**Department of Psychiatry** 

Columbia University, College of P&S

**NYS Psychiatric Institute** 

## DIVISION OF BRAIN STIMULATION AND THERAPEUTIC MODULATION

**JOURNAL CLUB** 

## Fortunato Battaglia, M.D., Ph.D.

Asst. Professor, Sophie Davis School of Bio-Medical Education, CCNY, CUNY

Adjunct Asst. Professor, Division of Brain Stimulation and Therapeutic Modulation, Columbia University

# Synaptic mechanisms underlying the the the the the the the the the section of the

### Wednesday September 24, 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 though atrium and across bridge over Riverside Dr. to new NYSPI, 6th FI.)

About Fortunato Battaglia, M.D., Ph.D.: Dr. Fortunato Battaglia is Assistant Medical Professor at the Sophie Davis School of Bio-Medical Education, CCNY, CUNY. He also is Adjunct Asst. Professor, Division of Brain Stimulation and Therapeutic Modulation, Dept. of Psychiatry, Columbia University, and NYS Psychiatric Institute. He received his M.D. in 1994 and his Ph.D. in 2002 from the University of Messina, Italy, and did postdoctoral work with Prof. Rene Hen at the Center for Neurobiology and Behavior, Columbia University. Dr. Battaglia's research interests include use of several brain stimulation modalities in animal and human models. He also is collaborating with Prof. Hen and the Center for Neurobiology and Behavior.

#### Paper(s) for Journal Club:

The speaker does not suggest any specific papers to read. Attendees might want to review abstracts of some of the below.

#### **Recent Selected Publications:**

Bikson M, Bulow P, Stiller JW, Datta A, <u>Battaglia F</u>, Karnup SV, Postolache TT. Transcranial direct current stimulation for major depression: a general system for quantifying transcranial electrotherapy dosage. Curr Treat Options Neurol. 2008 Sep;10(5):377-85.

Datta A, Elwassif M, <u>Battaglia F</u>, Bikson M. Transcranial current stimulation focality using disc and ring electrode configurations: FEM analysis. J Neural Eng. 2008 Jun;5(2):163-74. Epub 2008 Apr 28.

Rizzo V, Crupi D, Bagnato S, Quartarone A, Benvenga S, Bartolone L, Ghilardi MF, Trimarchi F, Girlanda P, <u>Battaglia F</u>. Neural response to transcranial magnetic stimulation in adult hypothyroidism and effect of replacement treatment. J Neurol Sci. 2008 Mar 15;266(1-2):38-43. Epub 2007 Sep 27.

Battaglia F, Wang HY, Ghilardi MF, Gashi E, Quartarone A, Friedman E, Nixon RA. Cortical Plasticity in Alzheimer's Disease in Humans and Rodents. Biol Psychiatry. 2007 Jul 23; [Epub ahead of print]

Quartarone A, Lang N, Rizzo V, Bagnato S, Morgante F, Sant'angelo A, Crupi D, <u>Battaglia F</u>, Messina C, Girlanda P. Motor cortex abnormalities in amyotrophic lateral sclerosis with transcranial direct-current stimulation. Muscle Nerve. 2007 May;35(5):620-4.

Battaglia F, Quartarone A, Ghilardi MF, Dattola R, Bagnato S, Rizzo V, Morgante L, Girlanda P. Unilateral cerebellar stroke disrupts movement preparation and motor imagery. Clin Neurophysiol. 2006 May;117(5):1009-16. Epub 2006 Mar 3.

Butefisch CM, Boroojerdi B, Chen R, <u>Battaglia F</u>, Hallett M. Task-dependent intracortical inhibition is impaired in focal hand dystonia. Mov Disord. 2005 May;20(5):545-51.

Quartarone A, Bagnato S, Rizzo V, Morgante F, Sant'angelo A, <u>Battaglia F</u>, Messina C, Siebner HR, Girlanda P. Distinct changes in cortical and spinal excitability following high-frequency repetitive TMS to the human motor cortex. Exp Brain Res. 2005 Feb;161(1):114-24. Epub 2004 Dec 2.

Quartarone A, Morgante F, Bagnato S, Rizzo V, Sant'Angelo A, Aiello E, Reggio E, <u>Battaglia F</u>, Messina C, Girlanda P. Long lasting effects of transcranial direct current stimulation on motor imagery. Neuroreport. 2004 Jun 7;15(8):1287-91.

Quartarone A, Bagnato S, Rizzo V, Siebner HR, Dattola V, Scalfari A, Morgante F, <u>Battaglia F</u>, Romano M, Girlanda P. Abnormal associative plasticity of the human motor cortex in writer's cramp. Brain. 2003 Dec;126(Pt 12):2586-96. Epub 2003 Sep 23.