

## List of elective modules 2017/18

### Subject area A: Basic Neuroscience

- (A2) Auditory Neuroscience (FB15) **Nowotny/Kössl**
- (A5) Clock Mechanisms in Mammalian Neurons and Neuroendocrine Cells (FB16) **Stehle**
- (A6) Cellular and Molecular Biology of the Circadian System (FB16) **Korf**
- (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) **Hechavarría/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-recording in freely behaving animals (FB16) **Duvarci/Kössl**

### Subject area B: Clinical Neuroscience

- (B1) Aging 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 Paediatric Neurology (FB16) **Kieslich**
- (B8) Clinical Neuroimaging (FB16) **Berkefeld**
- (B9) Clinical Auditory Neuroscience (FB 16) **Baumann**
- (B10) Experimental and Translational Psychiatry (FB16) **Slattery**

### 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**
- (C9) Information Theory for Neuroscientists (FB16) **Wibral**
- (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**