# **Coordinating Global Brain Projects** Monday, September 19, 2016

The goal of this meeting is to promote collaboration and cooperation in the emerging large-scale international brain projects, as part of NSF support for the U.S. BRAIN Initiative. The speakers are scientists and administrators who represent public and private projects around the world.

## Sponsors

National Science Foundation, The Kavli Foundation, Neurotechnology Center at Columbia University, The Rockefeller University, and Columbia University

# Organizers

Cori Bargmann, Ph.D.		Rafael Yuste, M.D., Ph.D.
Torsten N. Wiesel Professor, Lulu and Anthony Wang		Professor of Biological Sciences and Neuroscience
Laboratory of Neural Circuits and Behaviour		Director, NeuroTechnology Center
Director, Kavli Neural Systems Institute		Co-director, Kavli Institute of Brain Science
The Rockefeller University		Columbia University
Agenda		
8·00 – 8·30 a m	Registration and Continental Breakfast	

<b>8:00 – 8:30 a.m.</b> (30 minutes)	Registration and Continental Breakfast Welcome Remarks Cori Bargmann and Rafael Yuste	
<b>8:30 – 8:35 a.m.</b> (5 minutes)		
<b>8:35 – 8:50 a.m.</b> (15 minutes)	Introduction and Goals France A. Córdova, Ph.D. Director National Science Foundation	
	Robert W. Conn, Ph.D. President and Chief Executive Officer The Kavli Foundation	
	Thomas A. Kalil Deputy Director for Technology and Innovation White House Office of Science and Technology Policy	
<b>8:50 – 9:10 a.m.</b> (20 minutes)	Keynote Address LIGO as a Success of Large-scale Science David H. Shoemaker, Ph.D. Director, MIT LIGO Laboratory Massachusetts Institute of Technology	
<b>9:10 – 11:30 a.m.</b> (7 minutes/speaker plus 15 minute break)	<b>International Brain Projects</b> James L. Olds, Ph.D. Assistant Director, Directorate for Biological Sciences National Science Foundation	
	Walter J. Koroshetz, M.D. Director, National Institute of Neurological Disorders and Stroke National Institutes of Health	
	Jason Matheny, Ph.D. Director The Intelligence Advanced Research Projects Activity	

Karim Berkouk, Ph.D. Deputy Head, DG Research & Innovation European Commission

Christoph Ebell Executive Director Human Brain Project

Katrin Amunts, Ph.D. Scientific Director, Human Brain Project Professor, C. and O. Vogt Institute for Brain Research Heinrich Heine Universität Düsseldorf

Minh-hà Pham, Ph.D. Counselor for Science and Technology Embassy of France in the United States

Benedikt Grothe, Ph.D. Professor and Chair, Division of Neurobiology Ludwig-Maximillians-Universität München

Kathryn Adcock, Ph.D. Head of Neurosciences and Mental Health Medical Research Council UK

Ofir Akunis Israeli Minister of Science, Technology, and Space

#### Break

Yutaka Hishiyama Senior Director Japan Agency for Medical Research and Development

Shigeo Okabe, M.D., Ph.D. Professor and Chair, Department of Cellular Neurobiology The University of Tokyo

Kyungjin Kim, Ph.D. President Korea Brain Research Institute

Mu-ming Poo, Ph.D. Director, Institute of Neuroscience Chinese Academy of Sciences

Anthony G. Phillips, Ph.D. Scientific Director, Institute of Neurosciences, Mental Health and Addiction Canadian Institutes of Health Research

Anthony Murfett Minister Counselor for Industry, Science and Education Australian Embassy in the United States

Linda J. Richards, Ph.D. Professor and Deputy Director, Queensland Brain Institute The University of Queensland

**11:30 a.m. – 12:30 p.m.**Non-Government Partner Brain Projects(5 minutes/speaker)Hongkui Zeng, Ph.D.

Hongkui Zeng, Ph.D. Executive Director, Structured Science Allen Institute for Brain Science Gerald D. Fischbach, M.D. Chief Scientist and Fellow Simons Foundation

