**

## Biography

**Mervat Wahba is an Associate Professor of Neurology UTHSC since July 1st 2012 to current. Assistant Professor of Neurology UTHSC since February 1st 2006 to June 30 2012. Vascular Neurology, Fellowship Director September 1st 2010 to October 5th 2015. Medical Director Comprehensive Stroke Center Methodist System Medical Director since September 1st 2010 to March 2nd 2014. Neurology Clerkship Director May 2008 to current.**

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### Title

**TREATMENT OF RESTLESS LEGS SYNDROME WITH SELENIUM**

### Name & Country

**Jan Ulfberg**

Sweden

### Abstract

A highly researched area in order to find an etiology and treatment for restless legs syndrome ( RLS ) is the brain dopamine system. It is also claimed that hypoxia, due to decreased peripheral blood flow, might at least partially cause the characteristic unpleasant symptoms in RLS. Selenium has a strong anti-oxidant action, and is a regulator of dopamine function as well. **Case Presentation:** Three female patients, aged 25-60, were all suffering from severe to very severe RLS since childhood. Severity was measured by using the International Restless Legs Scale (IRLS), a 10-item questionnaire. Their scores of the IRLS were between 25 and 38. All 3 patients started to take selenium yeast 100 micrograms daily. Six months later the patients presented at the clinic and were re-assessed. Their RLS symptoms were substantially reduced to "moderate", represented by their IRLS scores of 10 to 18. All patients reported independently from each other that they did not experience any changes initially, but after 4 months of treatment, there was a steady reduction of their RLS-related symptoms. In the literature there is only one earlier report of selenium treatment in RLS. In a placebo-controlled trial, Rahimdel et al., showed RLS symptom relieving benefits of selenium salt, taken orally, 50 or 200 micrograms per day. It might be hypothesized that selenium may reduce the symptoms of RLS as selenium may work on the function of the dopaminergic system. It is known that RLS-patients are under oxidative stress. Thus, given the fact, that selenium is a potent antioxidant, its mechanism of action could as well be related to its ability to neutralize the reactive intermediates. Another possible working mechanism could be through the positive effect selenium has on endothelial function. In order to explore the efficacy of selenium in RLS, future randomized clinical trials would be of great interest and value.

### Biography

Jan Ulfberg, MD, PhD, Ass. Professor at Uppsala University, Sweden, has been dedicated to sleep research during recent thirty years, with a special interest in restless legs syndrome ( RLS ), even named Willis-Ekbom Disease. The main focus of this research has been on the epidemiology and the pathophysiology of this disease.

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### Title

**BEYOND THE ART OF BART: SENSORIMOTOR FOCUSED EMDR FOR PSYCHOTHERAPY AND PEAK PERFORMANCE**

### Name & Country

**Arthur G. O'Malley**

UK

### Abstract

This is an integrated approach to psychotherapy, which incorporates elements of trauma focused cognitive behaviour therapy (TF-CBT), Eye Movement Desensitization and Reprocessing (EMDR), mindfulness, somatic experiencing and sensorimotor psychotherapy (SP). This workshop gives participants an understanding of information processing in the body following significant life events. Gut feelings are initially registered at the level of the gut brain. Research on the gut microbiome and its relation to mental health will be presented. The next level of reprocessing takes place at the level of the heart brain, which is often linked to feelings of loss panic and anxiety. Activation of the body's energy system continues with activation of the hypothalamic pituitary adrenal (HPA) axis. A key component of reprocessing is overcoming the symptoms of speechless terror, which are felt at the level of the throat and pharynx. The goal of activating and reprocessing these sensations, motor impulses, emotions, feelings and thoughts is to bring unconscious trauma triggers into conscious awareness. In trauma as Bessel van der Kolk wrote in 1992, "the body keeps the score", with 90% of information stored somatically while we are consciously aware of only 10% of the information related to the traumatic event. This explains why premature use of CBT is ineffective. The reprocessing is continued with the patient being maintained in CALM WATERS (Conscious Aware, Level-Headed, Mindful, Window of Affective Tolerance Emotional Regulation and Stability). I will explain my two and three-dimensional models of dissociation associated with high arousal or RAPIDS (Racing Thoughts, Affective instability, Partitioned personality, Impulsivity, Distress and suicidality). This will also include a demonstration of dissociation and low arousal states or FROZEN (Freeze Reaction, Oblivious, Zonked out and Emotionally Numb). I will illustrate the use of the Sensorimotor EMDR psychotherapy with different types of traumatic dissociation with reference to individual cases of both acute and complex PTSD. I will also introduce delegates to quantum field theory and how quantum consciousness can be utilized in the consultation between therapist and client.

### Biography

Arthur G. O'Malley worked as a consultant child and adolescent psychiatrist from 2004 and am accredited as an EMDR consultant from 2008. Also trained in sensorimotor psychotherapy. Been a member of the UK and Ireland EMDR association since 2002 and was a member of the European Conference organizing committee for the London Conference and the Child and Adolescent Committee. Presentations at their AGMs in Glasgow, Manchester, Dublin and at the European conferences in Paris and London. I have presently widely in the fields of trauma, neglect and the developing brain, attachment disorders, personality disorders, emotional dysregulation in ADHD and ASD diagnosis and management. First presented on this model at the ISSTD 28th Annual conference in Montreal November 2011. Recent articles on the clinical effectiveness of BART psychotherapy have been published to complement the book, *The Art of BART* which was published by Karnac books in London in 2015 and is available in print and as an eBook from Amazon and karnac-books.com. The updated version of the book, "Beyond the Art of BART: Sensorimotor Focused EMDR for Psychotherapy and Peak Performance" will soon be published.

