

Teaching in the English language

Comparative and functional neuroanatomy with particular reference to the human and the rodent brain
(Prof Klimaschewski)

Location: Medizinzentrum Anichstrasse (MZA), Seminar Room (2. floor)

Dates: April 26 - May 06 (Mon-Thu), 5.00 - 7.30 pm

send email to [Prof Klimaschewski](#) if you want to participate

- apply the comparative method to understand the evolution of the nervous system
- understand the phylogeny of the brain – from fish to humans
- study the homology and analogy between species (phylogeny versus adaptation)
- acquire the anatomical overview of the nervous system and identify major parts of the human and rodent brain
- analyze anatomical and physiological relationships in all major functional brain systems
- gain knowledge about brain evolution, adaptation and behavior
- understand and learn to perform basic neuromorphological laboratory techniques

Neuronal imaging techniques (Dr Irschick)

Location: Medizinzentrum Anichstrasse (MZA), Seminar Room (2. floor)

Dates: May 26 - May 28 (Wed - Fri), 1.00 - 5.00 pm

send email to [Dr Irschick](#) if you want to participate

- review neurohistological laboratory methods
- learn about the different [microscopical techniques](#)
- understand the basics of image acquisition and image manipulation
- perform morphometry of neurons and glial cells after standard and fluorescent labeling of cultures or sections
- analyze cell-by-cell wavelength-specific stained area, measure integrated and average intensities, perform cell counts in binary images, determine axonal length and branching
- learn about the [Biooptics facility](#) at MUI

Handouts for SPIN/PhD basic lecture 'Signal Processing in Neurons', part 'Neuronal and Glial Cell Biology', are available on request.