Cycle B: Neuroscience

Coordinator:
Neuroscience Network Basel: S. Grumbacher, C. Alioth
For details see http://www.biozentrum.unibas.ch/neuro/

The lecture series provides basic knowledge in neurosciences. All the graduate students who aim to obtain a Ph.D. in neurobiology are asked to attend these lectures. In each semester one particular topic from developmental to clinical aspects of neuroscience is covered. Lectures include a general introduction into the topic as well as a discussion of the latest publications and results in the field. Lectures are organized by experts from the University of Basel, the University Hospital, the Friedrich Miescher Institute and from industry.

The workshops consist of regular trinational trainings, which may include theoretical, as well as practical, teaching in all aspects of Neuroscience. Trainings are organized in the context of the Eltem-Neurex program, and involve teachers-scientists, as well as students of the three Universities of Basel, Freiburg (Germany) and Strasbourg (France).

B1: Developmental Neuroscience - 14467
(2 hrs/week; 2 CP)

S. Arber


B2: Signaling in the Nervous System - 13693
(2 hrs/week; 2 CP)

A. Lüthi


B3: Genes and Behavior - 13145
(2 hrs/week; 2 CP)

J. Kapfhammer

Sensory circuits and encoding of sensory information - Motor control - Vision - Cortical processing and function - Developmental and adult learning - Emotion, fear, decision
making, consciousness - From genes to behavior and from behavior to genes.

**B4: Neurological Diseases - 12416**
(2 hrs/week; 2 CP)

J.-L. Boulay, D. Fischer, St. Frank, J. Kapfhammer, M.E. Liechti, Ph. A. Lyrer, L. Mariani, St. Rüegg, **N. Schaeren-Wiemers**, V. Taylor, M. Tolnay

Bipolar Disorders, Prion Disease, Alzheimer Disease, Epilepsy, Drug Addiction, Brain Tumors, Multiple Sclerosis, Peripheral Neuropathies, Stroke, Muscle Dystrophies, Trauma and Spiral Cord Injury, Huntington's Disease, Stem Cells.

**B5: Neurex - 12417**
(1 CP/workshop)

**F. Doetsch, P. Piguet** (Coordinator ELTEM), and lecturers of the trinational Neuroscience Network (Basel, Freiburg, Strasbourg)

These workshops are open for students from Basel, Freiburg and Strasbourg. Each workshop deals with a particular topic in neurobiology and introduces the techniques used. For workshops in preparation: please consult the section “Workshops and Trainings” in http://www.neurex.org