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### Title

**NEUROPROTECTIVE ROLE OF A SMALL PEPTIDE DERIVED FROM NEURONAL CELL CYCLE LIKE KINASE (CDK5) ACTIVATOR (P35)**

### Name & Country

**Harish C. Pant**

USA

### Abstract

Cdk5 is a member of cyclin-dependent kinases. It is unique among Cdk family of kinases; it is not activated by cyclins but is activated exclusively by the brain-specific p35/p25 proteins. It is a multifunctional protein kinase constitutively active in nervous tissues. It is implicated in ameliorating various neurodegenerative diseases phenotypes including AD. Cdk5, (Cdk5/p35), activity is tightly regulated and essential for nervous system development and neuronal functions. Emerging evidence suggests that its deregulation and hyper activation due to neuronal insults produced p25 and accumulation and aggregation of synaptic and cytoskeletal proteins in neuronal cells forming early stages of neurofibrillary tangles, plaques, Lewy bodies inclusions. These aggregated proteins and peptides are the hallmarks of AD, PD and ALS pathologies. On the basis of a large number of studies we have proposed Cdk5/p35 is a physiological and Cdk5/p25 is pathological target. To reduce the pathological phenotypes in situ / in vivo we discovered p5, a 24-amino acid truncated peptide from Cdk5 activator protein, p35, selectively inhibited the deregulated and hyperactive active Cdk5, (Cdk5/p25), induces pathology, but not Cdk5, (Cdk5/p35), kinase essential for nervous system development, function and survival. Recently it has been provided sufficient information that a modified truncated 24-amino acid peptide (TFP5), derived from the Cdk5 activator p35, penetrates the blood-brain barrier upon intraperitoneal injections (i.p.), inhibits significantly abnormal Cdk5 hyperactivity, and rescues significantly, AD pathology (up to 70–80%) in 5XFAD, p25Tg AD model. In addition, MPTP induced phenotypes in Parkinson's disease model mice. The present talk will provide the molecular and cellular basis of the selectivity of these two forms of kinases, Cdk5/p35 and Cdk5/p25, physiological and pathological behavior of Cdk5/p35 and Cdk5/p25 kinases. We propose, TFP5 may be able to ameliorate a number of phenotypes in different neurodegenerative disease.

### Biography

Harish C. Pant received his M.A. and Ph.D. degrees in Physics from Agra University, Agra, India. His postdoctoral studies were conducted on the mechanisms of electron and ion transport in model membrane systems at the Department of Biophysics at Michigan State University. He joined the Laboratory of Neurobiology in the NIMH as a senior staff fellow in 1974 with Dr. Ichiji Tasaki where he studied the function of the axonal cytoskeleton in the squid giant axon. In 1979 he moved to the NIAAA extending his studies on the neuronal cytoskeleton and the effects of alcohol on its regulation. Harish Pant moved to the NINDS, Laboratory of Neurochemistry in 1987 where he is presently chief of the section on Cytoskeleton Regulation. His laboratory is studying the mechanisms of topographic regulation of neuronal cytoskeleton proteins by post-translational modification, including the role of kinase cascades in normal brain and during neurodegeneration.

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## Title

**COMPUTATIONAL MODELLING FOR COGNITION EXPANSION: MAKING THE INVISIBLE  
VISIBLE**

## Name & Country

**Alice Marascu**

Ireland

## Abstract

**Artificial intelligence is reshaping our world and we assist at unpreceeding acceleration rates in numerous human activities. The core goal is the expansion of the human cognition, from its internal expansion (cognitive psychology) to its external expansion (social cognition). Understanding the complexity of the human brain and replicating its functionalities has been the goal of many scientists, and today, more than anytime in the scientific history, the researchers are working on a more ambitious step of amplification and augmentation of cognition capabilities. We looked at the deep mental process triggering the human behaviour and building our personal behavioural print. We translated and adapted core psychology theories of human cognition into computational models. A digitisation of the mental processes opens the door to building a better self for self cognitive capacities expansion, and equally important, a better relational self for augmented social cognition. We were interested in our personalised cognitive behavioural print and how it impacts our cognitive expansion. We will present our computational modelling and how we are testing it in real world applications.**

## Biography

**Alice Marascu is a senior research scientist at Nokia Bell Labs. Previously, she was a research scientist at IBM Research-Ireland, and held post-doctoral research roles at University of Trento-Italy, and INRIA Rennes Bretagne Atlantique-France. Her research spans natural language processing, large scale streaming data processing, large scale complex pattern recognition and mining, time series analysis. She has given multiple talks to industrial and academic audiences and published results in main conferences in the areas of big data, data mining, machine learning, query answering (VLDB, PVLDB, SIGMOD, Big Data Conference, etc).**

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## Title

IMMUNOLOGICAL GROUNDS ON EXERCISE-INDUCED FOOD AND PHYSICAL ALLERGIES

## Name & Country

**Yi-Sub Kwak**

Korea

## Abstract

It is well known that physical activity is beneficial for people with positive results for physical status and mental wellbeing. However, physical exercise decrease the immune response and may induce a allergy anaphylaxis at some situation as follows. A common example is exercise-induced asthma, exercise-induced urticaria, exercise-induced anaphylaxis and FDEIAN. Generally, anaphylaxis is a severe, potentially fatal, hypersensitivity reaction of rapid onset. It is a dramatic clinical emergency. Actually, there are lots of etiologic factors of anaphylaxis, the principal immunologic triggers are foods, insect stings, and drugs. In recent, physical exercise is also related with the anaphylaxis. In this paper, we present the current views of physiological mechanisms underlying physical anaphylaxis within the context of exercise immunology. We also deal with a detailed 2 kinds of EIA (exercise-induced asthma, exercise-induced anaphylaxis) and exercise prescription and medical treatment for exercise-induced asthma, exercise-induced anaphylaxis and CU (chronic urticaria).

