



MEETING AGENDA

Computational Psychiatry

February 3-6, 2019

The Banbury Center, Cold Spring Harbor Laboratory, New York, USA

This meeting was funded by **the Society for Biological Psychiatry; The William K. Warren Foundation; and The Carney Institute for Brain Science at Brown University**

Organizers:

Michael Browning, University of Oxford

Michael Frank, Brown University

Quentin Huys, University College London

Martin Paulus, Laureate Institute for Brain Research

While there has been a great deal of progress in the field of computational psychiatry over recent years, much of this progress has occurred in addressing foundational mechanisms of brain and behavior, and their alterations in patient populations, but without having a direct impact on treatment. The goal of this meeting was to bridge that gap, by facilitating the process by which computational models can be used to address real-world clinical questions in psychiatry.

Key discussion questions included:

- What are the low hanging fruit for computational psychiatry?
- What study designs should be used, populations studied, and questions addressed?
- What infrastructure, both IT and organizational, do we need to implement these studies?
- How can we ensure that the individual measure/model combinations are optimized for a particular question?
- What are the dimensions of measure/model combination that need to be assessed to facilitate selection of the best tool?



SUNDAY, FEBRUARY 3

Participant arrivals
Reception, dinner

MONDAY, FEBRUARY 4

Welcome Remarks

Rebecca Leshan, The Banbury Center, Cold Spring Harbor Laboratory

Meeting Introduction

Michael Browning, University of Oxford, United Kingdom
Michael Frank, Brown University, Providence, Rhode Island, USA
Quentin Huys, University College London, UK
Martin Paulus, Laureate Institute for Brain Research, Tulsa, Oklahoma, USA

Insights from the International Brain Lab

Anne Churchland, Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, USA

[Breakout Groups]

TUESDAY, FEBRUARY 5

[Breakout Groups]

WEDNESDAY, FEBRUARY 6

Breakout Groups Reporting
Review and Finalize Recommendations
Meeting Wrap-Up



MEETING PARTICIPANTS

Justin Baker, Harvard University
Michael Browning, University of Oxford
Cameron Carter, University of California, Davis
Christopher Chatham, F Hoffmann-La Roche Ltd.
Adam Chekroud, Spring Health & Yale University
Anne Churchland, Cold Spring Harbor Laboratory
Roshan Cools, Donders Institute
Bruce Cuthbert, National Institute of Mental Health
Peter Dayan, Max Planck for Biological Cybernetics
Hanneke Den Ouden, Donders Institute for Brain, Cognition and Behaviour
Michele Ferrante, National Institute of Mental Health
Michael Frank, Brown University
Claire Gillan, Trinity College Dublin
James Gold, University of Maryland School of Medicine
Rita Goldstein, Icahn School of Medicine at Mount Sinai
Catherine Hartley, New York University
Quentin Huys, University College London
Adam Kepecs, Cold Spring Harbor Laboratory
John Krystal, Yale School of Medicine
Rebecca Lawson, University of Cambridge
Janaina Mourao-Miranda, University College London
Martin Paulus, Laureate Institute for Brain Research
Mary Phillips, University of Pittsburgh Department of Psychiatry
Diego Pizzagalli, Harvard Medical School
Albert Powers, Yale University
David Rindskopf, The Graduate Center, CUNY
Jon Roiser, University College London
Daniela Schiller, Icahn School of Medicine at Mount Sinai
Katharina Schmack, Cold Spring Harbor Laboratory
Miriam Sebold, Charité - Universitätsmedizin Berlin
Klaas Enno Stephan, University of Zurich & ETH Zurich