

<b>Module title</b>		<b>Abbreviation</b>
Cellular Neurobiology		03-TN-CN-142-m01
<b>Module coordinator</b>		<b>Module offered by</b>
holder of the Chair of Clinical Neurobiology		Faculty of Medicine
<b>ECTS</b>	<b>Method of grading</b>	<b>Only after succ. compl. of module(s)</b>
5	numerical grade	--
<b>Duration</b>	<b>Module level</b>	<b>Other prerequisites</b>
1 semester	graduate	--
<b>Contents</b>		
<p>Structure, function, and molecular functional components of the peripheral nerves of the nervous system including its neuronal and non-neuronal cells as well as the neuromuscular endplate (model system mouse), motor behavioural tests in mouse models for motoneuron diseases; functional and morphological analysis of motoneurons and motor endplates, neural stem cells: characteristics, approaches for therapeutic strategies, anatomical, cellular/neuronal plasticity at selected brain structures, e. g. hippocampus and cerebellum (mouse model), immunohistochemistry/immunofluorescence in hippocampal/cerebellar slices, confocal microscopy, primary neuron preparations of dorsal root ganglia and hippocampal neurons, mouse perfusion, cLabs/Neuron to simulate various electrophysiological conditions, whole cell patch clamp recordings to determine ion channel properties.</p>		
<b>Intended learning outcomes</b>		
<p>Students who successfully completed this module will have acquired insights into current experimental approaches in neurobiology. They will have been introduced to preparations and recording techniques to study the function and pathomechanisms of neural models systems. The students will have examined clinical aspects of neurobiology with a focus on the molecular, cellular and physiological mechanisms. Additionally, they will have learned how to document their own data that they collected during lab courses. In addition, the students will have learned to critically reflect their data in the context of the experimental methods used.</p>		
<b>Courses</b> (type, number of weekly contact hours, language – if other than German)		
V + P (no information on SWS (weekly contact hours) and course language available)		
<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)		
log (approx. 10 to 30 pages)		
<b>Allocation of places</b>		
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<b>Additional information</b>		
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<b>Workload</b>		
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<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>		
keinem Studiengang zugeordnet		