## Biography

Yi-Sub Kwak Educational information includes: BS, 1992, MS, 1994, PhD, 2000, Yonsei University, Korea; Research Fellow, Yonsei University College of Medicine, 2000-2002. Appointment: Professor, 2003-, Head, Institute of Sport Science, 2007-, Chair, Graduate School and Department of Physical Education, 2009-, Don-Eui University; Managing Editor, Journal of Life Science, Busan, 2007-. Publications: Numerous articles in professional journals (in the fields of exercise science, exercise immunology, exercise nutrition, health and science and so on). Honours: Best professor in Dong-Eui University, 2005-2016; Excellence award, Beijing International Convention of Sports Science, 2006; Excellence Award, Yaubian International Convention of Sports Science, 2007. Visiting Fellow of Harris Manchester College, University of Oxford, 2008, 2010.

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## Title

**NEWER ADVANCES IN NEUROPSYCHIATRY**

## Name & Country

**Shashita Inamdar**

USA

## Abstract

**The increasing prevalence of neuropsychiatric disorders in the last 20 years has called for a demand in new diagnostic and treatment options. The World Health Organization (WHO) labels mental disorders as a continuing global burden, with an estimated 300 million affected by depression, 60 million affected by bipolar affective disorder, 21 million affected by schizophrenia and 47.5 million affected by dementia. Conventional methods of using medications to treat such disorders have developed a negative perception over time among patients and in the media. Most medications are now viewed as having addictive characteristics, short and long term side effects, drug interactions, and at times as being ineffective. With resistance from patients and limited efficacy, clinicians and researchers turn to new and more advanced methods to help those struggling with such disorders.**

## Biography

**Shashita Inamdar is a licensed physician and board-certified child, adolescent and adult psychiatrist. Inamdar is the Medical Director at Achieve TMS Centers and Achieve Concierge, renowned centers in San Diego, California for psychiatric, psychological and TMS treatment. She is also the Medical Director at the Center for Discovery, a leading residential and outpatient eating disorder treatment program. Inamdar serves as a member of the Advising Faculty at USD School of Nursing and Health Sciences. She also serves as a member of the Adjunct Clinical Faculty at Lake Erie College of Osteopathic Medicine, Department of Family Practice. Inamdar has over 20 years of extensive expertise in the diagnosis and management of emotional and psychiatric disorders. She is experienced in pharmacogenetic testing, ketamine treatment and neuromodulation treatments such as TMS and neurofeedback.**



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## Title

**DIFFERENCE PARTICIPATION OF KOREAN FEMALE PHYSICAL ACTIVITY BY LIFE CYCLE**

## Name & Country

**Younshin Nam**

Korea

## Abstract

The frequency of physical activity and participating sport are different from the life cycle of women in Korea. Women in their teens, 20's and 30's have a significantly higher rate of 'never doing physical activity. The lack of physical activity can lead to a health threat. Women in their teens and 20's say that physical activity makes muscles and skeletons male-like and it makes hard to maintain their beauty(Nam Younshin, Ju Seung-hee, 2012). Women have different life cycle characteristics. Women experience different physical and mental experiences from men such as menstrual period, pregnancy period, childcare period, menopause period. At this level, women's physical activity policies must be developed and promoted with considering women's life cycle characteristics. The purpose of this study is to promote for regular physical activity as women's life cycle.

**Methods:** 2016 data from the Ministry of Culture, Sports and Tourism survey on participation in the national sports were recycled. The subjects of this study were 4,569 Korean Women. The 647 women were in their teens and 635 women in 20's. 792 women were in their 30's and 854 women in 40's. The 711 women were in 50's, 453women in 60's and 477 women in over 70's.

## Biography

From 2007 September 09 and till now working at Duksung women's university in Seoul, Korea. During 2015 February till now she became Director of Seoul Sports Council. During 2012 January to till now working as Advisory Committee of Korean Sports & Olympic Committee and Vice - president of Korean Society of Sport Policy also as Vice - president of Korean Sport Exercise Physiology.

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## Title

**ASSESSMENT OF EFFORT AND EXAGGERATION DURING THE NEUROPSYCHOLOGICAL EXAMINATION**

## Name & Country

**Bob Gant**

Colorado

## Abstract

**Clinicians who evaluate patients with neurological disorders including head injuries are often challenged to determine if the patient is providing poor effort or exaggerating symptoms. Rapid advances have assisted in this effort and there are multiple tools available now to assist the clinician in their assessment. These tools will be the focus of this presentation.**

## Biography

**Bob Gant is a board-certified clinical neuropsychologist with extensive professional experience as a treating and forensic neuropsychologist, including the assessment of and treatment of brain injury and PTSD. He completed a clinical internship at the University of Kansas Medical Center and is the past president of Section II of the APA Division of Clinical Psychology. Dr. Gant is a licensed psychologist in two states (Colorado and Texas) in the United States. He is on the board of the American Board of Professional Neuropsychology (ABN) and Director of an approved Residency program in Clinical Neuropsychology (ACPN) in Boulder Colorado and Dallas, Texas.**

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### Title

**CONCURSING WORK AT THE CARLOS IV PRIZE FOR RESEARCH IN PUBLIC HEALTH AND PREVENTIVE MEDICINE**

### Name & Country

**Juan Ariel Jara Guerrero**

Peru

### Abstract

**Abdominal obesity and depression–anxiety show similar neuroendocrine abnormalities. Diets with high n-6:n-3 PUFA ratios may enhance the risk for both depression and inflammatory diseases. Changes in erythrocyte and brain concentrations of Omega-3 PUFA are positively associated with changes in cognitive or behavioral performance. The synergistic interaction of environmental and genetic factors likely contributes to the etiology of mental diseases. Higher blood (n-3) fatty acids were associated with reduced cognitive decline and an epidemiological studies associating increased fish consumption with reduced risk for dementia, including Alzheimer and mental disorders. Omega (n)-3 and n-6 fatty acids are important membrane components of neurons and immune cells, and related to psychiatric and inflammatory diseases. Increased ratio of n-6/n-3 in the blood has been reported in depressed patients and in students following stress exposure. If depression may precede dementia, DHA may help suppress insulin/neurotrophic factor signaling deficits, neuroinflammation, and oxidative damage that contribute to synaptic loss and neuronal dysfunction in dementia.**

### Biography

Juan Ariel Jara Guerrero PhD student in Neuroscience Complutense University of Madrid June-2011. Under the Directorate of Doctors: Dr. Jesús Trezguerres Dra. Marina Diaz Marsà at Madrid, 2013. He is also a Professor of Human Physiology. at Norbert Wiener University. Lives in Madrid, Spain.

