

# CENTER FOR APPLIED

East-Meets-West on Innovation and Entrepreneurship

**Congress and Exhibition** 

1 to 4 September 2012 University of Cyprus

The Center for Applied Neuroscience holds its Second Scientific Conference on Sept 3, 2012 during the activities of the EASTWEST 2012 Conference on Innovation and Entrepreneurship (Sept 1-4, 2012). This interdisciplinary conference, held for the first time in Cyprus, offers significant opportunities for industry and research collaboration.

For One-Day only Registration and Further Information on the Second Scientific Conference of the Center for Applied Neuroscience:

Phone Number: 22 895190 E-mail: dthemi01@ucy.ac.cy Website: <u>http://can.ucy.ac.cy/</u>

For information regarding the EASTWEST 2012 and full conference registration, please visit the conference website at:

http://www.b2match.eu/eastmeetswest2012/participants



# CENTER FOR APPLIED

2nd SCIENTIFIC CONFERENCE

Translational Research In Applied Neuroscience: From Laboratory

**Research to Real World Applications** 

Monday, September 3, 2012

3.00-7.30 p.m.

### **KEYNOTE SPEAKER**

**Mark Ashley, Sc.D.,** President and CEO Center for Neuro Skills, Bakersfield California, USA

"Clinical Innovation: Influences of Translational Neuroscience and Competitive Industry"

### **INVITED SPEAKER**

**Michael Lombardo, Ph.D.,** Research Fellow at Jesus College, Cambridge , UK "Paving the way forward towards developing predictive biomarkers for cognitive states and neuropsychiatric disorders "

....and additional stimulating presentations by CAN collaborators and researchers followed by discussions, information exchange and opportunities for collaboration.

**Dr. Mark Ashley** is Founder and President/CEO of Centre for Neuro Skills® (CNS), which has operated postacute brain injury rehabilitation programs since 1980. Dr. Ashley serves on the Board of Directors of the Brain Injury Association of America (BIAA) as the Emeritus Chair and as the Chair on the Board of Directors of the California Brain Injury Association. He serves as the Vice Chairman of the Access to Treatment Committee of the Business and Professional Council. He serves on the Federal Legislative Advisory Committee for BIAA. Dr. Ashley is an Adjunct Professor at the Rehabilitation Institute of the College of Education at Southern Illinois University. He is a member of the Advisory Committee for the Department of Rehabilitation Sciences, Cyprus University of Technology, and a member of the Advisory Board for the Applied Neuroscience and Neurobehavioral Research Center (ANNRC), University of Cyprus. He established BIAA's Brain Injury Business Practices College and the Business and Professional Council.

#### http://www.neuroskills.com/about-us/

### *Title:* Clinical Innovation: Influences of Translational Neuroscience and Competitive Industry

Medicine in the United States is conducted across non-profit and for-profit hospitals and clinics that compete to attract patient care episodes and associated funding. Competition drives access to treatment in numerous ways while also wielding substantial influence over pricing. A key feature of this competition in encouraging patient selection is innovation. Technological advances in neurorehabilitation are on the verge of substantially improving both rate and extent of recovery.

The neuroscience research yield has been voluminous. While scientific endeavors in neuroplasticity, transcranial magnetic stimulation, neuroendocrine, orthonutrient and neurometabolism result in few direct clinical innovations, some amalgamate to clinical innovation with meaningful financial consequence. This session will consider the dynamics of healthcare reform, translational neuroscience and clinical innovation in the U.S. While healthcare infrastructure may vary from that in the U.S., innovations are nonetheless translatable.

**Dr. Michael Lombardo** does multidisciplinary work within the fields of social cognitive neuroscience, psychiatric imaging, neuroendocrinology, and autism spectrum disorders. His work on autism focuses on understanding the cognitive and neural mechanisms behind social-communication difficulties, with a particular focus on mentalizing and the role of the self in social cognition. Dr Lombardo also has interests in the fetal programming role that early sex steroids have on human brain development and later development of atypical phenotypes. Dr Lombardo studied psychology at the University of California, Davis and worked as a researcher at the UC Davis MIND Institute and UC Davis Center for Mind and brain. Later he received a PhD from the University of Cambridge. He is a Research Associate and Director of MRI at the Autism Research Centre in the University of Cambridge and a Research Fellow at Jesus College, Cambridge and as a British Academy Postdoctoral Fellow.

https://sites.google.com/site/mvlombardo/

## *Title:* Paving the way forward towards developing predictive biomarkers for cognitive states and neuropsychiatric disorders

Psychology, psychiatry, and neuroscience have great potential for expanding past ivory towers and into real-world applications. However, we still have several hurdles before we may be able to fully realize much of this potential. In this talk I will discuss emerging work in psychology, psychiatry, and neuroscience that has started to unlock the potential for applying machine learning algorithms to massively multivariate data (e.g., MRI, genetics, proteins, hormones, etc) for the purposes of labeling and predicting discrete cognitive states (i.e. mindreading) and for detecting and evaluating neuropsychiatric disorders. Expanding on such work may get us into a better position for translating our conceptual advances into the real-world (i.e. neuromarketing, objective biology-based diagnostic tests). However, I will also highlight some of the pitfalls and caveats for such work so that we can better discern what is simply 'hype' and what is reality.