SISSA - 1st NEUROBIOLOGY SUMMER SCHOOL

"The Invertebrate Brain: from Neurons to Behaviour"

sponsored by SISSA, SINS (Societa' Italiana di Neuroscienze), Universita' di Trieste and Olympus

4-9 July 2011

TRIESTE, Santorio Building, via Bonomea, 265

Topics to be treated:

⇨ **Anatomy and physiology of the leech**
⇨ **Electrical and optical recordings**
⇨ **Neuronal basis of leech behaviors: swimming, crawling, feeding**
⇨ **Decision making and social interactions: experiments and theoretical approaches**
⇨ **Computational Neuroscience: spike sorting, neuronal coding, population dynamics**

spike sorting, neuronal coding, population dynamics
The registration fees for the practical lectures is 350 euros including meal and accommodation for the entire duration of the School. SINS and SISSA Scholarships are available. Send your application to the Secretary of the School <u>amanda.colombo@sissa.it</u> Deadline for applications: 1st June 2011

Lecturers:
  ⇨ **WILLIAM KRISTAN (UCSD - USA)**
  ⇨ **KATHLEEN FRENCH (UCSD - USA)**
  ⇨ **JOHN NICHOLLS (SISSA-Trieste)**
  ⇨ **VINCENT TORRE (SISSA-Trieste)**
  ⇨ **DAVIDE ZOCCOLAN (SISSA-Trieste)**
  ⇨ **GIULIETTA PINATO (CNR-Trieste)**
  ⇨ **GINESTRA BIANCONI (Northeastern Univ - USA)**

Image obtained by Antonia Marin-Burgin

Aims and scope of the School: The School will focus on understanding the neurobiological basis of behavior in the simple nervous system of the leech, with the aim of teaching; i- how to obtain electrical recordings; ii – how to obtain imaging data; iii – how to relate these data to behavior; iv – how to formalize in mathematical terms leech neurobiology. It will be divided into 2 separate sessions: a morning session open to all interested students and scientists composed of tutorial lectures. These lectures are free of charges. In the afternoon there will be practical sessions introducing participants to experimental methods. These practical sessions restricted to limited number of registered students. Applicants must be active in neuroscience research, preferably undergraduate and PhD students, post-doctoral researchers.