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## Title

**PERSPECTIVES OF NANO-INTERVENTIONS IN EARLY DIAGNOSIS AND TREATMENT OF ALZHEIMER'S DISEASE**

## Name & Country

**Jerzy Leszek**

Poland

## Abstract

The lack of effective treatment for Alzheimer's disease(AD) stems mainly from the incomplete understanding of AD causes. Currently there are several hypothesis which try to explain the early molecular mechanisms of AD pathogenesis. The current pathophysiologic approach is based on a number of common mechanisms of neurodegeneration, including accumulation of abnormal proteins tau and ABeta), mitochondrial dysfunction, oxidative stress, impaired insulin signaling, calcium homeostasis dysregulation, imbalance of neurotransmitters, early synaptic disconnection and late apoptotic cell death. Considering that AD is a multi-factorial disease with several pathogenic mechanisms and pathways, a multifunctional nanotechnology approach may be needed to target its main molecular culprits. There are still no effective treatments to prevent, halt or reserve AD. To very early diagnosis of AD we need to have an affordable, ultra-sensitive and selective molecular detection methods.

Nanomedicine as a biomedical and pharmaceutical application of nanotechnology for making nanocarriers for instance dendrimers has shown great potential not only for diagnosis but the treatment of many CNS diseases such AD. Ultra-low concentrations of protein biomarkers (eg.ADDL-amyloid-Beta-derived diffusible ligands) which have been implicated in the pathogenesis of AD, is possible to detect, owing to carrier dendrimers. Dendrimers are polymeric molecules chemically synthesized with well -defined shape size and nanoscopic physicochemical properties reminiscent of proteins.

## Biography

Jerzy Leszek is Professor of Psychiatry, Vice-Head of the Department of Psychiatry , Head of Alzheimer's Disease Lab at the Medical University in Wroclaw , and Scientific Director of Alzheimer's Disease Center in Scinawa near Wroclaw, Poland. He graduated at Medical University of Wroclaw in 1979, was awarded a doctorate in Wroclaw in 1981 and in 1999- examination for the degree of associate professor of psychiatry and since 2005 he is working as full professor of psychiatry at Wroclaw Medical University. He is author and co-author more than 240 papers (especially from old age psychiatry), some chapters to the books published in reputed Polish and international journals and serving as an editorial board member of several journals.

International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

**AUTISTIC SPECTRUM DISORDERS: THE CHALLENGE OF EARLY DETECTION IN THE ARAB REGION**

## Name & Country

**Ebtihal Elameen Eltyeb**

Saudi Arabia

## Abstract

**Autistic spectrum disorders (ASD) is neurodevelopment disorders that affect the children in early childhood, with increasing incidence and prevalence world widely<sup>1-2</sup>. It represents lifelong cognitive and developmental disabilities that make a huge burden in the families of affected children and their communities. Since the ASDs have broad spectrum of affection, the diagnosis is frequently later after the first three years of life when the affected child supposed to join the kindergarten; with exceptional early recognition in severe cases that could be picked and diagnosed easily. The purpose of this paper is to describe the current ASD research situation in Arab region, the available screening tools, and to summarize the possible factors which might influence the application and implementation of these variable.**

## Biography

**Ebtihal Elameen Eltyeb persuade MD Pediatrics and Child Health, she is an Assistant Professor of Pediatrics, at Jazan University, KSA.**

# SESSIONS

June 28-29, 2018

Neuropathic Pain | Cognitive Neuroscience | Autism | Neurology | Neuro Immunology | Traumatic Brain Injury | Neurodiagnostic studies | Spinal Cord Injury | Multiple Sclerosis | Mental Health | Neurosurgery | Neuroprotective Measures | Psychiatry | Psychiatric Rehabilitation | Brain Functioning

## Session Introduction

### Session Chair

Giulio Maria Pasinetti  
USA

### Session Co-chair

Ann Marie Leonard-Zabel  
USA

- Title: A new battle front against neuropathic pain**  
Jorge Armando Bernal Zamora, Mexico
- Title: Benefits of Acute Intermittent Hypoxia for treating spinal cord injury**  
Atiq Hassan, Canada
- Title: Cognitive approach to Memristor which is able to associative learning**  
Hakkı Halil Babacan, Turkey
- Title: Transcranial Random Noise Stimulation (tRNS) Over Fronto-temporal Cortex Improves Verbal Fluency and Empathy in Autism Children**  
Moises Aguilar- Domingo, Spain
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Walid Ismail attia, Saudi Arabia
- Title: Traumatic brain injury changes; Clinical and biochemical profile of trends and correlations during neurosurgical management of patients with moderate to severe TBI**  
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- Title: Laboratory assessment of mitochondrial dysfunction in patients with multiple sclerosis**  
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Anis Zaid, Egypt
- Title: Outcome of surgical intervention for ICH**  
Ali Babiker Sidahmed, Sudan
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Ajmal Kazmi, Pakistan

International Conference on  
**NEUROSCIENCE AND  
NEUROLOGICAL DISORDERS**

June 28-29, 2018 | Dublin, Ireland

### Title

**A NEW BATTLE FRONT AGAINST NEUROPATHIC PAIN**

### Name & Country

**Jorge Armando Bernal Zamora**

Mexico

### Abstract

Central Sensitization is a phenomenon of neuroplasticity that has been characterized by the presence of spontaneous or persistent pain, expansion of areas affected by pain, and qualitative sensory disorders that include allodynia and hyperalgesia. The Central Sensitization results from a series of functional and anatomical alterations in the CNS, some of them potentially irreversible, which may be responsible, at least in part, for the persistence of pain after the resolution of the triggering tissue injury. Clinical and experimental evidence shows that noxious stimuli can sensitize the central structures of the nerves involved in the perception of pain. Many outstanding clinical examples of these effects include amputees with pains in a phantom limb that are similar or identical to those felt in the limb before it was amputated, and patients after surgery who have benefited from preventive analgesia that blocks the limb afferent alluvium induced by surgery and or its central consequences, chronic low back pain, diabetic neuropathy and degenerative osteoarthritis.

