Meeting Report

The 2nd International Conference on Addiction Medicine and Reward Deficiency Syndrome (ARDS 2017) was held in Baltimore, MD, USA from March 17-19, 2017, unfolding the varied facets of Addiction Medicine – It’s Research and Therapy. This article provides an overview of the invited lectures at the ARDS 2017, organized by United Scientific Group.

This three-day scientific gathering with theme - Neurobiological and Clinical Science: Changing the Landscape of Addiction Medicine and Recovery, laid a global platform to share the current scenario of addiction to alcohol, opioids, substance abuse besides enlightening pathways to combat addiction to various substances.

After successful completion of Inaugural Reward Deficiency Syndrome Summit (RDS-1) in San Francisco on November 16-18, 2015, the first ever conference devoted to the Reward Deficiency Syndrome (RDS) an emerging field, we opened the gates to witness and share cutting-edge scientific findings, medical practices and caregiver initiatives related to addiction research and therapy through ARDS 2017.

In the course of the three-days, the attendees got an exclusive opportunity to network and be involved in inspiring and interesting discussions of latest information. The conference has gathered keynote lectures from 14 top notch experts in the fields of addiction medicine, psychiatry and neurobiology and 47 speakers from various sessions on topics spanning the breadth of current research in addiction genetics, drug addiction, eating disorders, gambling studies, child & adolescent substance abuse, dual diagnosis, neurotoxicology, drug induced brain disorders and new insights in addiction treatment & rehabilitation and their significance in clinical research and health diagnostics. The conference has provided the platform for Dominion Diagnostics, USA and Peak Achievement Training, USA, Nupathways, USA to exhibit their products and services. Travel sponsor for the event was Synaptamine Inc., USA.

The first day of the conference was inaugurated by the keynote talk from Kenneth Blum, the scientist that coined the term Reward Deficiency Syndrome and Editor-in-Chief JRDAS. He encapsulated “reward deficiency solution system” to overcome the opiate/opioid epidemic worldwide, his speech was followed by valuable keynote speeches, amongst them were Jag H. Khalsa, NIDA-NIH, delivered speech on Management of Epidemic of Opioid Use-HCV Infection in IDUs. Marc N. Potenza, Founding Director of the Yale Problem Gambling Clinic, the Yale Center of Excellence in Gambling Research and the Yale Research Program on Impulsivity and Impulse Control Disorders.
has delivered a talk on DSM-5 and ICD-11 efforts related to the consideration of gambling, gaming and other addictive disorders. Mark S. Gold from Washington University School of Medicine presented a lecture on Euphoria and Anhedonia: Dual Disorders in Addiction Medicine, Chicken and/or the Egg. Session talk were delivered by renowned experts - David Garner the President and CEO of River Centre Clinic, USA. He has developed the two most widely used psychometric instruments in the eating disorder field (EDI-3 and EAT-26). Pietro Paolo Sanna from The Scripps Research Institute elucidated work that he conducted in his lab on mechanisms behind long-term functional changes in the brain induced by drugs of abuse that may underlie dependence and vulnerability to relapse after cessation. Alexandre DaSilva, the Director of H.O.P.E. (Headache & Orofacial Pain Effort) worked on novel molecular (mu-opioid and dopamine), functional and structural neuroimaging techniques in vivo (PET and MRI-based), non-invasive brain stimulation and advanced 3D-neurornavigation projects all related to chronic pain, including cancer pain and migraine. Jonathan D. Cowan, President of Peak Achievement Training, USA proposed that Neureka! Protocol and the Peak Brain Happiness Trainer Pro a neurofeedback can be used to train individuals deficient in dopamine activity to raise these levels on their own, and thereby avoid reward deficiency syndromes. David E McCauley, Chairman of the Board/Founder of Oak Valley Foundation presented a talk on Addiction: The Essence of Surrender. The day ended with a Special Evening talk on Evidence-based Holistic Modalities to Overcome Addictions, presented by John J. Giordano. He is recipient of Martin Luther King Award and the Homeless Humanitarian Award.

The second day of ARDS 2017 witnessed scholarly keynote speeches, amongst them were presentations from Rajendra Badgaiyan, Co-Editor-in-Chief JRDSAS on Neuroimaging and the Reward Deficiency Syndrome, followed by David Baron speech on Translational Aspects of RDS for Clinicians Treating SUD, Marcelo Febo talk on Network Analysis Distinguish Short and Prolonged Functional Changes Caused by Potent ‘Bath Salt’ Drug MDPV. Daniel Langleben highlighted Application of fMRI Studies of Reward Processing in Addiction. He pioneered the application of functional MRI to study and detect deception. Igor Elman elucidated his thoughts on Reward Deficiency and Anti-Reward Processes in Pathological Gambling. Amongst the featured session speakers were Marjorie C. Gondré-Lewis from Howard University College of Medicine, Christopher J. Hammond from Johns Hopkins University School of Medicine. Christopher's research program focuses on characterizing the neurobiological predictors and mechanisms of treatment response for adolescent substance use disorders (SUDs) using translational neuroscience approaches (neuroimaging, genetics, biobehavioral measures). San-Yuan Huang the President of Taiwanese society of addiction science (TSAS) is active in addiction services, particularly in the rehabilitation of addictive patients and promotion of mental health in the addiction.

A Special talk by Martin Haraldsen on “Opioid substitution treatment”, mentioned buprenorphine can be used as an alternative and as a base for rehabilitation. The day got concluded on a good note through panel discussion on topic entitled - Reward Genomic Disparity in Opiate/Opioid Dependent African Americans: Embracing “Dopamine Homeostasis” Through Epigenetic Manipulation, from renowned experts - Rajendra Badgaiyan, Georgina M. Dunston, Bradford Wilson, Lorelle Bradley, Edwin Chapman, Olivia Finley, Earl Ettienne, Marjorie C. Gondré-Lewis, Kareem Washington and Kenneth Blum. This discussion was moderated by Melissa Clarke.

The last day of the meeting commenced with a special session - Clinical and Pre-Clinical Aspects of Alcohol Addiction following Bariatric Surgery, presented by speakers Panayotis K. Thanos, Andras Hajnal, Yanina Pepino and Laura M. Anderson. The day advanced through presentations from Lyle Fried, who has been working in SUD treatment for 18 years and developed numerous SUD treatment programs. Lorelle E. Bradley enlightened Reward Deficiency Syndrome in Children: Management Using Holistic and Integrative Approaches to Treat Impulsivity in Children. Bruce Steinberg who has devoted his efforts to studying brain mechanisms of Attention Deficit–Hyperactivity Disorder. Dr. Steinberg is conducting research on the effects of KB220Z, a “pro-dopamine regulator” on brain mechanisms of memory and attention in ADHD. John Harrelson elucidated a talk on Cinnamaldehyde-Based Inhibitors of Nicotine Metabolism: Potential for Addiction Treatment.

The ARDS-2017 organizing committee were contended that the conference was accredited by Wright State University for CME Credits: 19 AMA PRA Category 1 Credit(s)™ and participants benefited from the high value scientific program and foster new and lasting cross-disciplinary partnerships and collaborations between researchers, physicians, academicians, drug-experts, clinicians, policy makers in disparate biomedical and health science field to improve the knowledge sharing, with the goal of promoting the identification and deployment of effective treatment and recovery strategies for addiction.