

# Abnormal Excitability as Determinant of Nervous System Disease

February 16, 2017; 8:00 am - 7:00 pm

Free and open to the public. Entry requires pre-registration

Inquire at: [info@brain.harvard.edu](mailto:info@brain.harvard.edu) or visit [brain.harvard.edu](http://brain.harvard.edu)

Armenise Amphitheatre

Harvard Medical School

200 Longwood Avenue, Boston, MA

## Co-Chairs and Moderators

Bruce Bean, PhD, *Robert Winthrop Professor of Neurobiology* Harvard Medical School

Kevin Eggan, PhD, *Professor, Department of Stem Cell and Regenerative Biology*, Harvard University.

Clifford Woolf, MD, PhD, *Professor of Neurology and Director, FM Kirby Neurobiology Center*, Boston Children's Hospital and Harvard Medical School

## PRESENTATIONS

Panelists will include leaders from academic and industry labs as well as venture capital firms.

## INTRODUCTION:

### Abnormal excitability and its impact on disease

Clifford Woolf, MD, PhD, Harvard and Min Li, PhD, GlaxoSmithKline

#### Neurodevelopmental disorders

Takao Hensch, PhD, *Professor, Molecular & Cellular Biology and Neurology*

Children's Hospital Boston and Center for Brain Science at Harvard University

#### Psychiatric disorders

Beth Stevens, PhD, *Assistant Professor of Neurology*

Harvard Medical School, F.M. Kirby Neurobiology Center at Boston Children's Hospital

#### Alzheimer's

Doo Yeon Kim, PhD, *Assistant Professor of Neurology*

Harvard Medical School, Massachusetts General Hospital

#### Autism & Epilepsy

Mustafa Sahin, MD, PhD, *Professor of Neurology*

Harvard Medical School, FM Kirby Neurobiology Center, Boston Children's Hospital

#### ALS

Brian J. Wainger, MD, PhD, *Assistant Professor of Neurology and Anesthesiology*

Harvard Medical School, Harvard Stem Cell Institute, Massachusetts General Hospital

#### Striatal circuits

Bernardo Sabatini, PhD, MD, *Alice and Rodman W. Moorhead III Professor of Neurobiology*, Harvard Medical School

## PANEL DISCUSSION

Abnormal excitability: mechanisms; diagnosis; treatment; personalized medicine

## Channelopathies and Channels

#### Sodium

Stephen George Waxman, MD, PhD, *Bridget M. Flaherty Professor of Neurology; Director, Center for Neuroscience and Regeneration Research*, Yale University

#### Potassium

Edward C Cooper, MD, PhD, *Associate Professor, Neuroscience, Neurology, Molecular & Human Genetics*, Baylor College of Medicine

#### Calcium

Diane Lipscombe, PhD, *Professor of Neuroscience and Director, Brown Institute for Brain Science (BIBS)*, Brown University

## PANEL DISCUSSION

Channels as Drug Targets

## Excitability Screens - New Technologies

#### High Content

Kasper Roet, PhD, *Fellow, Woolf Lab*, FM Kirby Neurobiology Center, Boston Children's Hospital

#### Optical Readouts

Adam Cohen, PhD, *Professor of Chemistry and Chemistry Biology and of Physics*, Harvard University

## PANEL DISCUSSION

Abnormal Excitability - Translational Opportunities



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