<table>
<thead>
<tr>
<th>Date</th>
<th>Time PDT</th>
<th>Track</th>
<th>Presentation Title</th>
<th>Speaker</th>
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</thead>
<tbody>
<tr>
<td>13-Mar</td>
<td>6:00-7:00 AM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Keynote Presentation: Updates from the NIH BRAIN Initiative</td>
<td>Joshua A. Gordon, MD, PhD&lt;br&gt;Director of National Institute of Mental Health</td>
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<tr>
<td>13-Mar</td>
<td>7:00-7:30 AM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>NIH BRAIN Funding Opportunities: NIH BRAIN Initiative and Functional Human Neuroscience</td>
<td>James Gnadt, PhD&lt;br&gt;Program Director, Systems and Cognitive Neuroscience, National Institute of Neurological Disorders and Stroke; Karen David, PhD&lt;br&gt;Program Director, BRAIN Initiative, National Institutes of Health &amp; Systems and Cognitive Neuroscience, National Institute of Neurological Disorders and Stroke</td>
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<tr>
<td>13-Mar</td>
<td>7:40-8:00 AM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>BRAIN Initiative Scientific Updates: How the Human Brain Learns to Learn</td>
<td>Elizabeth Buffalo, PhD&lt;br&gt;Professor, Department of Physiology &amp; Biophysics, Neuroscience Focus Group, University of Washington</td>
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<tr>
<td>13-Mar</td>
<td>8:00-8:20 AM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>BRAIN Initiative Scientific Updates: Deciphering the Neuronal Mechanisms of Human Episodic Memory at the Single-Neuron Level</td>
<td>Ueli Rutishauser, PhD&lt;br&gt;Board of Governors Chair in Neuroscience, Director, Human Neurophysiology Research, Associate Professor, Neurosurgery, Neurology &amp; Biomedical Sciences, Cedars-Sinai Medical Center</td>
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<tr>
<td>13-Mar</td>
<td>8:20-8:40 AM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>BRAIN Initiative Scientific Updates: Influence of Task Context on Motor Cortical Activity During Reaching and Grasping</td>
<td>Jennifer Collinger, PhD&lt;br&gt;Assistant Professor, Department of Physical Medicine and Rehabilitation, University of Pittsburgh, Rehab Neural Engineering Labs, Biomedical Engineer, VA R&amp;D Center of Excellence</td>
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<td>13-Mar</td>
<td>8:40-9:00 AM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>BRAIN Initiative Scientific Updates: Mechanisms of Rapid, Flexible Cognitive Control in Human Prefrontal Cortex</td>
<td>Sameer Anil Sheth, MD, PhD&lt;br&gt;Associate Professor, Vice-Chair of Clinical Research, Neurosurgery, Baylor College of Medicine</td>
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<tr>
<td>13-Mar</td>
<td>9:10-9:30 AM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>PANEL DISCUSSION: BRAIN Initiative Awardees</td>
<td>Elizabeth Buffalo, PhD&lt;br&gt;Professor, Department of Physiology &amp; Biophysics, Neuroscience Focus Group, University of Washington; Ueli Rutishauser, PhD&lt;br&gt;Board of Governors Chair in Neuroscience, Director, Human Neurophysiology Research, Associate Professor, Neurosurgery, Neurology &amp; Biomedical Sciences, Cedars-Sinai Medical Center; Jennifer Collinger, PhD&lt;br&gt;Assistant Professor, Department of Physical Medicine and Rehabilitation, University of Pittsburgh, Rehab Neural Engineering Labs, Biomedical Engineer, VA R&amp;D Center of Excellence</td>
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<td>Presenter(s)</td>
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<td>9:30-9:50 AM</td>
<td>13-Mar</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Deep Brain Stimulation: Opportunities and Ethical Dilemmas</td>
<td>Rowshanak Hashemiyoyn, PhD</td>
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<td>10:00-10:20 AM</td>
<td>13-Mar</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Neuroethics: An Essential Partner for Neuroscience</td>
<td>Khara Ramos, PhD, Director, Neuroethics Program, National Institute of Neurological Disorders and Stroke</td>
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<td>10:20-10:40 AM</td>
<td>13-Mar</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Neuroethics: Ethical Issues in Research with Neural Devices with Humans</td>
<td>Saskia Hendriks, MD, PhD, Department of Bioethics, Clinical Center, National Institutes of Health (NIH)</td>
