

Title of module

Modular Advanced Practical and Seminar
in the Focal Point Programme
"Molecular Medicine", VZ: 185780, 183781
"G Protein-mediated signaling pathways "

Credit points

4

Available in semester(s)

1

Hours per week

5.25

Compact course



Lecturer(s)

Rinne, Kienitz

Teaching methods

Two-week advanced laboratory course with an intergrated seminar, one of four lab courses to be completed in the first term

Evaluation of learning progress

Active participation in the laboratory tasks and seminar, feedback during the experiment

Mode of examination

Assessment of active and successful participation in the practical (50%) and a written project report (50%)

Learning objectives

Acquire standard laboratory techniques for cellular experiments.

Soft skills

Contents of module

The students will participate in current scientific projects of the lab. The main focus will be on the analysis of G protein signaling pathways in living cells with fluorescence microscopy. Methodologies include construction of DNA plasmids, cell culture techniques, expression of recombinant proteins, modern time-resolved fluorescence – and FRET-microscopy of signaling pathways in living cells.