

# HOW MIND EMERGES FROM BRAIN: A VIEW INTO THE FUTURE

PROGRAM COTXERES PALAU ROBERT. PASSEIG DE GRÀCIA, 107, BARCELONA

Thursday, July 12<sup>th</sup>, 2012

9:15

Welcome

**Miquel Martí**

Director of B-Debate

**Mara Dierssen**

Center for Genomic Regulation

**Mavi Sánchez-Vives**

Institut d'Investigacions  
Biomèdiques August Pi i Sunyer

9:30

Early Auditory Experience  
Leaves an Imprint in Vocal Motor  
Circuits

**Richard Mooney**, Duke

University, North Carolina, USA

10:10

Lose Your Inhibition: Learn More

**Elly Nedivi**, MIT, Cambridge, USA

10:50

Coffee Break

11:20

Complementary Learning Systems  
Revisited: Gene Activation and  
Memory Encoding in Neocortex  
During Hippocampus-dependent  
Learning

**Richard Morris**, University of  
Edinburgh, Edinburgh, UK

12:00

Keynote lecture: Beyond  
Optimality to Individual Brains

**Eve Marder**, Brandeis

University, Massachusetts, USA

12:45

Open Debate  
Chairs: **Mara Dierssen** and **Eve  
Marder**

13:30

Lunch

15:00

The Functional Scope of Single  
Neurons

**Gábor Tamás**, University of  
Szeged, Szeged, Hungary

15:40

Hypothalamic Circuit Interactions:  
Ready for Prime Time?

**Christian Broberger**, Karolinska  
Institutet, Stockholm, Sweden

16:20

Coffee Break

16:40

Theta Network Oscillations: Focus on  
GABAergic cells

**Marco Capogna**, MRC Anatomical  
Neuropharmacology Unit, Oxford, UK

17:20

Open Debate  
Chair: **Richard Morris**

18:15

Transportation to CosmoCaixa

18:45

Visit to CosmoCaixa

20:00

Dinner at CosmoCaixa

22:00

Transportation to the Hotel

B-DEBATE IS AN INITIATIVE OF:



WITH THE SUPPORT OF:



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**Friday, July 13<sup>th</sup>, 2012**

**9:00**

Motor Control by Sensory Cortex

**Carl Petersen**, EPFL,  
Lausanne, Switzerland

**9:40**

The Traumatized Brain: Why Do  
Life's Stressors Scar Some and  
Not Others?

**Andrew Holmes**, National  
Institutes of Health, USA

**10:20**

Coffee break

**10:50**

GABAergic Projecting Neurons  
That Reciprocally Connect the  
Hippocampus and Medial  
Entorhinal Cortex and Modulate  
Activity at Long Distance

**Hannah Monyer**, University  
Hospital in Heidelberg,  
Heidelberg, Germany

**11:30**

Probing the Connectivity and  
Function of Sensory Cells  
Interfacing the Spinal Circuits with  
Cerebrospinal Fluid

**Claire Wyart**, ICME, Paris, France

**12:10** Keynote lecture:

Trk Receptors Are  
Computational Sensors

**Moses Chao**, Skirball Institute of  
Biomolecular Medicine, NYU  
School of Medicine, NY, USA

**13:00**

Open Debate  
Chairs: **Moses Chao** and  
**Hannah Monyer**

**13:45**

Lunch

**15:00**

Promiscuity and Discrimination in  
Neural Microcircuits

**Gilad Silberberg**, Karolinska  
Institute, Sweden

**15:40**

Coffee Break

**16:00**

Using Virtual Reality to  
Understand Brain Function

**Mavi Sánchez-Vives**, ICREA-  
IDIBAPS, Spain

**16:40**

The Creative Brain and Brain  
Machine Interfaces

**Eilon Vaadia**, Hebrew University  
of Jerusalem, Israel

**17:20**

Closing remarks