

Foreword

Topics addressed at the Symposium included the cellular basis of neurodegeneration, memory systems and aging, neural circuits of anxiety, addiction circuits and treatment frontiers, sleep and sleep disorders, hormonal regulation and mood disorders, cortico-striatal circuits in perception and action, deep brain stimulation for psychiatry, computational psychiatry, development of social cognition, restoration of vision, brain machine interfaces, and new techniques for human brain manipulation.

The Symposium attracted more than 290 participants from more than 25 countries and provided an extraordinary 5-day synthesis of current understanding in the field. Opening night talks that set the scene for later sessions included those by Mehmet Yanik on engineering brain activity patterns for therapeutics of disorders, Daphna Shohamy on how memory guides value-based decisions, Daniel Wolpert on probabilistic models of sensorimotor control and decision, and Antonello Bonci on synaptic plasticity, optogenetics, and a novel treatment against cocaine use disorders. P. Read Montague delivered a fascinating Dorcas Cummings Lecture on Connecting Mind and Brain in a Computational Age for the Laboratory's friends and neighbors. A special session of short "lightning" talks selected from the abstracts given by 10 recipients of the prestigious Chen fellowships was included in the program. Rising to the challenging task of condensing more than 50 talks given over the prior 5 days, Adam Kepecs provided a masterly summary of the state of the field at the conclusion of the Symposium. Interviews by participating editors, including Rebecca Leshan, Gary Stix, Sébastien Thuaud, Jan Witkowski, and Sejal Vyas, were conducted throughout the Symposium to provide a snapshot of the state of current research and are available on the CSHL Leading Strand YouTube channel (<https://www.youtube.com/user/LeadingStrand>). Transcripts of these Symposium conversations are also provided here.

Major support for the 83rd Symposium was generously provided by the Tianqiao & Chrissy Chen Institute (www.cheninstitute.org). The Laboratory was pleased to host the east-coast premiere of the Chen Institute's new documentary *Minds Wide Open* as part of the Symposium program. This innovative film, which features leading international experts and fascinating patient stories, makes a compelling case to policy makers, philanthropic funders, and the public that increased support is critical if we are to take advantage of this unparalleled opportunity to advance brain science and create a better world. Special thanks go to the Chen Institute's Yan Li, Jason Reindorp, and David Tan for their participation in and support of the 2018 Symposium.

We thank Val Pakaluk, Mary Smith, and Ed Campodonico and his staff in the Meetings & Courses Program for their assistance in organizing and running the Symposium, and John Inglis and his staff at Cold Spring Harbor Laboratory Press, particularly Inez Sialiano, Jan Argentine, Kathleen Bubbeo, and Denise Weiss, for publishing the printed and online versions of the Symposium proceedings. Photographer Connie Brukin captured candid snapshots throughout the meeting.

Symposium Organizers and Editors
David Stewart
Bruce Stillman