

TRANSLATING NEUROSCIENCE: FROM CONCEPT TO CLINIC

Opening Remarks

9:00 a.m. Dean Jeffrey Flier (HMS); President Patrick Aebischer (EPFL)

Keynote Lecture

9:15 a.m. Susan Hockfield (President Emerita, MIT)
The 21st Century's Technology Story: The Convergence of Biology with Engineering and the Physical Sciences

Pathways to Treatment for Autism Spectrum Disorders

9:45 a.m. Christopher A. Walsh (HMS and BCH)
Clues to Autism Spectrum Disorder from Human Genetics

10:15 a.m. **BREAK**

10:45 a.m. Dara S. Manoach (HMS and MGH) and Dimitri Van De Ville (EPFL)
Imaging Brain Networks in Children with Autism

11:15 a.m. Mustafa Sahin (HMS and BCH)
Testing Treatments for Convergent Pathways in Autism

12:00 p.m. **LUNCH**

Keynote Lecture

1:00 p.m. Ricardo Dolmetsch (Global Head of Neuroscience, Novartis Institutes for BioMedical Research)
A New Day for Drug Discovery in Neuroscience

Precision Medicine for Hearing Loss

1:30 p.m. Cynthia Casson Morton (HMS and BWH)
Next-Gen Diagnostics and Newborn Screening for Hearing Loss

2:00 p.m. Konstantina Stankovic (HMS and Mass Eye and Ear) and Demetri Psaltis (EPFL)
Optical Diagnostics for Hearing Loss

2:30 p.m. Bence György (HMS)
Gene Therapy Strategies for Recessive and Dominant Hereditary Hearing Loss

3:00 p.m. **BREAK**

3:30 p.m. Jeffrey R. Holt (HMS and BCH)
Gene Replacement Therapy for Genetic Deafness

4:00 p.m. Yvan Arsenijevic (EPFL)
Generation of Human Retinal Cone Photoreceptors and Pigment Epithelium from Induced Pluripotent Stem Cells

4:30 p.m. Daniel J. Lee (HMS and Mass Eye and Ear)
Hearing the Light: Optogenetic-Based Auditory Brainstem Implants

Keynote Lecture

5:00 p.m. Al Sandrock (Executive Vice President, Neurology Discovery and Chief Medical Officer, Biogen)
Bringing Drugs to Market: Aducanumab, a Potential Disease-Modifying Treatment for Alzheimer's Disease

5:30 p.m. **RECEPTION** with Speakers

BERTARELLI PROGRAM IN TRANSLATIONAL NEUROSCIENCE AND NEUROENGINEERING
 a joint venture of
 HARVARD MEDICAL SCHOOL AND THE ÉCOLE POLYTECHNIQUE FÉDÉRALE DE LAUSANNE