

Department of Neurology, Mainz	
1	Synaptic interleukin-4 receptor signaling modulates neuronal network activity Micaela Domingues, Nicholas Hanuschek, Carine Thalman, Samantha Schmaul, Manuela Ecker, Johannes Vogt, Frauke Zipp, Christina Francisca Vogelaar
2	Expression of the IL-4 receptor system in the mouse brain Yvonne Gärtner, Micaela Domingues, Samantha Schmaul, Nicholas Hanuschek, Christina F. Vogelaar, Frauke Zipp
Epilepsy Center, Frankfurt	
3	Attentional Modulation of the Human Hippocampus R. Kienitz, A. Strzelczyk, C. Kell, W. Singer & F. Rosenow
4	Parvalbumin expressing interneurons control spike-phase coupling of hippocampal cells to theta oscillations Michael Strüber, Jonas-Frederic Sauer & Marlene Bartos
Department of Child and Adolescent Psychiatry, Psychosomatics and Psychotherapy, Frankfurt	
5	Integration of genomic information and drug-transcriptome data predicts treatment response to valproate with high accuracy Simeon Platte, Giorgia Guerini, Colin B Josephson, RAISE-GENIC Consortium, Massimo Pandolfo, Felix Rosenow, Reetta Kälviäinen, Chantal Depondt, Karl Martin Klein, Andreas G. Chiochetti
Institute for Psychology, Darmstadt	
6	Criterion learning for perceptual decision making Christina Koß, Luis de la Cuesta Ferrer, Maik Stüttgen, Frank Jäkel
Edinger Institute, Frankfurt	
7	Calpains as potential therapeutic targets of highly malignant gliomas Lena Elias, Caterina Klein, Tanja Müller, Stefan Günther & Dorothea Schulte
8	From neurogenesis to leukemogenesis: Comparing transcriptional activity of PBX1 and TCF3 Vera Laub, Elisabeth Nan, Stefan Günther, Nicoletta Bobola, Dorothea Schulte
Frankfurt Institute for Advanced Studies	
9	Dynamics close to criticality support long synaptic lifetimes in cortical circuits Jan Marker, Tristan Stöber, Irina Pochinok, Felix Hoffmann, Masud Ehsani, Matthias Kaschube, Simon Rumpel, Jürgen Jost, Jochen Triesch
10	How stable are signal and noise correlations in mouse auditory cortex? Thomas Lai, Bastian Eppler, Dominik Aschauer, Simon Rumpel, Matthias Kaschube
11	Abrupt transitions of activity patterns in response to gradual changes of network connectivity Bastian Eppler, Dominik Aschauer, Simon Rumpel, Matthias Kaschube
Institute for Cell Biology and Neuroscience, Frankfurt	
12	Soluble epoxide hydrolase upregulation in Alzheimer's disease promotes blood-brain barrier dysfunction Murphy DeMeglio, Susanne Hille, Jiong Hu, Eloah dos Santos De Biasi, Peter Breunig, Oliver Müller, Ingrid Flemming, Jasmin K. Hefendehl
13	Microglia drive accelerated amyloid plaque accumulation in peri-infarct tissue after stroke Jan Hofmann, Michael Candlish, Eloah dos Santos De Biasi, Desirée Brösamle, Angelos Skodras, Peter R. Nilsson, Marc Beyer, Andreas Geburtig-Chiochetti, Jonas J. Neher, Jasmin K. Hefendehl
14	Elucidating the progression of vascular amyloidosis in vivo and ex vivo Eloah dos Santos De Biasi, Michael J. Candlish, Peter R. Nilsson, Ralf Brandes, Angelos Skodras, Mathias Jucker, Jasmin K. Hefendehl

15	<p>Investigating the pathomechanistic influence of amyloid beta on brain pericyte function P. Peter Breunig ,Christina Sauerland, Michael Candlish,R. Wilder Scott, Lin Wei Tung, Varsha Venkatesha Murthy, Blerina Aliraj, Andreas Weigert, Jasmin K. Hefendehl</p>
Institute for Clinical Neuroanatomy, Frankfurt	