The experimental evidence of these changes is illustrated by the development of sensitization, by a phenomenon called WIND up that translates as winding or pushing the expansion of the receptive fields of the neurons of the central nervous system, as well as by the improvement of flexion reflexes and the persistence of pain or hyperalgesia after the contributions of the injured tissues. The perception of pain is not simply a moment-to-moment analysis of noxious afferent input, but involves a dynamic process that is influenced by the effects of past experiences. Sensory stimuli act on neuronal systems that have been modified by previous inputs, and behavior that is significantly influenced by previous memory events.

### Biography

Jorge Armando Bernal Zamora was Born and resident of Saltillo Coahuila. Born on November 22, 1969 Mexican nationality. Experience with Specialty Internal Medicine : 1992-1996 Monterrey NL , Hospital Universitario de Monterrey Universidad Autonoma de Nuevo Leon. Specialty in Neurology 1996-1999 Hospital San Jose TEC de Monterrey Technological Institute of Advanced Studies of Monterrey. Master's Degree 1999-2000 Fellowship in Sleep Disorders Houston Tx. Training polysomnography and psycho disorders in sleep disorders.

International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

**BENEFITS OF ACUTE INTERMITTENT HYPOXIA FOR TREATING SPINAL CORD INJURY**

## Name & Country

**Atiq Hassan**

Canada

## Abstract

Most spinal cord injuries (SCIs) in humans and animals are incomplete and partial recovery arises as a result of plasticity within neural circuitry. Many experimental therapies have been used to improve recovery after SCI, Acute intermittent hypoxia (AIH-brief exposures to reduced O<sub>2</sub> levels alternating with normal O<sub>2</sub> levels) in one of them. AIH treatment elicits plasticity in respiratory and non-respiratory spinal systems in experimental animals. AIH treatment has also been shown to improve walking abilities in persons with chronic incomplete SCI. In this study, I have examined the effect of AIH treatment, alone or in combination with motor training, on functional recovery and the effect of AIH on the expression of plasticity- and hypoxia-related proteins in the spinal cords of SCI rats. Rats were trained to cross a horizontal ladder and footslip errors were measured before surgery, 4 weeks post-surgery, each day of AIH treatment, and 1, 2, 4 and 8 weeks after treatment. AIH treatment consisted of 10 episodes of AIH: (5 min 11% O<sub>2</sub>: 5 min 21% O<sub>2</sub>) for 7 days. Motor training +AIH-treated rats made fewer footslips on the ladder task compared to normoxia-treated control rats after 4 days of treatment and this improvement was sustained for 8 wks post-treatment. Importantly, AIH treatment + motor training also increased the expression of Hypoxia-inducible factor-1 $\alpha$ , Vascular endothelial growth factor, Brain-derived neurotrophic factor, tyrosine kinase B receptors and phospho-trkB in spinal motor neurons in SCI rats compared to normoxia-treated SCI rats. Taken together with the promising findings from human SCI studies, the results of this study suggest that AIH has potential as an effective therapy to restore motor function after nervous system injury.

## Biography

Atiq Hassan obtained his PhD in Biomedical Sciences from University of Saskatchewan Canada in 2015 and Master's degree in Neurosciences, from the University of Calgary, Canada. He is a biomedical scientist, specialized in Neuroscience with 15 years of experience in research and academic environment and currently teaching Neuroscience at Avalon University School of Medicine as an Associate Professor. During his PhD, he explored the potential benefits of Acute Intermittent Hypoxia (AIH) as a novel rehabilitation intervention for facilitating the behavioral recovery of forelimb function following cervical Spinal Cord Injury (SCI) in rats in safe and meaningful ways.



International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

COGNITIVE APPROACH TO MEMRISTOR WHICH IS ABLE TO ASSOCIATIVE LEARNING

## Name & Country

**Hakkı Halil Babacan**

Turkey

## Abstract

We are at a time when electronic systems are structured in a manner similar to the human brain. The memristor, a neuromorphic circuit designed by Chua in 1971, is a modeling of synaptic learning and associative learning. Neuromorphic circuit elements and memristor can be used in artificial brain formation in the later periods and in the treatment of various lesions, psychiatric and neurological diseases. Scientific publications of memristor related neuroscientists, behavioral scientists, cognitive scientists and psychologists are scarce. The aim of this review is to examine the learning models built on the memristor by cognitive perspective.

**METHODS:**In this study, the learning experiments on the memristor were investigated in the literature and the results were compared.

**RESULTS:**In conditional learning experiments on the memristor, which is its own memory, the unconditional stimulus and the neutral stimulus represent different types of signals. Before the learning, the signals which are denoted as neutral stimuli can not give output from the electronic angle. But just like Pavlov's dog experiment, when the signal representing the unconditioned stimulus was presented before learning, the output is taken. When both stimuli were presented in the order of the Pavlov experiment, the output was taken from the neutral stimulus. And after learning, the output can be taken when the neutral stimulus given alone. In this way, the memristors were able to learn conditionally and to achieve synaptic modeling.

