The CAJAL Advanced Neuroscience Training Programme

Course Programme 2016

- Lectures by renowned scientists with methodological training sessions
- Interactive and engaging atmosphere
- Experiments within the frame of short scientific projects
- Two top European facilities in neuroscience

The CAJAL Training Programme consists of two- or three-week, hands-on courses organised by top ranking neuroscientists. **Topics in 2016** include behaviour of neural systems, computational neuroscience, neuronal trafficking, nutrition and brain functions, hippocampus and glial cells.

www.cajal-training.org
Techniques for studying behaviour, along with those for monitoring and manipulating neural activity during behaviour, have progressed rapidly. This three-week course is a practical ‘hands-on’ introduction to advanced methods in behavioural neuroscience and will cover sufficient background such that all participants will be able to establish these techniques in their home laboratories.

Cytoskeleton remodeling and axonal trafficking have emerged as one of the most exciting and rapidly moving fields in cellular neurobiology. This course will focus on the following topics: cytoskeleton dynamics, axonal transport, growth-cone migration, neuronal plasticity, synaptogenesis, neurodegeneration and regeneration.
The two major areas of nutritional neuroscience explored in this course are the role of the brain in the regulation of food intake and the effect of nutrients on brain physiology, function and pathology - both influence the risk and progression of mood and cognitive disorders.

This advanced course will bring both nutritional and neuroscience researchers together for a three-week intensive course.

www.cajal-training.org
The Brain Prize course
The Hippocampus: from Circuits to Cognition
10-31 October 2016

Course directors:
• Jozsef Csicsvari (Institute of Science and Technology, Austria)
• Charan Ranganath (University of California, USA)

On-site chairs:
• Christophe Mulle (University of Bordeaux, France)
• Mario Carta (University of Bordeaux, France)

Venue:
Bordeaux Neurocampus, France

Application deadline: 11 July 2016

New technical and scientific advances have opened up opportunities for mechanistic investigations of hippocampal function at the level of cells, systems, and cortico-hippocampal networks.

The goal of this course is to give in-depth exposure to the breadth of research on the hippocampus and to provide hands-on training in state-of-the-art methods used to study hippocampal function.

CAJAL-ISN course
Glial Cells in Health and Disease
27 November - 10 December 2016

Course directors:
• Ismael Galve-Roperh (Complutense University, Spain)
• Serge Nataf (University of Lyon, France)
• Frank Kirchhoff (University of Saarland, Germany)

On-site chair:
• Stephane Oliet (University of Bordeaux, France)

Venue:
Bordeaux Neurocampus, France

Application deadline: 29 July 2016

Glial cells (astrocytes, oligodendrocytes and microglia) are essential actors in nervous system function under physiological and pathological conditions. The importance of glial cell function can be exemplified by the active role of astrocytes in neuronal communication, microglial mediated-synaptic remodeling, non-cell autonomous neuronal death and survival. Participants will develop experimental projects focused on the role of astrocytes in neuronal activity and/or the response of microglial and oligodendrocytes to brain injury.

This course is organised in partnership with The Brain Prize

Image by Amanda Sierra

This course is organised in partnership with ISN (International Society for Neurochemistry)

www.cajal-training.org
What they say about the CAJAL Programme

“IBRO is dedicated to advancing neuroscience through the teaching, training and mentoring of young scientists in centres of research excellence. The CAJAL programme is our regional commitment to building European brain research and elevating its visibility and impact.”

_Larry Swanson, IBRO Secretary-General and Chair of the CAJAL Steering Committee 2016_

“We believe that the CAJAL programme will foster our new, pan-European training hub where neuroscientists can broaden their perspectives.”

_Monica Di Luca, FENS President_

“The CAJAL programme is a great opportunity for me to learn new things and try out new ideas. It is just a great environment for science.”

_Adam Kampff, Behavioural of Neural Systems Course Director_

“I loved that the course was so hands-on and intense. It was wonderful to meet the other students and instructors. Everybody was so smart and passionate, it was really inspiring.”

_Morgane Nouvian, CAJAL Programme student 2015_

For more information contact: [cajal@fens.org](mailto:cajal@fens.org)

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The CAJAL Advanced Neuroscience Training Programme represents a commitment by four partner institutions - FENS, IBRO, the University of Bordeaux and the Champalimaud Foundation - to establish dedicated neuroscience training facilities in Europe.