GABBA

Graduate Program in Areas of Basic and Applied Biology

Universidade do Porto

Neuroscience Module

- Introduction to Neuroscience –

Organizers

Albino J. Oliveira-Maia

Rui M. Costa

Dates and Venue

January 23th to 27th 2017

Champalimaud Centre for the Unknown

Lisbon, Portugal

Goals

The study of neuroscience has become truly multidisciplinary in recent years, integrating a considerable array of technologies and approaches into a science aimed at understanding how the brain comes to perceive, acquire and use information. Although molecular, systems and cognitive neuroscience will continue to prosper on their own, there is a growing sense that integration of these fields is inevitable. Recently, powerful tools emerging from molecular genetics, electrophysiology and brain imaging have offered novel perspectives to the study of the brain, and their use has led to an unprecedented ability to both manipulate and observe brain phenomena, across levels of biological complexity. In this module, we will highlight recent findings that document this exciting convergence between molecular, cellular, systems and computational neuroscience.

Lecturers

- Ana Catarina Certal

http://neuro.fchampalimaud.org/en/research/platforms/staff/Fish%20Facility/

- Ana Fernandes

http://neuro.fchampalimaud.org/en/person/151/

- Albino Oliveira-Maia

http://neuro.fchampalimaud.org/en/person/52/

http://centroclinico.fchampalimaud.org/en/neuropsiquiatria/

- Christian Machens

http://neuro.fchampalimaud.org/en/person/97/

- Daniel Nunes

http://neuro.fchampalimaud.org/en/person/314/

- Eric DeWitt

http://neuro.fchampalimaud.org/en/person/104/

- Isabel Campos

http://neuro.fchampalimaud.org/en/research/group/Fly%20Facility/

- Joaquim Alves da Silva

http://neuro.fchampalimaud.org/en/person/153/

- João Peça

http://www.cnbc.pt/research/department_group_show.asp?iddep=1107&idgrp=1113&lg=1

- Leopoldo Petreanu

http://neuro.fchampalimaud.org/en/person/117/

- Maria Luisa Vasconcelos

http://neuro.fchampalimaud.org/en/person/123/

- Susana Lima

http://neuro.fchampalimaud.org/en/person/61/

- Theory Seminar Series: Martin Stemmler

http://www.neuro.bio.lmu.de/members/comp_neuro_herz/stemmler_m/index.html

- Champalimaud Neurosc. Programme Colloquium: Alexander Fleischmann

http://www.college-de-france.fr/site/en-cirb/fleischmann.htm

Schedule

The Module will consist of lectures and site visits/demonstrations, held in the morning and early afternoon. From Tuesday to Friday, at the end of each day the students (in groups of 2 or 3) are expected to present, a paper relating to the theme presented that same afternoon, distributed prior to the start of the module. This should be a 45 minute presentation, in Journal Club style, followed by 15 minutes of discussion and questions. Evaluation for this course will depend mostly on this presentation.

Monday 23.01	Tuesday 24.01	Wednesday 25.01	Thursday 26.01	Friday 27.01
10.00-11.30 AOM Welcome and introduction	9.30-11.00 LP Cortical Circuits	9.30-11.00 SL Neuroethology	10.00 -11.30 ED Decision Making	9.30-11.00 AF Ingestive Behaviour
12:00-13:00 CISS	11:00-12:00 TSS	11:30-12:00 IC Visit to the Fly facility	12:00-13:00 CNP Coll.	11.30-12.00 AC Visit to the Vivarium
LUNCH				
15.00-17.00 CM Theoretical Neuroscience	14.00-15.30 JP Synaptic mechanisms of plasticity in health and disease	14.00 -15.30 MLV Innate Behaviour	15.00-16.30 DN Neuroplasticity and Neural Activity	14:00-15:30 JAS Neurobiology of action
	16.00-17.00 JP Journal club	16.00-17.00 MLV Journal club	17.00-18.00 DN Journal club	16.00-17.00 JAS Journal club
		20.00 Dinner		18.00 CNP Beer Hour

AC – Ana Catarina Certal
AF – Ana Fernandes
AM – Albino Oliveira Maia
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IC – Isabel Campos
JS – Joaquim Alves da Silva
JP – João Peça
LP – Leopoldo Petreanu
MV – Maria Luisa Vasconcelos
SL - Susana Lima

Seminar Room
Class Room
Animal Facilities

CISS – Champalimaud Internal Seminar Series
TSS – Theory Seminar Series
CNP Coll. – Champalimaud Neuroscience Programme Colloquium