IEEE Workshop on Advanced NeuroTechnologies for BRAIN Initiatives

November 10-11, 2016

Sheraton San Diego Hotel and Marina, California

The IEEE Workshop on Advanced NeuroTechnologies for BRAIN Initiatives, sponsored by the IEEE Brain Initiative, will be held November 10-11, 2016, at the Sheraton San Diego Hotel and Marina, California. We strongly encourage members of both the Neuroscience and Engineering Communities to attend this highly multidisciplinary workshop.

The workshop will highlight the development of novel electronic and photonic devices and techniques for experimental probing, neural simulation studies, and the design and development of human-machine interface systems, artificial vision sensors, and neural prosthesis have significantly restored and enhanced the impaired sensory functions and motor systems. Furthermore, we highlight these recent technological advances by focusing on advanced technologies that monitor and control brain activities to treat neurological diseases, including Alzheimer's, Epilepsy, Depression, etc., from the molecular to systemic levels.

Invited talks will be presented by internationally well respected researchers. This workshop will provide a unique interactive platform to exchange of ideas in the areas of BRAIN initiatives with leading researchers and medical and industry professionals.

Tentative Program at a Glance

November 10, 2016

8:15 AM – 6:00 PM PST

Opening and Welcome Remarks

Andrew Laine, IEEE EMBS President
Paul Sajda, Chair, IEEE Brain Initiative
Metin Akay, Chair, Advanced Technologies for Brain Initiatives Workshop

Symposium #1: Brain Initiatives

Ted Berger, University of Southern California
Carol Lucas, NSF
Kamil Ugurbil, University of Minnesota
Doug Weber, DARPA

Symposium #2: Neural Implants and Prosthetics: Translational Neural Engineering

Gert Cauwenberghs, University of California, San Diego
Michel M. Maharbiz, University of California, Berkely
Jacob Robinson, Rice University
Mario Romero-Ortega, University of Texas, Dallas

Symposium #3: Brain Mapping and Connectivity

Dominique Durand, Case Western Reserve University
Warren Grill, Duke University
Paul Sajda, Columbia University
John White, Boston University

November 11, 2016

8:30 AM – 12:00 PM PST

Symposium #4: Advances in Brain-Computer Interface

Jose Carmena, University of California Berkeley
Dario Farina, Goettingen University
Karim Oweiss, University of Florida
Maryam Shanechi, University of Southern California

Symposium #5: Neurotechnology for Rehabilitation

Robert Kirsch, Case Western Reserve University
Lee Miller, Northwestern University and RIC
Jose Pons, Neural Rehabilitation Group, Cajal Institute
Eric Perreault, Northwestern University and RIC

Registration is Open at brain.ieee.org/news/antbi/

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