

<b>Module title</b>		<b>Abbreviation</b>
<b>Molecular and Clinical Neurobiology</b>		07-MS1N-152-m01
<b>Module coordinator</b>		<b>Module offered by</b>
Managing Director of the Institute of Clinical Neurobiology		Faculty of Biology
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
10	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	graduate	--
<b>Contents</b>		
<p>Content of the lecture <i>Molekulare und klinische Neurobiologie (Molecular and Clinical Neurobiology)</i> - cells of the nervous system, properties of neurons and glial cells - ion channels and excitability of membranes, channelopathies - synapses, transmitter release, neuromuscular end plate, Myasthenia gravis - motor activity, anatomy of the human motor system, spinal reflexes, motor neuron diseases - cerebellum, ataxia and basal ganglia, Morbus Parkinson - muscles and muscle diseases - somatosensory system and pain - hippocampus, learning and memory, anterograde amnesia, visual agnosia - cortex, Morbus Alzheimer - sleep, EEG, epilepsy - sensory physiology, vision, diseases of the visual system; Reading: Kandel, Principles of Neural Science, 4th Edition: A detailed description of this course is also available at <a href="http://neurobiologie.uk-wuerzburg.de/lehveranstaltungen.html">http://neurobiologie.uk-wuerzburg.de/lehveranstaltungen.html</a>. The lecture Molecular and Clinical Neurobiology (incl. seminar) and <i>Neuroentwicklungsbiologie (Neurodevelopment; Fridays 8-9 a. m.)</i> together form one theoretical module (10 ECTS). However, you may also complete these two modules separately and have them credited within the area of mandatory electives 2.</p>		
<b>Intended learning outcomes</b>		
Theoretical foundations of molecular and clinical neurobiology, developmental mechanisms of neuronal diseases.		
<b>Courses</b> (type, number of weekly contact hours, language — if other than German)		
V (2) + S (1) Module taught in: German and/or 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 (30 to 60 minutes, including multiple choice questions) or c) oral examination of one candidate each (30 to 60 minutes) or d) oral examination in groups of up to 3 candidates (30 to 60 minutes) Language of assessment: German and/or English		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
300 h		
<b>Teaching cycle</b>		
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<b>Referred to in LPO I</b> (examination regulations for teaching-degree programmes)		
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<b>Module appears in</b>		
Master's degree (1 major) Biology (2015) Master's degree (1 major) Biosciences (2016) Master's degree (1 major) Biosciences (2017) Master's degree (1 major) Biosciences (2018)		

Master's degree (1 major) Biosciences (2021)  
Master's degree (1 major) Biosciences (2023)  
Master's degree (1 major) Biosciences (2024)