## Biography

Hakkı Halil Babacan studying at undergraduate psychology department of Istanbul University.

International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

**TRANSCRANIAL RANDOM NOISE STIMULATION (TRNS) OVER FRONTO-TEMPORAL CORTEX IMPROVES VERBAL FLUENCY AND EMPATHY IN AUTISM CHILDREN**

## Name & Country

**Moises Aguilar Dominigo**

Spain

## Abstract

**Interventional, prospective, randomized, double-blind, placebo-controlled and parallel assignment study, in which patients receive three types of intervention tRNS: one group received 35 sessions focused on the fronto-temporal cortex, another group received 35 sessions focused on the temporal fusiform cortex and last placebo group was operated with 35 sessions tRNS. After brain noninvasive stimulation sessions, a blind analysis of the improvement in verbal fluency and empathy in patients with autism spectrum disorder is made. For each patient included a follow up period of three months will be established.**

## Biography

**Moises Aguilar Dominigo holds a PhD in Neuroscience from the University of Murcia, a degree in medicine and surgery from the University of Valencia and a specialist in neuromodulation and neurofeedback. presides over the spanish foundation for the development of Neurometric.**

International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

**DECISION MAKING IN ACQUIRED ADOLESCENT DEFORMITY: CASE DISCUSSIONS IN THE LIGHT OF KFMC EXPERIENCE & ROLE OF THE O-ARM AND NEURONAVIGATION IN THEIR MANAGEMENT**

## Name & Country

**Walid Ismail Attia**

Saudi Arabia

## Abstract

The type and extent of surgeries carried out in the management of adolescent spine deformities still lacks evidence-based medicine proof. It is up to the health care provider's sound judgement and expertise to do what is needed for the patient. Management challenges include yet not limited to; decompression near vital vascular or neural structures, decompression at a blind angle, difficult deformities corrections and difficult trajectories for instrumentation. The use of intraoperative CT quality O-arm, and neuronavigation are still tested as aiding tools in such operative modalities. **Methods:** Among our 600 + cases operated with guidance of O-arm and Neuronavigation since 2008, we randomly selected 3 cases of complex spine modalities that were operated upon in our institute by the first two authors to be included in this retrospective study. Cases include traumatic spinal fractures, infective, inflammatory, benign and malignant neoplasms affecting different parts of the spinal column. All of them had technical challenges regards adequacy of decompression or safety of instrumentation. All had undergone a combination of decompression deformity correction, and instrumentation of different modalities and/or bone grafting. In all cases the Medtronic O-arm® and Medtronic StealthStation® were used as intraoperative mapping tools. Discussions are intended to be of interactive nature. **Results:** Intraoperative navigation tools were so useful in securing adequate neural decompression, neural and vascular tissue safety together with tough bony purchases of the hardware from the first and only trial of application. Intraoperative CT taken by the o-arm was a useful confirmatory intraoperative test of proper hardware placement. **Conclusion:** The intraoperative use of the O-arm and stealthStation is very useful in different modalities of complex spine surgeries. Intraoperative confirmation of the proper hardware placement by intraoperative CT is of utmost value in completing the procedure.

## Biography

Walid Ismail Attia is a Consultant Neurosurgery and Spine Surgery Director at King Fahad Medical City. He completed his Bachelor of Medicine/Bachelor of Surgery at Tanta University, Egypt and Residency in Neurosurgery at Tanta University Hospital, Egypt.

International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

**TRAUMATIC BRAIN INJURY CHANGES; CLINICAL AND BIOCHEMICAL PROFILE OF TRENDS AND CORRELATIONS DURING NEUROSURGICAL MANAGEMENT OF PATIENTS WITH MODERATE TO SEVERE TBI**

## Name & Country

**Kadhaya David Muballe**

South Africa

## Abstract

Traumatic brain injury (TBI) is a pathological process characterised by changes in multimodal monitoring parameters and a chronobiology of biochemical trends. The underlying physiological and biochemical events in moderate to severe traumatic brain injury are responsible for the poor clinical outcomes often seen in these patients. A greater understanding of the sequence of pathological changes and their interaction with current clinical multimodal monitoring parameters may help in directing effective management strategies to improve clinical outcomes.

## Biography

Kadhaya David Muballe Affiliation includes : Department of Neurosurgery; Walter Sisulu University. Department of Physiology; Walter Sisulu University. Department of Public Health Walter Sisulu University. The Walter Sisulu University research office provided the funding to purchase laboratory kits for this study. This funding was granted to Kadhaya David Muballe during his PhD work. This study was part of the PhD done by KD Muballe at the Walter Sisulu University. His main field includes Neurosurgery: Level 4; Nelson Mandela Academic Hospital Sisson street Fort gale, Mthatha 5100, Eastern Cape, South Africa.

International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

USE OF RANDOMIZED SUBMAXIMAL GLUTAMATE STIMULUS TO INTERPRET GLIAL EFFECTS ON NEURONAL POTASIAM DYNAMICS A PILOT STUDY

## Name & Country

**Olayinka Sulaiman**

Nigeria

## Abstract

Glutamate (GLU) binding to neurons can cause dynamic changes in intracellular calcium. We tested effects of a 3-group submaximal glutamate stimulus (250, 500 and 750 nanomolar GLU in randomized orders) on neurons in culture, and measured intracellular calcium dynamics in cultures high and low in glia at 8 and 9 days in vitro. Gliadepleted cultures responded to increasing GLU with synchronized dynamics, leading to a greater "area under the curve" (AUC) for intracellular calcium over time. The AUC determined if the neuron would respond dynamically to the next addition of glutamate. This observation was not displayed within cultures high in glia, where AUC returned to baseline with every GLU addition, regardless of order of addition. Furthermore, the 3-group stimulus resulted in decreasing average AUC, regardless of order. In contrast, for cultures depleted of glia, the deciding factor of a responding cell to dynamically respond to GLU additions depended on the ability of the cell to distribute the calcium load (AUC) of the prior addition. Determining how neurons respond and behave such as in the presence of functional or dysfunctional glia, may help our understanding of signal processing in the brain.

