

Weygandt M, Behrens J, **Brasanac J**, Söder E, Meyer-Arndt L, Wakonig K, Ritter K, Brandt AU, Bellmann-Strobl J, **Gold SM**, Haynes JD, Paul F. Neural mechanisms of perceptual decision-making and their link to neuropsychiatric symptoms in multiple sclerosis. *Mult Scler Relat Disord*. 2019 Aug;33:139-145. doi: 10.1016/j.msard.2019.05.025. Epub 2019 May 30. PubMed PMID: 31195338.

Paraskevopoulou F, Herman MA, Rosenmund C. Glutamatergic Innervation onto Striatal Neurons Potentiates GABAergic Synaptic Output. *J Neurosci*. 2019 Jun 5;39(23):4448-4460. doi: 10.1523/JNEUROSCI.2630-18.2019. Epub 2019 Apr 1. PubMed PMID: 30936241; PubMed Central PMCID: PMC6554626.

Haage V, Semtner M, Vidal RO, Hernandez DP, Pong WW, Chen Z, Hambardzumyan D, Magrini V, Ly A, Walker J, Mardis E, Mertins P, Sauer S, Kettenmann H, Gutmann DH. Comprehensive gene expression meta-analysis identifies signature genes that distinguish microglia from peripheral monocytes/macrophages in health and glioma. *Acta Neuropathol Commun*. 2019 Feb 14;7(1):20. doi: 10.1186/s40478-019-0665-y. PubMed PMID: 30764877; PubMed Central PMCID: PMC6376799.

Haage V, Elmadany N, Roll L, Faissner A, Gutmann DH, Semtner M, Kettenmann H. Tenascin C regulates multiple microglial functions involving TLR4 signaling and HDAC1. *Brain Behav Immun*. 2019 Jul 2;. doi: 10.1016/j.bbi.2019.06.047. [Epub ahead of print] PubMed PMID: 31271872.

Alonso L, Peeva P, Ramos-Prats A, Alenina N, Winter Y, Rivalan M. INTER-INDIVIDUAL AND INTER-STRAIN DIFFERENCES IN COGNITIVE AND SOCIAL ABILITIES OF DARK AGOUTI AND WISTAR HAN RATS. *Behav Brain Res*. 2019 Aug 29;:112188. doi: 10.1016/j.bbr.2019.112188. [Epub ahead of print] PubMed PMID: 31473288.

Böhme MA, McCarthy AW, **Grasskamp AT**, Beuschel CB, Goel P, Jusyte M, Laber D, Huang S, Rey U, Petzoldt AG, Lehmann M, Göttfert F, Haghghi P, Hell SW, Oswald D, Dickman D, Sigrist SJ, Walter AM. Rapid active zone remodeling consolidates presynaptic potentiation. *Nat Commun*. 2019 Mar 6;10(1):1085. doi: 10.1038/s41467-019-08977-6. PubMed PMID: 30842428; PubMed Central PMCID: PMC6403334.

Madipakkam AR, Rothkirch M, Dziobek I, Sterzer P. Access to awareness of direct gaze is related to autistic traits. *Psychol Med*. 2019 Apr;49(6):980-986. doi: 10.1017/S0033291718001630. Epub 2018 Jun 27. PubMed PMID: 29947310.

Anton K, Ernst A, Basta D. Auditory influence on postural control during stance tasks in different acoustic conditions. *J Vestib Res*. 2019 Aug 22;. doi: 10.3233/VES-190674. [Epub ahead of print] PubMed PMID: 31450523.

Jochner MCE, An J, Lättig-Tünnemann G, Kirchner M, Dagane A, Dittmar G, Dirnagl U, Eickholt BJ, Harms C. Unique properties of PTEN-L contribute to neuroprotection in response to ischemic-like stress. *Sci Rep*. 2019 Feb 28;9(1):3183. doi: 10.1038/s41598-019-39438-1. PubMed PMID: 30816308; PubMed Central PMCID: PMC6395706.

Henssler J, Brandt L, Müller M, **Liu S**, Montag C, Sterzer P, Heinz A. Migration and schizophrenia: meta-analysis and explanatory framework. *Eur Arch Psychiatry Clin Neurosci*. 2019 Jun 4;. doi: 10.1007/s00406-019-01028-7. [Epub ahead of print] PubMed PMID: 31161262.

Heinz A, Beck A, Halil MG, Pilhatsch M, Smolka MN, **Liu S**. Addiction as Learned Behavior Patterns. *J Clin Med*. 2019 Jul 24;8(8). doi: 10.3390/jcm8081086. Review. PubMed PMID: 31344831.