Karel Svoboda, Ph.D. Group Leader Howard Hughes Medical Institute

Miyoung Chun, Ph.D. Executive Vice President of Science Programs The Kavli Foundation

Tobias Bonhoeffer, Ph.D. Director, Max Planck Institute of Neurobiology, Martinsried Governor, The Wellcome Trust, London

Anne-Marie Engel, Ph.D. Director of Research Lundbeck Foundation

Inez Jabalpurwala, M.B.A. President and CEO Brain Canada Foundation

Jeffrey Borenstein, M.D. President and Chief Executive Officer Brain Behavior Research Foundation

Viren Jain, Ph.D. Senior Research Scientist Google

Kunal Ghosh, Ph.D. Founder and Chief Executive Officer Inscopix

Daryl R. Kipke, Ph.D. President NeuroNexus

**12:30 – 1:30 p.m.** *(60 minutes)* 

#### Lunch

1:30 – 3:30 p.m.

(15 minutes/speaker)

Frontiers in Neuroscience and Neurotechnology Cell Types: Evan Macosko, M.D., Ph.D. Instructor, Harvard Medical School Stanley Center for Psychiatric Research

Structure: Tomomi Shimogori, Ph.D. Team Leader, Laboratory of Molecular Mechanisms of Thalamus Development RIKEN Brain Science Institute

Animal Imaging: Raju Tomer, Ph.D. Assistant Professor, Department of Biological Sciences Columbia University

Behavior: Kristin Branson, Ph.D. Group Leader Janelia Research Campus

Human Imaging: Karla Miller, Ph.D. Professor of Biomedical Engineering, Nuffield Department of Clinical Neuroscience University of Oxford Computation: Surya Ganguli, Ph.D. Associate Professor, Laboratory of Neural Dynamics and Computation, **Department of Applied Physics** Stanford University Translation: Beth Stevens, Ph.D. Assistant Professor of Neurology Harvard University 3:30 – 4:00 p.m. Break (30 minutes) 4:00 - 4:10 p.m. Johns Hopkins University/Kavli White Paper (10 minutes) Joshua T. Vogelstein, Ph.D. Department of Biomedical Engineering and the Institute for Computational Medicine Johns Hopkins University 4:10 - 4:40 p.m. **Joint Initiatives** Peter B. Littlewood, Ph.D. (6 minutes/speaker) Director Argonne National Laboratory Michael Roukes, Ph.D. Robert M. Abbey Professor of Physics, Applied Physics, and Biological Engineering California Institute of Technology Martha J. Farah, Ph.D. Professor and Director, Center for Neuroscience and Society University of Pennsylvania Miguel Nicolelis, M.D., Ph.D. Professor, Neurobiology, Biomedical Engineering, Psychology, and Neuroscience **Duke University Medical Center** Andrea Chiba, Ph.D. Associate Professor, Department of Cognitive Neuroscience University of California, San Diego 4:40 - 5:00 p.m. Wrap Up and Synthesis (20 minutes) Terrence Sejnowski, Ph.D. Professor and Head, Laboratory of Computational Neurobiology Francis Crick Chair Salk Institute for Biomedical Studies Sten Grillner, M.D., Ph.D. Professor, Department of Neuroscience Karolinska Institutet 5:00 - 5:45 p.m. **Establishment of a Global Brain Initiative** Moderated by Cori Bargmann and Rafael Yuste (45 minutes)

 6:00 - 7:00 p.m. (2 x 30 minute sessions)
Live Broadcast from the United Nations Headquarters: Dialogue on Brain Science and Launch of an International Brain Station Hosted by the U.S. Department of State in collaboration with The Global Partnerships Forum, The Kavli Foundation, and the U.S. National Science Foundation
6:00 - 7:30 p.m.

Sponsored by The Kavli Foundation Open to all attendees

## **Host Venue**

Caspary Auditorium The Rockefeller University 1230 York Avenue at East 66<sup>th</sup> Street New York City www.rockefeller.edu/globalbrain