

Module title		Abbreviation
Practical Course in Molecular Infection Biology		03-98-PMIB-202-m01
Module coordinator		Module offered by
Institute of Molecular Infection Biology		Faculty of Biology
ECTS	Method of grading	Only after succ. compl. of module(s)
5	numerical grade	--
Duration	Module level	Other prerequisites
1 semester	undergraduate	--
Contents		
Fundamental principles of the interaction of bacterial pathogens and multicellular parasites with host organisms; invasion of mammalian cells by intracellular bacteria as well as the regulation and mode of action of bacterial virulence factors; fundamental principles of microbial diagnostics.		
Intended learning outcomes		
Students will acquire theoretical and practical knowledge on bacterial virulence factors, their regulation and mode of action in the context of infectious disease, including the invasion of eukaryotic host cells by bacterial pathogens and the multiplication and persistence of bacteria within host cells. The students will learn fundamental principles of the cultivation of bacteria and multicellular parasites under laboratory conditions as well as the utilisation of these cultivation systems for the development of novel anti-infectives. The students will learn the principles of microbial diagnostics, including microbial cultivation as well as DNA-based, microscopical, serological and physiological methods of diagnostic differentiation.		
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)		
a) Written examination (45 to 90 minutes) or b) Log (10 to 20 pages) or c) oral examination of one candidate each (20 to 30 minutes)		
Allocation of places		
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Additional information		
Duration: 2 weeks		
Referred to in LPO I (examination regulations for teaching-degree programmes)		
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Module appears in		
Bachelor' degree (1 major) Biomedicine (2020)		