Sebold M, Spitta G, **Gleich T**, Dembler-Stamm T, Butler O, Zacharias K, Aydin S, Garbusow M, Rapp M, Schubert F, Buchert R, Gallinat J, Heinz A. Stressful life events are associated with striatal dopamine receptor availability in alcohol dependence. *J Neural Transm (Vienna)*. 2019 Feb 12;. doi: 10.1007/s00702-019-01985-2. [Epub ahead of print] PubMed PMID: 30747311.

Poulsen MH, **Poshtiban A**, **Klippenstein V**, Ghisi V, Plested AJR. Gating modules of the AMPA receptor pore domain revealed by unnatural amino acid mutagenesis. *Proc Natl Acad Sci U S A*. 2019 Jul 2;116(27):13358-13367. doi: 10.1073/pnas.1818845116. Epub 2019 Jun 18. PubMed PMID: 31213549; PubMed Central PMCID: PMC6613130.

Eriksen N, Rostrup E, Fabricius M, Scheel M, Major S, Winkler MKL, Bohner G, Santos E, Sakowitz OW, Kola V, **Reiffurth C**, Hartings JA, Vajkoczy P, Woitzik J, Martus P, Lauritzen M, Pakkenberg B, Dreier JP. Early focal brain injury after subarachnoid hemorrhage correlates with spreading depolarizations. *Neurology*. 2019 Jan 22;92(4):e326-e341. doi: 10.1212/WNL.0000000000006814. Epub 2018 Dec 28. PubMed PMID: 30593517.

Reiffurth C, Alam M, Zahedi-Khorasani M, Major S, Dreier JP. Na⁺/K⁺-ATPase α isoform deficiency results in distinct spreading depolarization phenotypes. *J Cereb Blood Flow Metab*. 2019 Feb 28;:271678X19833757. doi: 10.1177/0271678X19833757. [Epub ahead of print] PubMed PMID: 30819023.

Ivens S, **Çalışkan G**, **Papageorgiou I**, Cesetti T, Malich A, Kann O, Heinemann U, Stork O, Albrecht A. Persistent increase in ventral hippocampal long-term potentiation by juvenile stress: A role for astrocytic glutamine synthetase. *Glia*. 2019 Jul 17;. doi: 10.1002/glia.23683. [Epub ahead of print] PubMed PMID: 31313857.

Al-Fatly B, Ewert S, Kübler D, Kroneberg D, **Horn A**, Kühn AA. Connectivity profile of thalamic deep brain stimulation to effectively treat essential tremor. *Brain*. 2019 Aug 3;. doi: 10.1093/brain/awz236. [Epub ahead of print] PubMed PMID: 31377766.

Kadobianskyi M, **Schulze L**, Schuelke M, Judkewitz B. Hybrid genome assembly and annotation of *Danio rerio*. *Sci Data*. 2019 Aug 26;6(1):156. doi: 10.1038/s41597-019-0161-z. PubMed PMID: 31451709; PubMed Central PMCID: PMC6710283.

Fan AP, **Khalil AA**, Fiebach JB, Zaharchuk G, Villringer A, Villringer K, Gauthier CJ. Elevated brain oxygen extraction fraction measured by MRI susceptibility relates to perfusion status in acute ischemic stroke. *J Cereb Blood Flow Metab*. 2019 Feb 7;:271678X19827944. doi: 10.1177/0271678X19827944. [Epub ahead of print] PubMed PMID: 30732551.

Ovadia-Caro S, **Khalil AA**, Sehm B, Villringer A, Nikulin VV, Nazarova M. Predicting the Response to Non-invasive Brain Stimulation in Stroke. *Front Neurol*. 2019;10:302. doi: 10.3389/fneur.2019.00302. eCollection 2019. PubMed PMID: 31001190; PubMed Central PMCID: PMC6454031.

Bayrak Ş, **Khalil AA**, Villringer K, Fiebach JB, Villringer A, Margulies DS, Ovadia-Caro S. The impact of ischemic stroke on connectivity gradients. *Neuroimage Clin*. 2019 Jul 19;24:101947. doi: 10.1016/j.nicl.2019.101947. [Epub ahead of print] PubMed PMID: 31376644; PubMed Central PMCID: PMC6676042.

Castillo X, Castro-Obregón S, Gutiérrez-Becker B, Gutiérrez-Ospina G, **Karalis N**, **Khalil AA**, Lopez-Noguerola JS, Rodríguez LL, Martínez-Martínez E, Perez-Cruz C, Pérez-Velázquez J, Piña AL, Rubio K, García HPS, Syeda T, Vanoye-Carlo A, Villringer A, **Winek K**, **Zille M**. Re-thinking the Etiological Framework of Neurodegeneration. *Front Neurosci*. 2019;13:728. doi: 10.3389/fnins.2019.00728. eCollection 2019. Review. PubMed PMID: 31396030; PubMed Central PMCID: PMC6667555.

