

GABBA

Graduate Program in Areas of Basic and Applied Biology

Universidade do Porto

Neuroscience Module

- Introduction to Neuroscience –

Organizers

Albino J. Oliveira-Maia

Dates and Venue

March 12th to 16th 2018

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 Cortal

<http://neuro.fchampalimaud.org/en/research/platforms/staff/Fish%20Platform/>

- Albino Oliveira-Maia

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

- Carlos Ribeiro

<http://neuro.fchampalimaud.org/en/research/investigators/research-groups/group/Ribeiro/>

- Christian Machens

<http://neuro.fchampalimaud.org/en/research/investigators/research-groups/group/Machens/>

- Eric DeWitt

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

- Gonzalo de Polavieja

<http://neuro.fchampalimaud.org/en/research/investigators/research-groups/group/de%20Polavieja/>

- Isabel Campos

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

- Joaquim Alves da Silva

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

- Maria Luisa Vasconcelos

<http://neuro.fchampalimaud.org/en/research/investigators/research-groups/group/Vasconcelos/>

- Marta Moita

<http://neuro.fchampalimaud.org/en/research/investigators/research-groups/group/Moita/>

- Rita Teodoro

<http://cedoc.unl.pt/neuronal-growth-and-plasticity/>

- Susana Lima

<http://neuro.fchampalimaud.org/en/research/investigators/research-groups/group/Lima/>

- Thiago Carvalho

<http://neuro.fchampalimaud.org/en/person/500/>

- Champalimaud Research Colloquium: Simon Rumpel

<https://www.unimedizin-mainz.de/physiologie/group-prof-simon-rumpel.html?L=1>

Schedule

The Module will consist of lectures and site visits/demonstrations, held in the morning and afternoon. From Tuesday to Friday, at the beginning of the morning, 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	12.03	Tuesday	13.03	Wednesday	14.03	Thursday	15.03	Friday	16.03
9.30-10.00 Registration	9.00-10.00 Journal Club		9.00-10.00 IC Visit to the Fly facility		9.00-10.00 Journal Club		9.00-10.00 Journal Club		
10.00-12.00 AM Welcome and Introduction	10.00-12.00 JS Neurobiology of Action	10.00-12.00 ED Systems Neuroscience		10.00-12.00 GP Collective Behaviour		10.00-12.00 MV Innate Behaviour			
12.00-13.00 CISS	12.00-13.00 TC CR Graduate Programmes	12.00-13.00 Journal Club		12.00-13.00 CR Coll. Simon Rumpel		12.00-13.00 IC/AC Visit to the Vivarium (Rodent and Fish facilities)			
			LUNCH						
15.00-17.00 RT Neuronal Growth and Plasticity	15.00-17.00 CR Behavior and Metabolism		15.00-17.00 CM Theoretical Neuroscience	15.00-17.00 SL Neuroethology		15.00-17.00 MM Behavioural Neuroscience			
			20.00 Dinner				17.00 CNP Beer Hour		
AC – Ana Catarina Cortal AM – Albino Oliveira Maia CM – Christian Machens CR – Carlos Ribeiro ED – Eric DeWitt GP – Gonzalo de Polavieja IC – Isabel Campos JS – Joaquim Alves da Silva MM – Marta Moita MV – Maria Luisa Vasconcelos RT – Rita Teodoro SL - Susana Lima TC – Thiago Carvalho									