**Department of Psychiatry**  
Columbia University, College of P&S  
**Division of Brain Stimulation and Therapeutic Modulation**  
**Journal Club**

**Marom Bikson, Ph.D.**  
Associate Professor  
Director, Biomedical Engineering, CCNY

**Abhishek Datta, Ph.D. cand.**  
Biomedical Engineering, CCNY

**Peter Bulow, M.D.**  
Asst. Professor of Clinical Psychiatry  
Division of Brain Stimulation and Therapeutic Modulation

will discuss their recently published paper


**Wednesday October 8, 2008**

1:00 PM to 2:00 PM

**Location:** New York State Psychiatric Institute, 1051 Riverside Drive, Room 5001  
(Enter Kolb Annex, 40 Haven Ave., turn rt., walk thorough atrium and across bridge over Riverside Dr. to new NYSPI, take elevator to 5th Fl.)

(See over for brief speaker biography and selected publications)
About Marom Bikson, PhD

Prof. Marom Bikson’s research group studies the effects of electricity on the human body and applies this knowledge toward the development of medical devices and electrical safety guidelines. Specific areas of research include, among others:

1) Medical devices including biosensors, drug delivery technology, and electrotherapy devices for neurological disorders.
2) Medical device safety including electrical hazards, electroporation, heating damage, and safe stimulation protocols.
3) Understanding the neuronal networks underlying normal brain function, including the role of endogenous electric fields.
4) Developing new treatments for neurological diseases including epilepsy and depression, through translational research.

Prof. Bikson’s group uses a range of research and engineering design tools including cellular and animal studies, computer simulations, imaging, and clinical evaluation. Prof. Bikson’s work is supported by funding agencies including NIH, The Andy Grove Foundation, and the Howard Hughes Medical Institute. Prof. Bikson is actively involved in biomedical education including outreach to underserved groups. Prof. Bikson has provided technical support and consulting for biomedical companies (Medtronic, Nevrocorp, Ion Channel Innovations), utility companies (Con Edison, First Energy), regulatory agencies (NASA, Potomac Institute for Policy Studies), and litigation support.

More information on Neural Engineering at The City College of New York, http://bme.ccny.cuny.edu/research/areas/neural.php

Selected Recent Publications


About Abhishek Datta, PhD cand.

Abhishek Datta is a PhD candidate in the Biomedical Engineering Department, The City College of the CUNY. Abhishek has been modeling the electric fields generated inside the brain during Transcranial Current Stimulation. His goal is to increase the spatial focality of stimulation. He is also investigating the effects of Deep Brain Stimulation (DBS) induced electric fields on endothelial cell barrier function.

Selected Recent Publications (and see above)


About Peter Bulow, MD

Dr. Peter Bulow is Assistant Professor of Clinical Psychiatry with the Division of Brain Stimulation and Therapeutic Modulation, Department of Psychiatry, Columbia University. Dr. Bulow has been investigating transcranial Direct Current Stimulation (tDCS) as a treatment for depression. tDCS is an old technology that has received attention in the last ten years for its neuron-modulating potential. Dr. Bulow and others in the Division also will be investigating an FDA-sanctioned hand-held proprietary transcranial stimulating device, Cranial Electrotherapy Stimulation (CES).

Selected Recent Publications (and see above)


In press:


Paper to read for Journal Club meeting


http://www.brainstimulation.columbia.edu/