

South Galeria Biltmore

13th April 2018

Friday, April 13th 10:00 - 11:30 am

Session A1: Nano-Neuro-Photonics (USC CME)

Chairs: Babak Kateb, MD . Fartash Vasefi PHD

10:00-10:15 Brian Norling (MEMS Precision Technology, Inc.): Nanosurgical device development capability based upon nanofabrication, nanosensing, micro-actuation, and microelectronics techniques

10:15-10:30 Chen Jessie Zhang (National Institute of Standards and Technology (NIST)): Nano-Fabrication for Biomedical Research

10:30-10:45 Todd Ovokaitys (Qigenix): "Photoacoustic Therapeutic Approach to Parkinson's"

10:45-11:00 Ramin Estifai (Brain Window Canada Inc.): Multimode confocal scanning laser ophthalmoscope for age-related disease management

11:00-11:15 Mohammad Torabzadeh (Beckman Laser Institute and Medical Clinic): High speed imaging of cerebral oxygenation and blood flow during cardiac arrest and resuscitation

11:15-11:30 Mohammadreza Nasiriavabaki (biomedical engineering of Wayne State University): Characterization of a transfontanelle photoacoustic probe for neonatal brain imaging

Friday, April 13th 1:30 - 3:00 pm

Session A8: Neurotechnology and Personalized Medicine in Psychiatry

Chairs: Chair: Prof. Dr. Nevzat Tarhan, MD

1:30-1:45 Nevzat Tarhan (Uskudar University): Future of deep TMS in psychiatry

1:45-2:00 Turker Erguzel (Uskudar University): Mental task based robotic arm control and trajectory tracking application

2:00-2:15 Baris Metin and Bernis Kaya (Uskudar University): Virtual reality in treatment of neuropsychiatric disorders

2:15-2:30 Baris Metin and Bernis Kaya (Uskudar University): Mapping of cognitive functions using transcranial magnetic stimulation

2:30-2:45 Merve Cebi (Uskudar University): The impact of high frequency repetitive transcranial magnetic stimulation on executive functioning in patients with with treatment resistant depression

2:45-3:00 Session Discussion

Friday, April 13th 3:30 - 5:00 pm

Session A15: Current and future of the Diagnostics and Therapeutics of Substance Abuse

Chairs: Chairs: Daniel Sipple, Shilpa Buch and Hon. Ken Cooley

3:30-3:45 Mark H. Erath (Mayo Clinic College of Medicine): Precision Analgesia: Attacking the opioid crisis with Pharmacogenomics and Analytics

3:45-4:00 Daniel Sipple (InSitu Biologics): Reduced Operative Opiate Exposure: ASC, Spinal Cord Stimulation, Sustained Release Anaesthetics

4:00-4:15 Steven Stanos (American Academy of Pain Medicine): Risk Evaluation and Mitigation Strategies

4:15-4:30 David Wensel (National PACE Association): PACE as cost effective, scalable outpatient addiction treatment system

4:30-4:45 Ken Cooley (California State Assembly District 8): Opiate Policy- Government and Insurance Perspectives

4:45-5:00 Session Discussion