



SEP
21-23
2016

13th Key Symposium 2016

BIOELECTRONIC MEDICINE — Technology Targeting Molecular Mechanisms

www.nyas.org/BioelectronicMedicine

Technology is changing the world and bioelectronic medicine is at the forefront of this technological revolution. The pharmaceutical industry's history is based on therapies that target molecular mechanisms, yet these therapies are expensive, difficult to administer, often toxic, and may be accompanied by lethal side effects. **Bioelectronic medicine — the convergence of molecular medicine; neuroscience and biology; and electronics and computing to develop cures — may change the future of therapies for a wide variety of diseases.** This groundbreaking discipline is aimed at **interfacing electronics with nerves to specifically target the biological processes underlying disease.** Bioelectronic medicine is now at the epicenter of where healthcare, technology, and science converge. A unique moment exists to characterize the challenges and opportunities facing the future of this scientific domain.

The 13th Key Symposium 2016: Bioelectronic Medicine — Technology Targeting Molecular Mechanisms, will convene thought leaders who have the potential to explore, define, and create this new field. Session topics include: **Defining Circuits, Cell Biology and Cancer, Molecular Sensing, Clinical Updates, Brain Interfaces, Processing the Future, and Funding the Field.** By harnessing the power of technology spanning disciplines from microfluidics to **computer processing to molecular technology**, we step closer to the promise of bioelectronic medicine — to naturally reproduce a drug's therapeutic reaction by mobilizing the body's natural reflexes to develop effective, safe and economical alternatives to pills and injectables.

CALL FOR POSTER ABSTRACTS

Abstract submissions are invited for a poster session. For complete submission instructions, please send an email to BioelectronicMedicine@nyas.org with the words "Abstract Information" in the subject line. The deadline for abstract submission is **July 29, 2016**.

Location

The New York Academy of Sciences
7 World Trade Center
250 Greenwich Street,
40th Floor
New York, NY 10007

Speakers and Organizers

Polina Anikeeva, PhD, Massachusetts Institute of Technology

Guy Boeckxstaens, PhD, University of Leuven

Bruno L. Bonaz, MD, PhD, University of Grenoble Alpes, INSERM, France

Ed Boyden, PhD, Massachusetts Institute of Technology

Chad Bouton, The Feinstein Institute for Medical Research

Magnus Berggren, MSc, PhD, Linköping University

Melanie Brickman Borchard, PhD, MSc, The New York Academy of Sciences

Isaac Chiu, PhD, Harvard Medical School

Gene Civillico, PhD, U.S. National Institutes of Health

Jeffrey Friedman, MD, PhD, The Rockefeller University

Nick Langhals, PhD, National Institute of Neurological Disorders and Stroke, U.S. National Institutes of Health

Patrick Lincoln, PhD, SRI International

Peder Olofsson, MD, PhD, Karolinska Institutet

Agneta Richter-Dahlfors, PhD, Karolinska Institutet

Tom Soh, PhD, University of California, San Diego

Helene Svahn, PhD, Royal Institute of Technology

Paul Peter Tak, MD, PhD, Glaxo Smith Kline

Eric T. Tatro, PhD, The New York Academy of Sciences

Kevin J. Tracey, MD, The Feinstein Institute for Medical Research

Douglas J. Weber, PhD, U.S. Defense Advanced Research Project Agency

Anthony Zador, MD, PhD, Cold Spring Harbor Laboratory