November 9, 2017

Opening and Welcome Remarks	09:00 - 9:15 AM

Paul Sajda, Chair, IEEE Brain Initiative

Metin Akay, Chair, ANTBI Workshop

Keynote	09:15 - 10:15 AM

Tim Denison, Medtronic
Platform Research Tools and Deployment Strategies to Accelerate Translational Discovery

Coffee Break	10:15 - 10:30 AM
Symposium#1: Neuroethics	10:30 - 11:45 AM

Recorded Message, **Judy Illes**, University of British Columbia
Why Neuroethics?

Sara Goering, University of Washington
Engaging End-user Perspectives In the Ethical Design of Neural Technologies

James Giordano, Georgetown University
A Risk Assessment and Mitigation Approach to Ethically Addressing and Guiding Use of Neurotechnologies

Lunch Break with Speaker	11:45 AM - 1:15 PM

Christoph Guger, g.tec Guger Technologies OG
BCIs for Assessment and Rehabilitation

Symposium#2: *Technologies for Brain Trauma and Spinal Cord Injuries*	01:15 - 03:00 PM

Silvestro Micera, École Polytechnique Fédérale de Lausanne
Promoting Plasticity For Upper Limb Function Restoration Using Wearable and Implantable Devices

Mario Romero-Ortega, University of Texas at Dallas
Technologies For Neuromodulation of Small Nerves and Fascicles

Robert Kirsch, Case Western University
BCI Control of Functional Electrical Stimulation to Restore Arm and Hand Function

Coffee Break	03:00 - 03:15 PM
Symposium#3: Engineering Next Generation BCI	03:15 - 05:00 PM

Krishna Shenoy, Stanford University
Intra-cortical Motor BMIs

Jacob Robinson, Rice University
Nanotechnologies For Miniaturizing Electrical and Optical BCI

Jon Viventi, Duke University
High-Resolution Neural Interfaces Using Flexible Silicon Electronics

November 10, 2017

Symposium#4: *Neurotechnology for Rehabilitation*	09:00 – 10:45 AM

Ted Berger, University of Southern California
A Hippocampal Prosthesis For Human Memory

James Weiland, University of Michigan
Retinal Prosthesis For the Blind

Jack Judy, University of Florida
Integrating Microelectrode Arrays into Tissue-Engineered Scaffolds For Novel Neural Interfaces

Coffee Break	10:45 - 11:00 AM
Keynote	11:00 AM - Noon

Mark Chevillet, Facebook
Designing a Silent Speech Interface

Lunch Break	Noon - 01:00 PM
Symposium#5: *Neurocomputation and Modeling*	01:00 - 03:00 PM

John White, Boston University
Autonomous Synchronous Activity in Isolated Hippocampus

Loren Frank, University of California, San Francisco
New Tools For Understanding Distributed Patterns of Brain Activity

Cynthia Chestek, University of Michigan
Neural Interfaces For Controlling Finger Movements

Maryam Shanechi, University of Southern California
Decoding Mood From Human Multisite Brain Activity

Coffee Break	03:00 - 03:15 PM
Symposium#6: *Global Neurotechnology Industry*	03:15 - 05:15 PM

James Harris, Inscopix
Reflections on Building a Neurotechnology Company in the 21st Century

Chad Bouton, Feinstein Institute
Bioelectronic Medicine

Matthew Angle, Paradromics
Broadband For the Brain

Daryl Kipke, NeuroNexus
Tapping Into the Nervous System: Challenges and Opportunities For Neurotechnologies In Neuroscience and Bioelectronics

Closing Remarks	05:15 - 05:30 PM

Paul Sajda, Chair, IEEE Brain Initiative

Metin Akay, Chair, ANTBI Workshop