

Module title					Abbreviation	
Practical Course in Immunology and Virology					03-98-PIV-202-m01	
Module coordinator				Module offered by		
Institute of Virology and Immunobiolog			y Faculty of MedicineFaculty of Biology			
ECTS Metho		od of grading	Only after succ. compl. of module(s)			
5	5 numerical grade			<u> </u>		
Duration		Module level	Other prerequisites			
1 semester		undergraduate	[			
Contents						
The focus is on antigen uptake by dendritic cells and their antigen presentation to T cells. Subsequent time-kine- tic analyzes to determine the activation of the T cells. Part virology: Learning of virological basic principles by means of practical exercises. The focus is on the infecti- on of cells with wild-type and transgenic viruses, morphological examination of infected cells with cytopathic ef- fect, determination of virus titer and tropism, investigation of the functionality of antiviral antibodies and of the humoral immune response against viral infections.						
Part immunology: Professional work with primary immune cells under sterile conditions and the ability to inde- pendently apply basic immunological working methods. Mastering the basic safety aspects of working in the S2 laboratory when dealing with pathogen-stimulated cell cultures and principles of immunological methods in re- search. Checking, analyzing, interpreting, evaluating and classifying/judging the results. Allocation of the mole- cular basis of the immunoregulatory mechanisms, their consequences and causal impact on immune tolerance and immune stimulation. Part virology: Expert work with viruses and eukaryotic cells under sterile conditions as well as the ability to inde- pendently apply basic working methods of virology. Mastery of the basic safety aspects of working in an S2 labo- ratory with infectious agents as well as the concepts of genetic safety and principles of virological methods in re- search and diagnostics. Review, analyze, interpret, evaluate and classify/assess results. Assign the molecular basis of viral infections, their consequences and causal site in the disease process. <b>Courses</b> (type, number of weekly contact hours, language – if other than German) P (5) + S (1) Module taught in: German/English						
<b>Method of assessment</b> (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						
Additional information						
Workload						
Teaching cycle						
<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)						
Module appears in						

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Bachelor's degree (1 major) Biomedicine (2020)

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