## Biography

Olayinka Sulaiman affiliation includes Bsc.(BCH), Msc.(Pharmacol), Mphil( Neuropharm) from University of Ibadan, Nigeria.

International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

SPINAL CORD INJURY

## Name & Country

**Mohamed Mohamed Refaat**

Egypt

## Abstract

Spinal cord injuries can cause severe disability. The principal treatments for traumatic SCI include surgical stabilization. Using muscle as a scaffold is a new approach. This work aimed to evaluate the clinical efficacy of muscle graft as a scaffold for the growing axons organizing their growth, preventing gliosis in the damaged area and enhancing neural recovery in canine model of traumatic spinal cord injury. 14 dogs were divided into group I 4 dogs subjected to Sham operation, group II 5 dogs subjected to dorsal laminectomy with excision of 1 cm segment of the spinal cord and group III 5 dogs subjected to dorsal laminectomy then muscle graft was inserted into the spinal cord gap. The animals of all groups were euthanized after 8 weeks. Olby and modified Tarlov scores were used to clinically evaluate the therapeutic effects. Spinal cord specimens were subjected to histological, morphometric and statistical studies. Olby and modified Tarlov scores revealed significant improvement in group III. Histological sections showed overgrowth of axons on the muscle graft. CD44 & CD105 stains were positive for endogenous stem cells. This study proved the clinical efficacy of muscle grafting as a tool for induction of neuroregeneration after traumatic spinal cord injury.

## Biography

Mohamed Mohamed Refaat is a Consultant and head of department of Neurosurgery Jubail city Mouwasat hospital Saudi Arabia from 2015 till now. Consultant of Minimal Invasive Spine Surgery Mouwasat Hospital from 2016 till now. Member of Saudi Association of Neurological Surgery Education. Medical Doctorate M.D in Neurosurgery Cairo University, November 2007, Egypt. PhD Doctoral Degree in Neurosurgery, Neuroscience Kanazawa University, September 2007, Japan. Master Degree MSc General Surgery, Cairo University, April 1999, Egypt. MBBCh Faculty of Medicine, Cairo University, December 1995, Egypt University position Demonstrator: Neurosurgery 2000 Assistant lecturer: Neurosurgery 2001 Lecturer of Neurosurgery: 2011 till now.

International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

**LABORATORY ASSESSMENT OF MITOCHONDRIAL DYSFUNCTION IN PATIENTS WITH MULTIPLE SCLEROSIS**

## Name & Country

**Ahmed Essmat Ali Mohamed**

Egypt

## Abstract

**Multiple sclerosis (MS) is an inflammatory demyelinating and neurodegenerative disease affecting more than 2 million people worldwide and considered a leading cause of non-traumatic disability in young adults in many countries. Objective: To evaluate the mitochondrial dysfunction in patients with multiple sclerosis (MS) via investigation of serum levels of lactate and uric acid (UA) in MS patients and to explore their potential role as biological markers for monitoring the disease activity and progression. Methods: This case-control study was conducted on 52 Egyptian subjects 32 multiple sclerosis patients=Group I and 20 normal healthy individuals (Control group = Group II). Group I patients were subjected to thorough history taking, detailed neurological examination and clinical assessment of the severity of the disease using Expanded Disability Status Scale (EDSS) and fatigue using Fatigue severity scale (FSS). Serum level of lactate and uric acid were measured in both groups. Results: In comparison to the control group, subjects with multiple sclerosis had statistically significant higher serum level of lactate ( $p= 0.001$ )., with no statistically significant difference in serum levels of UA ( $p= 0.337$ ), no statistically significant correlation between serum UA levels and EDSS or FSS and statically significant negative correlation between serum lactate levels and EDSS-FSS.**

## Biography

Ahmed Essmat Ali Mohamed is working as a Lecture of Neurology at Al-azhar University, Egypt. His interests lies at the topics related to Multiple Sclerosis which evaluate the mitochondrial dysfunction in patients with multiple sclerosis (MS) via investigation of serum levels of lactate and uric acid (UA) in MS patients and to explore their potential role as biological markers for monitoring the disease activity and progression.

International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

**THE IDEA OF COMMUNITY MENTAL HEALTH AND MUTUAL SELF HEALTH GROUPS AS ONE OF TOOLS**

## Name & Country

**Ahmed Agamy**

Egypt

## Abstract

**A talk about my Experience for 3 years in Franco Basgalia center in kafr el dawwar with Cooperation with Italian Ministry of health one of pioneer project of community Mental health In Egypt and I will give a talk about "The Idea of Community Mental Health and Mutual self health groups as one of tools".**

## Biography

**Ahmed Agamy is a Neuropsychiatry specialist in Helwan Mental Hospital graduated at 2007 from Alexandria University and holding a Post Graduate high diploma at Neuropsychiatry Ain Shams University.**



International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

**NEUROPROTECTIVE ROLE OF GINKGO BILOBA AGAINST COGNITIVE DEFICITS ASSOCIATED WITH BISPHENOL A EXPOSURE: AN ANIMAL MODEL STUDY**

