Master program „Interdisciplinary Neuroscience"

List of elective modules 2018/19   *update: 13.09.2018*

Subject area A: Basic Neuroscience

- (A2) Auditory Neuroscience   (FB15) ***Nowotny/Kössl***
- (A5) Clock Mechanisms in Mammalian Neurons and Neuroendocrine Cells (FB16) ***Stehle***
- (A7) Neurobiology of the Nematode *Caenorhabditis elegans*   (FB14) ***Gottschalk***
- (A8) Neuropharmacology (FB14) ***Klein***
- (A9) Cellular Physiology of Dopaminergic Neurons (FB16 & FB12) ***Röper/Schneider***
- (A10) Neurophysiology and Behaviour (FB 15) ***Grünewald***
- (A12) The Neuro-Vascular Interface (FB 16) ***Liebner***
- (A14) Embryonic and adult neurogenesis (FB 16) ***Schulte***
- (A15) Electrophysiological recordings in freely behaving animals (FB 16) ***Sigurdsson***
- (A17) Auditory Function and Dysfunction: Behavior and Physiology (FB 15) ***Gaese***
- (A18) Information Processing in the Central Auditory System (FB 15) ***Gaese***
- (A19) Neuronal basis of acoustic communication in mammals (FB 15) ***Hechavarria/Kössl***
- (A20) Learning and Memory: From single neuron to circuit physiology (MPI/FB15) ***Letzkus/Kössl***
- (A21) Cellular, molecular and systemic Neurobiology in mouse and zebrafish (FB15) ***Acker-Palmer***
- (A22) Optogenetics and calcium-recordings in freely behaving animals (FB16) ***Duvarci/Kössl***
- (A23) Cellular and molecular mechanisms in neurovascular disorders (FB15) ***Hefendehl/Kössl***

Subject area B: Clinical Neuroscience

- (B1) Ageing and Neurodegeneration (FB16) ***Auburger***
- (B4) Plasticity in Hippocampus – Morphology, Physiology, and Clinical Relevance (FB16) ***Schwarzacher/Deller***
- (B6) Brain Damage and Neuroprotection   (FB16) ***Kögel/Rami***
- (B7) Clinical Paedriatric Neurology (FB16) ***Kieslich***
- (B8) Clinical Neuroimaging (FB16) ***Berkefeld***
- (B9) Clinical Auditory Neuroscience *(FB 16)* ***Baumann***
- (B10) Experimental and Translational Psychiatry (FB16) ***Slattery***
- (B11) Neurobiological human cell models (FB 16) ***Chiocchetti/Kössl***

Subject area C: Cognitive and Computational Neuroscience

- (C1) Modern non-invasive Methods in Human Cognition Research (FB16) ***Kaiser***
- (C3) Modeling and Simulation (FB12) ***Wittum***
- (C4) Virtual Hippocampus – Introduction to Computational Neuroscience (FB 16) **Jedlicka**
- (C7) Cognitive Neuroscience – Higher Cognitive Functions (FB 5) ***Fiebach***
- (C8) Systems Neuroscience – Sensorimotor and Cognitive Networks (FB 16) ***Kell***
- (C10) Computational Neuroanatomy – quantitative analysis and modelling (ESI/FB16) ***Cuntz***
- (C11) Computational Modeling of Neuronal Plasticity (FIAS/FB 15) ***Triesch***
- (C12) Computational neural dynamics (MPI/FB15) ***Tchumatchenko/Kössl***
- (C13) Models for Neural Circuit Development (MPI/FB 15) **Gjorgjieva/Kössl**
- (C14) Cognitive Psychology – Attention, Perception & Memory (FB05) ***Vo***

Subject area D: Applied Aspects of Neuroscience

- (D1) Behavioral Biology in Zoos (FB15) ***Dierkes***