

"2nd LECTURE COURSE ON MOLECULAR AND CELLULAR COGNITION"

Organised by the European Molecular and Cellular Cognition Society (EMCCS). Web Site: <http://www.molcellcog.org/>

Sponsored by the Federation of European Biochemical Societies (FEBS) and the European Molecular Biology Organisation (EMBO).

Organisers:

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LOCATION:

Fondazione Giorgio Cini
Isola di San Giorgio Maggiore, Venezia, Italy

DATES: 14-19 October 2010

ALL INCLUSIVE FEE: 830 €

NUMBER OF PARTICIPANTS: 100

APPLICATION PROCEDURE: When applying through our web MCCS site (www.molcellcog.org), by submitting your CV and a letter outlining your scientific interest, please also mention whether you apply for a FEBS Young Travel Fund (YTF) which will cover both travel and fee costs. A letter of recommendation from your direct supervisor is also necessary. A total of 25 YTF grants will be available to European Scientists and 12 transcontinental YTF grants will also be possible for non Europeans. For eligibility please check the conditions of award at the FEBS web site (<http://www.febs.org/index.php?id=106>). Deadline: 30-07-2010.

CONTENT OF THE SCHOOL

The Course will be held in Venice, at the Fondazione Cini, a unique institution for the development of art, letters and science, from the 14th to the 19th of October 2010. The School will involve a faculty of 20 speakers selected among the best specialists in the field and up to 100 PhD students and postdoctoral fellows.

The sessions will focus on the following hot topics:

- a. Molecular mechanisms of memory consolidation and reconsolidation
- b. epigenetic mechanisms of learning and memory
- c. control of protein translation

- d. synaptic plasticity
- e. in vivo electrophysiology
- f. molecular genetics of cognitive diseases
- g. neurogenesis and memory

Each lecturer will have 90 min to provide a background on the given topic and discuss new recent and unpublished data from her/his laboratory. 30 final minutes will be used for a discussion with students and the other members of faculty. Moreover, on day 4 and 5 (afternoon), a poster session mandatory for all students will be followed by oral presentations from the best students (up to 20% of all participants).

PROGRAMME AND COURSE CALENDAR

DAY 1: Thursday, 14 October

Reception and Welcome Cocktail at the Fondazione Cini (17.30-19.30)

Opening Lecture (19.30-21.00): Discovery Paths in Molecular and Cellular Cognition (Susumu Tonegawa, MIT, USA)

Evening: free time

DAY 2: Friday, 15 October

Molecular and cellular approaches to study cognition: memory consolidation, storage and reconsolidation

Chair: Alcino Silva

8.30-10.30: Molecular cascades of long-term memory storage in the rat cortex (Yadin Dudai, Weizmann, Israel)

10.30-11.00: coffee break

11.00-13.00: Critical periods and mechanisms underlying memory consolidation and reconsolidation (Cristina Alberini, Mount Sinai, USA)

13.00-14.30: lunch

Molecular and cellular approaches to study cognition: genetic and epigenetic mechanisms of memory formation

Chair: Yadin Dudai

8.30-10.30: Chromatin remodeling in learning and memory (Isabelle Mansuy, Zuerich, Switzerland)

10.30-11.00: coffee break

11.00-13.00: Making and Breaking Fear Memories (Sheena Josselyn, Toronto, Canada)

13.00-14.30: lunch

Evening (21.00-23.00): Round Table on “the Art of Publishing and Peer Review” (organizer: Katja Brose, Editor of Neuron)

DAY 3: Saturday, 16 October

Molecular and cellular approaches to study cognition: synaptic plasticity and glutamate receptors

Chair: Cristina Alberini

14.30-16.30: Making new memories in the hippocampus: cellular and molecular mechanisms (Serge Laroche, CNRS, France)

16.30-17.00: coffee break

17.00-19.00: Hippocampal code, place cells and spatial learning (Peter Seeburg, MPI, Germany)

19.00-21.00: Dinner

Cellular approaches to study cognition: synaptic plasticity and in vivo electrophysiology

Chair: Riccardo Brambilla

14.30-16.30: Grid cells, place cells, and the brain's representation of space (Dori Derdikman, Trondheim, Norway)

16.30-17.00: coffee break

17.00-19.00: Learning new actions and shifting to automatic (Rui Costa, NIH, USA)

19.00-21.00: Dinner

Evening (21.00-23.00): EMBO Lecture on Women in Science Science and Colloquium: "Causes of women under-representation in science". Isa Schön (European Platform of Women Scientists), Isabelle Mansuy, Cristina Alberini.

DAY 4: Sunday, 17 October

Molecular and cellular approaches to study cognition: control of protein translation

Chair: Isabelle Mansuy

8.30-10.30: Translational Control: Signaling, Synapses, and Behavior (Eric Klann, NYU, USA)

10.30-11.00: coffee break

11.00-13.00: Complex Translation Regulation in the Cortex and Memory Consolidation (Kobi Rosenblum, Haifa, Israel)

13.00-14.30: lunch

Afternoon (14.30-16.30): Poster Session and selection of the speakers for the following day

Evening (16.30-22.30): Boat Trip to visit the Laguna and dinner

DAY 5: Monday, October 18

Molecular and cellular approaches to study cognition: cognitive diseases

Chair: Kobi Rosenblum

8.30-10.30: Reversing neurodevelopmental disorders in adults: the NF1, TSC and DISC1 stories (Alcino Silva, UCLA, USA)

10.30-11.00: coffee break

11.00-13.00: Abnormal Cell Signaling and Cognitive Disorders (Riccardo Brambilla, HSR, Italy)

13.00-14.30: lunch

14.30-16.30: Student Presentations

16.30-17.00: coffee break

17.00-19.00: Student Presentations

19.00-21.00: Dinner

21.00-23.00: EMBO Lecture on Science and Society and Colloquium: "Neuroscience and Psychoanalysis: a necessary encounter to improve the quality of life of psychiatric patients and their families". Cristina Alberini, Pierre Magistretti (Lausanne, Switzerland) and Francois Ansermet (Geneve, Switzerland)

DAY 6: Tuesday, October 19

Molecular and cellular approaches to study cognition: neurogenesis and memory

Chair: Peter Seeburg

8.30-10.30: Neurogenesis: What's learning got to do with it? (Tracey Shors, Rutgers, USA)

10.30-11.00: coffee break

11.00-13.00: Integration of adult-generated neurons into hippocampal memory circuits (Paul Frankland, Toronto, Canada)

13.00-14.30: lunch

Afternoon (14.30-20.30): Freetime

Evening (from 20.30 onwards): Social Dinner and Farewell Party

Wednesday, October 20

Departure