

Module title		Abbreviation
Cell Biology - Focus Cytoskeleton and Microscopic Imaging		03-98-PZB2-202-m01
Module coordinator		Module offered by
Institute of Experimental Biomedicine, holder of the Professorship of Molecular Microscopy		Faculty of Medicine
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	May not be combined with 03-98-PZB1 or 03-98-PZB3.
Contents		
<p>Becoming familiar with basic cell biological principles via hands-on training and seminars. Major topics are the structural organisation, the stability and the dynamics of the cytoskeleton in eukaryotic cells. Biochemical analysis of cytoskeletal components. Complementary imaging using modern microscopic approaches and implementation of the results into the dynamic processes of the cytoskeleton living cells.</p>		
Intended learning outcomes		
<p>Problem-oriented handling of eukaryotic cells under sterile conditions and understanding principles of techniques for the analysis of the cellular cytoskeleton. Understanding the molecular basis of cell biology and recognizing targets for drugs affecting the cytoskeleton. Principles and limitations of classical and modern forms of microscopic imaging for the analysis of the cytoskeleton. Cellular malfunctions and their significance for the disease development. Independent extraction of relevant information and presentation of selected examples of the current literature.</p>		
Courses (type, number of weekly contact hours, language — if other than German)		
P (5) + S (1) Module taught in: German / English		
Method of assessment (type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)		
<p>a) written examination (45 to 90 minutes) b) oral examination of one candidate each (20 to 30 minutes) Language of assessment: German and/or English</p>		
Allocation of places		
Bachelor's Biomedicine: 12 places		
Additional information		
Duration: 2 weeks		
Workload		
150 h		
Teaching cycle		
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Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor' degree (1 major) Biomedicine (2020)		