Zaqout S, Ravindran E, Stoltenburg-Didinger G, Kaindl AM. Congenital microcephaly-linked CDK5RAP2 affects eye development. *Ann Hum Genet*. 2019 Jul 29;. doi: 10.1111/ahg.12343. [Epub ahead of print] PubMed PMID: 31355417.

Zaqout S, Blaesius K, Wu YJ, Ott S, Kraemer N, Becker LL, Rosário M, Rosenmund C, Strauss U, Kaindl AM. Altered inhibition and excitation in neocortical circuits in congenital microcephaly. *Neurobiol Dis*. 2019 Sep;129:130-143. doi: 10.1016/j.nbd.2019.05.008. Epub 2019 May 15. PubMed PMID: 31102767.

Hadar R, Winter R, **Edemann-Callesen H**, Wieske F, Habelt B, Khadka N, Felgel-Farnholz V, Barroeta-Hlusicka E, Reis J, Tatarau CA, Funke K, Fritsch B, Bernhardt N, Bikson M, Nitsche MA, Winter C. Prevention of schizophrenia deficits via non-invasive adolescent frontal cortex stimulation in rats. *Mol Psychiatry*. 2019 Jan 28;. doi: 10.1038/s41380-019-0356-x. [Epub ahead of print] PubMed PMID: 30692610.

Hadar R, **Edemann-Callesen H**, Hlusicka EB, Wieske F, Vogel M, Günther L, Vollmayr B, **Hellweg R**, Heinz A, Garthe A, Winter C. Recurrent stress across life may improve cognitive performance in individual rats, suggesting the induction of resilience. *Transl Psychiatry*. 2019 Aug 5;9(1):185. doi: 10.1038/s41398-019-0523-5. PubMed PMID: 31383851; PubMed Central PMCID: PMC6683163.

de Zeeuw J, Papakonstantinou A, Nowozin C, Stotz S, Zaleska M, Hädel S, Bes F, Münch M, Kunz D. Living in Biological Darkness: Objective Sleepiness and the Pupillary Light Responses Are Affected by Different Metameric Lighting Conditions during Daytime. *J Biol Rhythms*. 2019 Aug;34(4):410-431. doi: 10.1177/0748730419847845. Epub 2019 Jun 2. PubMed PMID: 31156018; PubMed Central PMCID: PMC6637815.

Jurek B, Chayka M, Kreye J, Lang K, **Kraus L**, Fidzinski P, Kornau HC, Dao LM, Wenke NK, Long M, Rivalan M, Winter Y, Leubner J, Herken J, Mayer S, Mueller S, Boehm-Sturm P, Dirnagl U, Schmitz D, Kölch M, Prüss H. Human gestational NMDAR autoantibodies impair neonatal murine brain function. *Ann Neurol*. 2019 Jul 20;. doi: 10.1002/ana.25552. [Epub ahead of print] PubMed PMID: 31325344.

Thamm T, Zweynert S, Piper SK, **Madai VI**, **Livne M**, Martin SZ, Herzig CX, Mutke MA, Siebert E, Liebig T, Sobesky J. Diagnostic and prognostic benefit of arterial spin labeling in subacute stroke. *Brain Behav*. 2019 May;9(5):e01271. doi: 10.1002/brb3.1271. Epub 2019 Mar 25. PubMed PMID: 30912272; PubMed Central PMCID: PMC6520295.

Livne M, Rieger J, Aydin OU, Taha AA, Akay EM, Kossen T, Sobesky J, Kelleher JD, Hildebrand K, Frey D, **Madai VI**. A U-Net Deep Learning Framework for High Performance Vessel Segmentation in Patients With Cerebrovascular Disease. *Front Neurosci*. 2019;13:97. doi: 10.3389/fnins.2019.00097. eCollection 2019. PubMed PMID: 30872986; PubMed Central PMCID: PMC6403177.

Dusek P, **Madai VI**, Huelnhagen T, Bahn E, Matej R, Sobesky J, Niendorf T, Acosta-Cabronero J, Wuerfel J. The choice of embedding media affects image quality, tissue R2*, and susceptibility behaviors in post-mortem brain MR microscopy at 7.0T. *Magn Reson Med*. 2019 Apr;81(4):2688-2701. doi: 10.1002/mrm.27595. Epub 2018 Dec 2. PubMed PMID: 30506939.

Oliveira-Ferreira AI, Major S, Przesdzing I, Kang EJ, Dreier JP. Spreading depolarizations in the rat endothelin-1 model of focal cerebellar ischemia. *J Cereb Blood Flow Metab*. 2019 Jul 7;;271678X19861604. doi: 10.1177/0271678X19861604. [Epub ahead of print] PubMed PMID: 31280632.