## Name & Country

**Anis Zaid**

Egypt

## Abstract

Our study aimed to elucidate to what extent Ginkgo biloba (Gb) can protect rats from cognitive deficits induced by exposure to Bisphenol A (BPA) at high dose. Therefore, sixty male Wistar rats were randomly divided into four groups of 15 animals in each group: Vehicle group, Gb-control group, BPA-exposed group and Gb pre-treated group. All administrations were given daily by an oral gavage once a day for eight weeks. Cognitive function was assessed using Morris water maze; Y-maze and Novel object recognition tasks. Additionally, hippocampal levels of DA, NE and 5-HT were measured. BPA-induced oxidative stress was evaluated by determining SOD activity, NO and MDA levels in rat hippocampus as well as level of circulating adiponectin. Moreover, histopathological changes in CA3 region of rat hippocampus and immunohistochemical expression of NF-kB and Caspase-3 were investigated. We found that Gb pretreatment significantly improved cognitive performance; may be via increasing hippocampal levels of estrogen-dependent biogenic amines. At the same time, Gb could strictly control BPA-induced oxidative stress by improving SOD activity and adiponectin level with decrease in NO and MDA levels. Lastly, Gb alleviated the histopathological injuries induced by BPA and inhibited NF-kB and caspase-3 activation. In conclusion, our results suggested that Gb has potential to ameliorate BPA-induced hippocampal neuronal damage and subsequent cognitive deficits through mechanisms involving its ability to enhance the release of biogenic amines as well as its antioxidant and adiponectin pro-secretory effects.

## Biography

Anis Zaid Educational profile deals mainly with Pathology Department, Faculty of Veterinary Medicine, University of Sadat City, Egypt. He also gave many presentations with co authors in which one of the presentation includes Expression of Glial Fibrillary Acidic Protein in Brain Tissues after Experimental Infection with Newcastle Disease Virus: Comparative Study between Chicken and Duck.

International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

**OUTCOME OF SURGICAL INTERVENTION FOR ICH**

## Name & Country

**Ali Babiker Sidahmed**

Sudan

## Abstract

**Intera Cerebral Hemorrhage ICH one of the commonest neurosurgical emergency presentations. This is a prospective non randomized study for 20 cases of ICH that treated surgically by the author and his team in a period from may 2014 to may 2015 with six month follow up. 13 cases were male and 7 cases were female .the commonest age group between 30 -44 years (35%) ,the commonest clinical presentation was alteration in the level of consciousness in 90% of cases followed by focal weakness in 45%, more than half of cases 55% present to neurosurgical department 6 to 12 hours after developing the symptoms .30% of cases were hypertensive. 40 % with associated IVH. All patients underwent surgery :classical craniotomy in 50%, mini craniotomy in 35%, craniectomy in 10% ,and burrehole in 5% . 65 % admitted in ICU postoperatively. Postoperatively 70% has no complications .DVT IN 10% and rebleeding occur in 15 % of cases. In three months follow up result for all cases 50% were conscious without residual neurological deficits, 40% of cases conscious with residual weakness and 10% were died.**

## Biography

**Ali Babiker Sidahmed is a Neurosurgeon. Lives in Khartoum, Sudan. His affiliation includes MD neurosurgery. His research interest lies on topics like intracerebral hemorrhage (ICH ),Interventricular hemorrhage (IVH), craniotomy, DVT, ICU related cases.**

International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

**IMPACTS OF ENDURANCE EXERCISE AND ENERGY RESTRICTION ON BRAIN FUNCTION**

## Name & Country

**Yi-Sub Kwak**

Korea

## Abstract

**Brain development is a complex process, and stimuli during this development period may modulate the functional maturation of the brain. It has been shown that environmental stimuli, such as physical activity habits, have a beneficial effect on brain development. Many human and animal studies have shown that environmental stimuli, such as physical activity habits, have a beneficial effect on brain development. Exercise has many functions not only in the developmental period of the brain but also in adulthood. Exercise is known to have many beneficial effects on brain function and energy metabolism. Endurance exercise and prolonged fasting state are known to improve brain function including cognition.**

## Biography

**Yi-Sub Kwak, Education: BS, 1992, MS, 1994, PhD, 2000, Yonsei University, Korea; Research Fellow, Yonsei University College of Medicine, 2000-2002. Appointment: Professor, 2003-, Head, Institute of Sport Science, 2007-, Chair, Graduate School and Department of Physical Education, 2009-, Don-Eui University; Managing Editor, Journal of Life Science, Busan, 2007-. Publications: Numerous articles in professional journals (in the fields of exercise science, exercise immunology, exercise nutrition, health and science and so on). Honours: Best professor in Dong-Eui University, 2005-2016; Excellence award, Beijing International Convention of Sports Science, 2006; Excellence Award, Yaubian International Convention of Sports Science, 2007. Visiting Fellow of Harris Manchester College, University of Oxford, 2008, 2010.**

International Conference on

# NEUROSCIENCE AND NEUROLOGICAL DISORDERS

June 28-29, 2018 | Dublin, Ireland

## Title

**INTRODUCING PSYCHIATRIC REHABILITATION: ILLNESS MANAGEMENT AND RECOVERY**

## Name & Country

**Ajmal Kazmi**

Pakistan

## Abstract

**This presentation describes the collaboration between a comprehensive community mental health facility in Karachi, Pakistan, Karwan-e-Hayat, and Department of Psychiatric Rehabilitation & Counseling Professions, Rutgers School of Health Related Professions New Jersey, U.S. This training was fostered and supported by a voluntary U.S based organization, Carvan of Life. In the Fall of 2008 faculty from the Department provided on-site consultation and training to selected Karwan-e-Hayat staff members and other invited professionals. The 17 week process was carried out via WebCT (an internet distance learning platform), SKYPE,ooVoo and e-mail. Prior to this training Professor Smith visited Karwan-e-Hayat to meet staff, interview prospective trainee and learn about the facility. The consultation and training process continues with the eventual introduction of modified evidenced based practices into existing day programming and inpatient services.**

## Biography

**Ajmal Kazmi, MBBS, DTM&H, DPM RCP&S , MRC (Psych) , Certified Rehabilitation Practitioner (UMD NJ USA). Consultant Psychiatrist Karwan-e-Hayat, Psychiatric Care & Rehabilitation Karachi Pakistan. He had his training in Ireland from 1990 to 1995. My last job was in St Loman Hospital.**