16	<p>Dendritic dynamics, spinogenesis and survival of newborn hippocampal granule cells Sophia Kirscht, Lukas Frey</p>
17	<p>Time lapse imaging of single granule cells in the mouse dentate gyrus after entorhinal denervation in vitro – identification of different response types to denervation Davide Greco, Alexander Drakew, Thomas Deller</p>
18	<p>Sex matters: differences in dendritic spines in the CA2 subregion of the hippocampus Sharif Jabra, Meike Fellenz, Michael Rietsche, Aet O’Leary, David Slattery, Thomas Deller</p>
Brain Imaging Center, Frankfurt	
19	<p>Confirmation behavior in sensorimotor control Johannes Kasper, Christian A. Kell</p>
20	<p>Monitoring gait disturbances in Parkinson's Disease for closed-loop gait control Paul Kirsch, Miriam Alisa Helbig, Christian Kell</p>
21	<p>Differential contributions of the two cerebral hemispheres to visuomotor control Julia Guldán</p>
Institute of Human Genetics, Mainz	
22	<p>Epigenetic modulation during early development in a mouse model of tuberous sclerosis V. Engelhardt, J. Krummeich, A. Arlt, M. Schmeißer, S. Schweiger</p>
23	<p>BRCA2 haploinsufficiency influences brain development and brain function Ann-Sophie Pabst, Tomke Lang, Malin Dewenter, Stefan Diederich, Jennifer Winter, Helle Ulrich, Susann Schweiger</p>
24	<p>Trajectory of Neuroligin/Neurexin dysregulation associates with the establishment of an ASD-like phenotype in Tuberous Sclerosis J. Krummeich, C. Caliendo, A. Arlt, K. Rolski, K. Vincze, R. Schneider, S. Gerber, M. Schmeißer, S. Schweiger</p>
Institute of Neurophysiology, Frankfurt	
25	<p>Role of dorsal hippocampal-prefrontal interactions in spatial working memory Natasha Khan, Torfi Sigurdsson</p>
26	<p>Neuronal activity in organotypic entorhino-hippocampal slice cultures visualized with optogenetics and calcium imaging Carolin C. Koretz, Alexander Drakew, Tijana Radic, Tassilo Jungnitz, Jochen Roeper, Thomas Deller</p>
27	<p>Stable patterns or dynamic changes: How does the prefrontal cortex cope with changing behavioral demands? Johannes Hahn, Torfi Sigurdsson</p>
28	<p>Distinct roles of the dorsal and ventral hippocampus in spatial working memory and in signaling spatial information to the medial prefrontal cortex Susanne S. Babl, Torfi Sigurdsson</p>
Klinik für Anästhesiologie, Mainz	
29	<p>Microglia depletion via dietary administration of the CSF1R-inhibitor PLX-3397 after traumatic brain injury in mice Isa Wernersbach</p>
30	<p>Early microglia/macrophage depletion leads to long-term sex-dependent effects on inflammation and neuronal maintenance after traumatic brain injury in mice Yong Wang, Isa Wernersbach, Jenny Strehle, Shuailong Li, Dominik Appel, Matthias Klein, Katharina Ritter, Regina Hummel, Irmgard Tegeger, Michael K. E. Schäfer</p>
31	<p>Microglia subtypes show substrate-specific phagocytosis preferences and phenotype plasticity Shuailong Li, Isa Wernersbach, Gregory S. Harms, Michael K.E. Schäfer</p>

Institute of Pathophysiology, Mainz	
32	The tickling approach to the neurophysiology of fun Girsovic Vsevolods
33	CKAMP44 – modulating AMPAR to protect against excitotoxicity? Benedikt Grünewald, Matthias Venyi, Masood Wani and Jakob von Engelhardt
34	CKAMP44 controls synaptic function and strength of relay neurons during early development of the dLGN. Florian Hetsch, Danni Wang, Xufeng Chen, Jiong Zhang, Muhammad Aslam, Marcel Kegel, Henrik Tonner, Franz Grus, Jakob von Engelhardt
