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

Experiments to characterize pathogens and their pathogenic properties are carried out. The internship includes, among other things, methods for identifying bacterial pathogens, physiological tests, biochemical detection assays and molecular methods. Furthermore, the genetic causes of antibiotic resistance are determined and gene regulation mechanisms investigated. Methods for determining the human microbiome are learned and working with databases is practiced. Virulence factors that are important in the host-pathogen interaction are analyzed.

Intended learning outcomes

Acquisition of professional competences to characterize bacterial pathogens, to classify their virulence and physiological properties and to understand their role in disease processes. Ability to analyze sequencing data using databases. Ability to discuss general aspects of infectious diseases in the society. Methodological competence to solve complex problems based on scientific data. Ability to present scientific work to others.

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

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's degree (1 major) Biomedicine (2020)