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<td>10:40-11:00 AM</td>
<td>13-Mar</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Neuroethics: Invasive Human Neurophysiological Recordings for Basic Science: Is Altruism Enough?</td>
<td>Nader Pouratian, MD, PhD, Professor of Neurosurgery and Radiation Oncology and affiliated faculty in Bioengineering and Neuroscience, UCLA Medical Center &amp; UCLA Brain Research Institute Ashley Feinsinger, PhD, Adjunct Assistant Professor, David Geffen School of Medicine at UCLA, Philosophy Department, UCLA</td>
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<td>11:00-11:20 AM</td>
<td>13-Mar</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Neuroethics: From Lab to Law; Neuroscience in the Courtroom</td>
<td>Francis Shen, JD, PhD, Executive Director of the Harvard MGH Center for Law, Brain, and Behavior; Associate Professor of Law, McKnight Presidential Fellow, University of Minnesota</td>
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<td>11:20-11:40 AM</td>
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<td>Pioneering Our Understanding of the Human Brain</td>
<td>PANEL DISCUSSION: Neuroethics</td>
<td>Khara Ramos, PhD, Director, Neuroethics Program, National Institute of Neurological Disorders and Stroke, Nader Pouratian, MD, PhD, Professor of Neurosurgery and Radiation Oncology and affiliated faculty in Bioengineering and Neuroscience, UCLA Medical Center &amp; UCLA Brain Research Institute Ashley Feinsinger, PhD, Adjunct Assistant Professor, David Geffen School of Medicine at UCLA, Philosophy Department, UCLA Francis Shen, JD, PhD, Executive Director of the Harvard MGH Center for Law, Brain, and Behavior; Associate Professor of Law, McKnight Presidential Fellow, University of Minnesota, Saskia Hendriks, MD, PhD, Department of Bioethics, Clinical Center, National Institutes of Health (NIH)</td>
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<td>11:50-12:00 PM</td>
<td>13-Mar</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Innovative Neurotechnologies: NIH Funding for Technology Development and Translation to Humans</td>
<td>Nick Langhals, PhD, Program Director, Division of Translational Research, National Institute of Neurological Disorders and Stroke (NINDS)</td>
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<td>13-Mar</td>
<td>12:00-12:20 PM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Innovative Neurotechnologies: Early Feasibility Study of a Visual Cortical Prosthesis for the Blind: The Orion Visual Prosthesis System, Nader Pouratian, MD, PhD, Professor of Neurosurgery and Radiation Oncology and affiliated faculty in Bioengineering and Neuroscience, UCLA Medical Center &amp; UCLA Brain Research Institute</td>
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<td>13-Mar</td>
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<td>Pioneering Our Understanding of the Human Brain</td>
<td>Innovative Neurotechnologies: RAVE: R Analysis and Visualization of Intracranial Encephalography, Michael Beauchamp, PhD, Professor, Vice Chair of Basic Research, Departments of Neurosurgery and Neuroscience, Director of the Core for Advanced MRI, Baylor College of Medicine, John Magnotti, PhD, Assistant Professor, Neurosurgery, Baylor College of Medicine</td>
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<td>13-Mar</td>
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<td>Pioneering Our Understanding of the Human Brain</td>
<td>Innovative Neurotechnologies: Human Brain Science; The Intersection of Translational Neurotechnology and Systems Neuroscience, Bijan Pesaran, PhD, Associate Professor of Neural Science, New York University</td>
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<td>13-Mar</td>
<td>1:00-1:20 PM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Innovative Neurotechnologies: High-Resolution Recording and Non-Invasive Perturbation Tools for the Human Brain, György Buzsáki, PhD, Biggs Professor of Neuroscience, NYU School of Medicine</td>
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<td>13-Mar</td>
<td>1:20-1:40 PM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Innovative Neurotechnologies: Merging Minds and Machines: Brain Computer Interfaces (BCIs) to Restore Movement and Communication for People with Paralysis, John Donoghue, PhD, Founding Director of the Wyss Center for Bio and Neuroengineering</td>
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<tr>