35	Effects of CKAMP59 on AMPARs Samy Al-Qut, Benedikt Grünewald, Jakob von Engelhardt
36	The Role of serotonin 5-HT_{3A} receptor in cortical neuronal function Jiong Zhang, Marcel Kegel and Jakob von Engelhardt
37	Altered intrinsic excitability and synaptic transmission at presymptomatic stage in juvenile Batten disease Masood Ahmad Wani, Benedikt Grünewald, Jakob von Engelhardt
38	CKAMP44 modulates processing of visual information by dLGN relay neurons Sonia Ruggieri, Tim Gollisch, Xufeng Chen, Jakob von Engelhardt
Max Planck Institute for Empirical Aesthetics, Frankfurt	
39	Neural and behavioural signatures of entrainment to increasingly irregular sounds Lea Kërçiku, Yuranny Cabral-Calderin, Vera Komeyer, Molly J. Henry
Institute of Physiology, Mainz	
40	Frequency and layer specific effects of high frequency STN stimulation on the motor cortex - STN network in mice in vivo Svenja Kreis, Muthuraman Muthuraman, Sergiu Groppa, Heiko J. Luhmann
41	Activity-dependent regulation of cell death in a caspase3 overexpression model Jonas Schroer, Davide Warm, Heiko J. Luhmann, Anne Sinning
42	Early spontaneous activity predicts survival of developing cortical neurons Davide Warm, Davide Bassetti, Jonas Schroer, Heiko J. Luhmann and Anne Sinning
43	Characterization of a c-Fos reporter system for in vivo imaging in the mouse auditory cortex Sarah Lutz, Johannes Seiler, David Lüdke, Bastian Eppler, Matthias Kaschube, Simon Rumpel
44	Investigating the effects of the disturbance of the E/I balance on dendritic spines Altug Kamacioglu, Dominik Aschauer, Simon Rumpel
45	Probing network dynamics in mouse auditory cortex using targeted microablation of functionally identified neurons Takahiro Noda, Eike Kienle, Yonatan Loewenstein, Simon Rumpel
46	Experienced entropy drives boredom-related choice behavior Johannes Seiler, Ohad Dan, Oliver Tüscher, Yonatan Loewenstein, Simon Rumpel
47	The Role of ERK in TBI-induced Functional Changes of the Mouse Somatosensory Cortex 1-week post-TBI Celine Gallagher, Natascha Ihbe, Thomas Mittmann

48	Developmental Characterization of Vip-positive GABAergic Interneurons in the Somatosensory Cortex in Mice Clara A. Simacek, Thomas Mittmann
49	Traumatic brain injury mediates HCN-channel functions in parvalbumin-positive basket cells of layer 2/3 somatosensory cortex Qiang Wang, Werner Kilb and Thomas Mittmann
50	Developmental changes of network activity in the somatosensory cortex in the glutamic acid decarboxylase 67 (GAD67)-GFP mouse model Timo Ueberbach, Thomas Mittmann
51	Development of GABAergic synapses in the somatosensory cortex Abusaada Ahd
Institute of Pharmaceutical and Biomedical Sciences, Mainz	
52	Angiogenin - a critical factor in pathological aging and Alzheimer's disease? Marko Jörg, Christina Endres, Mark Helm, Kristina Friedland
Leibniz Institute for Resilience Research, Mainz	
53	Inhibition of blood coagulation improves mental resilience M. Wendelmuth, T. Nguyen, S. Reyda, W. Ruf, S. Schweiger
54	ViNe-Seg: Deep-Learning assisted Segmentation of Visible Neurons and subsequent Analysis embedded in a Graphical User Interface Nicolas Ruffini, Saleh Altahini, Nico Weber, Anna Wierczeiko, Hendrik Backhaus, and Albrecht Stroh
