

Code	Project title	PI
Molecular & cellular determinants of neural resources		
A01	The NMDA receptor complex - a signalling hub at the origin of cognitive flexibility?	Daniela C. Dieterich (Inst. for Pharmacology & Tox, OVGU) Markus Fendt (Inst. for Pharmacology & Tox., OVGU)
A02	Shaping neuronal engram ensembles through excitation-transcription coupling	Anna Karpova (RG Neuroplasticity, LIN) Michael R. Kreutz (RG Neuroplasticity, LIN)
A03	Neural resource allocation by spatial memory circuits facing progressive pathological challenges	Stefan Remy (Dept. Cellular Neuroscience, LIN) Stefan Dürschmid (Med. Faculty & Clinic for Neurology, OVGU)
A04	Cognitive enhancement by the anti- ageing protein Klotho – from molecular mechanisms to interventions	Emrah Düzel (Inst. of Cognitive Neurology & Dementia) Maria Andres-Alonso (RG Neuroplasticity, LIN) Michael R. Kreutz (RG Neuroplasticity, LIN)
A05	Extracellular matrix integrity as neural resource of cognitive flexibility	Alexander Dityatev (AG Molecular Neuroplasticity, DZNE) Björn Schott (Univ. Clinic for Psychiatry & Psychotherapy, Georg-August University, Göttingen) Constanze I. Seidenbecher (Dept. Neurochemistry and Molecular Biology, LIN)
A06	Neural resource mediated by BDNF- dependent neuroplasticity of cortico- hippocampal interactions	Volkmar Leßmann (Institute of Physiology, OVGU) Frank Ohl (Dept. Systems Physiology of Learning, LIN)
A07	Orexinergic modulation of neural resource	Anne Albrecht (Institute for Biology, OVGU) Oliver Stork (Institute for Biology, OVGU)
A08	The noradrenergic system´s contribution to neural resource in ageing	Matthew Betts (Institute of Cognitive Neurology & Dementia Research, OVGU) Dorothea Hämmerer (Institute of Cognitive Neurology & Dementia Research, OVGU)

Meso-scale determinants of neural resources

B01	Medial temporal lobe and prefrontal cortex connectivity as a neural resource for recognition memory	Matthias Prigge (RG Plasticity of Neuromodulatory Networks, LIN) Magdalena Sauvage (Dept. Functional Architecture of Memory, LIN)
B02	Neural resources of mnemonic discrimination and their interaction with hidden pathology in older adults and SuperAgers	Radoslaw Martin Cichy (Dept. of Education and Psychology, Freie Universität Berlin) Emrah Düzel (Institute of Cognitive Neurology & Dementia Research, OVGU)
B03	Grid cell integrity as a neural resource for navigation and episodic memory?	Kevin Allen (Univ. Hospital Heidelberg & DKFZ, Heidelberg) Thomas Wolbers (AG Aging & Cognition, DZNE) Jonathan Shine (Medical Faculty, OVGU)
B04	Effects of hippocampal vascularization patterns on the neural resources of MTL neurocognitive circuits	Esther Kühn (Institute of Cognitive Neurology & Dementia Research, OVGU) Anne Maass (AG Multimodal Neuroimaging, DZNE) Stefanie Schreiber (Univ. Clinic for Neurology, OVGU)
B05	Structural and functional determinants of attentional resources in multiple object and feature tracking	Jens-Max Hopf (Dept. Cognitive Neurophysiology, OVGU) Mircea Ariel Schönfeld (Dept. of Experimental Neurology, OVGU)
B06	Mobilisation of neural resources for temporal attention	Eike Budinger (Dept. Systems Physiology of Learning, LIN) Toemme Noesselt (Institute for Psychology, OVGU) Janelle Pakan (Institute of Cognitive Neurology & Dementia Research, OVGU)

Macro-scale principles of neural resources and resource allocation

C01	Dynamic modelling of training-induced, response-optimised mobilisation of neural resources	Marco Taubert (Institute of Sport Science, OVGU) Gabriel Ziegler (Inst. of Cognitive Neurology & Dementia)
C02	Exploratory attentional resource allocation by the anterior prefrontal cortex	Max Happel (Dept. Systems Physiology of Learning, LIN) Stefan Pollmann (Institute for Psychology, OVGU)
C03	Monitoring vs. Automatisation: Neural resource allocation for human skill learning	Elena Azañón (Med. Faculty & Clinic for Neurology, OVGU) Max-Philipp Stenner (Med. Faculty & Clinic for Neurology)
C04	Restoring neural resources perturbed by sleep deprivation	Markus Ullsperger (Institute for Psychology, OVGU)
C05	Intervening in circuits for cognitive resource allocation in primates	Kristine Krug (Institute for Biology, OVGU) Petra Ritter (Dept. of Neurology, Charité Berlin)

Scientific service projects

Z01	Functional neural circuit analysis and small animal imaging <i>in vivo</i>	Frank Angenstein (AG Functional Neuroimaging, DZNE) Michael R. Kreutz (RG Neuroplasticity, LIN) Oliver Stork (Institute for Biology, OVGU)
Z02	Human imaging at meso-scale	Esther Kühn (Inst. of Cognitive Neurology & Dementia) Oliver Speck (Institute for Physics, OVGU) Michael Hanke (Inst. of Systems Neuroscience, University Düsseldorf & Inst. of Neuroscience, Research Center Jülich)
Z03	Human molecular imaging ageing and SuperAgeing cohort	Emrah Düzel (Inst. Cognitive Neurology & Dementia Research) Anne Maass (AG Multimodal Neuroimaging, DZNE) Michael C. Kreißl (Dept. of Radiology, OVGU)

Central project

IRTG	Integrated Research Training Group	Toemme Noesselt (Institute for Psychology, OVGU) Oliver Stork (Institute for Biology, OVGU)
Z	Central task of the CRC	Emrah Düzel (Institute of Cognitive Neurology & Dementia Research, OVGU)