<td>13-Mar</td>
<td>1:40-2:00 PM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Clinical Updates: Towards Artificial Intelligence Based Adaptive Deep Brain Stimulation in Movement Disorders, Wolf-Julian Neumann, MD, Clinician Scientist, Movement Disorders and Neuromodulation Unit at the Department of Neurology, Charité - Universitätsmedizin Berlin, Germany</td>
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<tr>
<td>13-Mar</td>
<td>2:00-2:20 PM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Clinical Updates: Basal Ganglia-Cortical Loop Function During Speech, R. Mark Richardson, MD, PhD, Associate Professor, Director, Adult Epilepsy &amp; Movement Disorders Surgery, Director, Brain Modulation Laboratory, Faculty Member, University of Pittsburgh Brain Institute, Univ of Pittsburgh</td>
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<td>13-Mar</td>
<td>2:20-2:40 PM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Clinical Updates: Inducing Cortical Plasticity by Brain Stimulation and Prehabilitation, Juan A. Barcia, MD, PhD, Professor and Head, Department of Neurosurgery, Hospital Clinico San Carlos and Universidad Complutense de Madrid</td>
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<td>13-Mar</td>
<td>2:40-3:00 PM</td>
<td>Pioneering Our Understanding of the Human Brain</td>
<td>Clinical Updates: Closed Loop Deep Brain Stimulation in Parkinson's Disease Using Patient Specific Biomarkers and Therapeutic Windows, Helen Bronte-Stewart, MD, MS, John E Cahill Family Professor in the department of Neurology and Neurological Sciences, Stanford</td>
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<tr>
<td>14-Mar</td>
<td>6:00-7:00 AM</td>
<td>Perspectives on Neuropsychiatric Disorders</td>
<td>Keynote Presentation: Environmental Risk Mechanisms for Psychiatric Disorders, Andreas Meyer-Lindenberg, MD, MSc, MBA, Director of the Central Institute of Mental Health, Department of Psychiatry and Psychotherapy, University Medical Centre Mannheim</td>
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<td>14-Mar</td>
<td>7:00-8:00 AM</td>
<td>Perspectives on Neuropsychiatric Disorders</td>
<td>Vulnerability to Stress as a Risk Factor for Major Mental Disorders</td>
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<td>8:00-9:00 AM</td>
<td>Perspectives on Neuropsychiatric Disorders</td>
<td>Using Computational Psychiatry to Develop a Rigorous and Integrative Understanding of Psychiatric Disorders</td>
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<td>9:00-10:00 AM</td>
<td>Perspectives on Neuropsychiatric Disorders</td>
<td>A Gene Expression Based Screening Platform for Mouse Models of Late-Onset Alzheimer's Disease</td>
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<td>10:00-11:00 AM</td>
<td>Perspectives on Neuropsychiatric Disorders</td>
<td>Identifying Pattern Transitions of Mind and Brain in Psychotherapy: The Nonlinear Dynamics of Human Change Processes</td>
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<td>Understanding Batten Disease Pathogenesis</td>
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<td>12:00-1:00 PM</td>
<td>Emerging Roles of the Immune System in Brain Function and Behavioral Processes</td>
<td>Keynote Presentation: Infections and Inflammation as Possible Causes of Severe Mental Disorders - Paving the Way for new Treatment Targets</td>
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<td>1:00-2:00 PM</td>
<td>Emerging Roles of the Immune System in Brain Function and Behavioral Processes</td>
<td>Exploring the Link Between Infection and Mental Illness: Results From Nationwide Studies</td>
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</table>

*Anthony Grace, PhD, Distinguished Professor of Neuroscience, Professor of Psychiatry and Psychology Department of Neuroscience, University of Pittsburgh

*Tiago V. Maia, PhD, Associate Professor, Faculty of Medicine, University of Lisbon

*Greg Carter, PhD, Associate Professor, The Jackson Laboratory

*Günter Schiepek, PhD, Paracelsus Medical University: Institute of Synergetics and Psychotherapy Research, Salzburg, Austria

*Jonathan D. Cooper, PhD, Professor of Pediatrics, Washington University School of Medicine, St Louis

*Michael Benros, MD, PhD, Research Leader, Mental Health Care Copenhagen, Copenhagen University Hospital

*Ole Kähler-Forsberg, Aarhus University and Copenhagen University Hospitals, Denmark; Massachusetts General Hospital and Harvard University