55	From Dogs to Rats to Humans: Translational Research on Stressor Controllability Jana Meier, Kornelia Gentsch, Michèle Wessa
56	Prediction error related neural representation of extinction learning and consolidation Elena Andres, Chuan-Peng Hu, Anna Gerlicher, Martina Thiele, Raffael Kalisch
Institute of Medical Psychology, Frankfurt	
57	Distraction prevents decoding of auditory working memory contents Philipp Deutsch, Stefan Czoschke, Cora Fischer, Jochen Kaiser, Christoph Bledowski
58	Rapid TMS Localization of Finger Movement in the Brain: A Pilot Study Anna Leah Zier, Ole Numssen, Thomas Knösche, Gesa Hartwigsen, Konstantin Weise
Institute of Developmental Biology and Neurobiology, Mainz	
59	Mechanisms underlying robust contrast computations Freya Thurn, Burak Gür, Marion Silies
60	A multispectral spatial visual stimulation for optophysiological experiments Marion Silies, Christopher Schnaitmann
61	Learning from Schwann Cells, modulating gene expression in oligodendrocytes after injury Nocera Gianluigi, Claire Jacob
62	Control chromatin remodelling enzymes in Schwann cells to improve peripheral nerve regeneration Nadège Hertzog, Mert Duman, Maelle Bochud, Valérie Brügger, Felicia Schön, Devanarayanan Siva Sankar, Jörn Dengjel, Sofia Raigon-Lopez and Claire Jacob
63	Molecular mechanism behind different properties of first order interneurons Wagh Neel, Sporar K, Silies Marion
Institute for Psychology, Mainz	
64	Internal and external influences on brain signal variability José C. García Alanis, Michael D. Nunez, Christoph Löffler, Gidon T. Frischkorn, Klaus Oberauer, Christian J. Fiebach, and Anna-Lena Schubert

ICAR3R, Gießen	
65	<p style="text-align: center;">Information theoretic measures of pattern separation in the dentate gyrus Alexander Bird</p>
66	<p style="text-align: center;">Lognormal-like skewed distribution of spine sizes is independent of presynaptic transmitter release and synaptic plasticity Nina Röbler, Tassilo Jungenitz, Albrecht Sigler, Alexander Bird, Martin Mittag, Jeong Seop Rhee, Thomas Deller, Hermann Cuntz, Nils Brose, Stephan W. Schwarzacher, Peter Jedlicka</p>
67	<p style="text-align: center;">Multi-scale modeling of synaptic plasticity induced by Transcranial Magnetic Stimulation Hananeia, Ebner, Galanis, Vlachos, Jedlicka</p>
68	<p style="text-align: center;">A general principle of dendritic constancy: A neuron's size- and shape-invariant excitability Hermann Cuntz, Alex D. Bird, Martin Mittag, Marcel Beining, Marius Schneider, Laura Mediavilla, Felix Z. Hoffmann, Thomas Deller, Peter Jedlicka</p>
Institut für Molekulare Medizin, Mainz	
69	<p style="text-align: center;">A Gdap1-knockout Drosophila model of Charcot-Marie-Tooth disease Li Zhang, Fatih Yasar, Janina Kopetzky, Máximo Ibo Galindo Orozco, Axel Methner</p>
70	<p style="text-align: center;">NECAB2 orchestrates an endosomal pathway of mitochondrial quality control at striatal synapses Diones Bueno, Partha Narayan Dey, Teresa Schacht, Christina Wolf, Verena Wüllner, Elena Morpurgo, Liliana Rojas-Charry, Petra Leukel, Michael K.E. Schäfer, Luise Florin, Stefan Tenzer, Paul Stamm, Andreas Daiber, Leonardo Nardi, Verica Vasic, Michael J. Schmeisser, Andrea Hellwig, Ruchika Anand, Andreas S. Reichert, Sandra Ritz, Marion Silies, Katrin B. M. Frauenknecht, and Axel Methner</p>