A variety of research groups are active in Neuroscience, spanning Cognitive Neuroscience, aimed at understanding how the brain produces behavior, and Neurobiology, investigating the molecular, cellular and integrative mechanisms at work in the nervous system.

Cognitive neuroscientists focus on functions expressed by an entire system, where the system may be a baby learning to speak or a population of neurons storing a new memory. The observation of brain-lesioned patients, the recording of neuronal activity, whether at the level of neurons or by imaging the whole brain, and the analysis of mathematical models all contribute to the same goal. Neurobiologists seek to explain the underlying processes that ultimately account for behavior and for its dysfunction at the level of molecules, cells, networks and integrated systems. To carry out such complex studies, a variety of experimental approaches and scientific disciplines are required, ranging from mathematics and physics to biology.
The Neurobiology Sector of the International School for Advanced Studies (SISSA) has PhD fellowships available for training and research in molecular, cellular and systems neuroscience.

Tuition starts in November and is organized in courses and seminars held by the teaching staff and by external lecturers, together with a series of methods courses to introduce students to the techniques applied in current research. Students are also encouraged to attend courses of their interest organized by the Cognitive Neuroscience group.

Main research lines:
- Cellular and network mechanisms of neurotransmitters
- Synaptic plasticity in development
- Sensory systems
- Regeneration of immature spinal cord after injury
- Neuronal and artificial computation

Additional information about the courses and the research activity can be found at:
http://www.sissa.it/nb/
info: phd@sissa.it

Short fellowships may be awarded to students who will sit the entrance exam. Such fellowships will cover travel and accommodation expenses and will entitle students to stay in the school before the selection.

COORDINATOR ANDREA NISTRI

THE MOST RECENT PLACEMENTS AFTER PHD AT SISSA
- University College London, London, UK
- CNRS, France
- Baylor College of Medicine, Huston, USA
- Monell Chemical Senses Center, Philadelphia, USA
- Karolinska Institutet Solna, Sweden
- Universität Heidelberg, Heidelberg, Germany
- Columbia University New York, USA
- University of British Columbia, Vancouver, Canada
- Max Delbrück Center for Molecular Medicine, Berlin, Germany

Neurobiology

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