Barow E, Boutitie F, Cheng B, Cho TH, Ebinger M, Endres M, Fiebach JB, Fiehler J, Ford I, **Galinovic I**, Nickel A, Puig J, Roy P, Wouters A, Magnus T, Thijs V, Lemmens R, Muir KW, Nighoghossian N, Pedraza S, Simonsen CZ, Gerloff C, Thomalla G. Functional Outcome of Intravenous Thrombolysis in Patients With Lacunar Infarcts in the WAKE-UP Trial. *JAMA Neurol*. 2019 Jun 1;76(6):641-649. doi: 10.1001/jamaneurol.2019.0351. PubMed PMID: 30907934; PubMed Central PMCID: PMC6563546.

Barow E, Boutitie F, Cheng B, Cho TH, Ebinger M, Endres M, Fiebach JB, Fiehler J, Ford I, **Galinovic I**, Nickel A, Puig J, Roy P, Wouters A, Thijs V, Lemmens R, Muir KW, Nighoghossian N, Pedraza S, Simonsen CZ, Gerloff C, Thomalla G. Clinical Characteristics and Outcome of Patients with Lacunar Infarcts and Concurrent Embolic Ischemic Lesions. *Clin Neuroradiol*. 2019 Jun 3;. doi: 10.1007/s00062-019-00800-5. [Epub ahead of print] PubMed PMID: 31161343.

Hotter B, **Galinovic I**, Kunze C, Brunecker P, Jungehulsing GJ, Villringer A, Endres M, Villringer K, Fiebach JB. High-resolution diffusion-weighted imaging identifies ischemic lesions in a majority of transient ischemic attack patients. *Ann Neurol*. 2019 Sep;86(3):452-457. doi: 10.1002/ana.25551. Epub 2019 Jul 31. PubMed PMID: 31298762.

Kronenberg G, **Uhlemann R**, Endres M, Gertz K. Microglia, Monocytes, and the Recurrence of Anxiety in Stress-Sensitized Mice. *Biol Psychiatry*. 2019 Jun 15;85(12):e67-e68. doi: 10.1016/j.biopsych.2018.11.027. Epub 2019 Mar 8. PubMed PMID: 30857640.

Kronenberg G, Gertz K, **Uhlemann R**, Kuffner MTC, Kirste I, An J, Jadavji NM, Schott BH, Scheffel T, Endres M, **Hellweg R**, Harms C. Reduced Hippocampal Neurogenesis in Mice Deficient in Apoptosis Repressor with Caspase

Recruitment Domain (ARC). *Neuroscience*. 2019 Jul 26;416:20-29. doi: 10.1016/j.neuroscience.2019.07.032. [Epub ahead of print] PubMed PMID: 31356897.

Boujon V, Uhlemann R, Wegner S, Wright MB, Laufs U, Endres M, Kronenberg G, Gertz K. Dual PPAR α / γ agonist aleglitazar confers stroke protection in a model of mild focal brain ischemia in mice. *J Mol Med (Berl)*. 2019 Aug;97(8):1127-1138. doi: 10.1007/s00109-019-01801-0. Epub 2019 May 30. PubMed PMID: 31147725; PubMed Central PMCID: PMC6647083.

Iggena D, **Klein C**, Rasińska J, Sparenberg M, Winter Y, Steiner B. Physical activity sustains memory retrieval in dopamine-depleted mice previously treated with L-Dopa. *Behav Brain Res*. 2019 Sep 2;369:111915. doi: 10.1016/j.bbr.2019.111915. Epub 2019 Apr 16. PubMed PMID: 30998993.

Klein C, Jonas W, Wiedmer P, **Schreyer S**, Akyüz L, Spranger J, **Hellweg R**, Steiner B. High-fat Diet and Physical Exercise Differentially Modulate Adult Neurogenesis in the Mouse Hypothalamus. *Neuroscience*. 2019 Feb 21;400:146-156. doi: 10.1016/j.neuroscience.2018.12.037. Epub 2018 Dec 29. PubMed PMID: 30599265.

Guo J, Bertalan G, Meierhofer D, **Klein C**, **Schreyer S**, Steiner B, Wang S, **Vieira da Silva R**, Infante-Duarte C, Koch S, Boehm-Sturm P, Braun J, Sack I. Brain maturation is associated with increasing tissue stiffness and decreasing tissue fluidity. *Acta Biomater*. 2019 Aug 23;. doi: 10.1016/j.actbio.2019.08.036. [Epub ahead of print] PubMed PMID: 31449927.

Dreier JP, Major S, **Lemale CL**, Kola V, **Reiffurth C**, **Schoknecht K**, Hecht N, Hartings JA, Woitzik J. Correlates of Spreading Depolarization, Spreading Depression, and Negative Ultraslow Potential in Epidural Versus Subdural Electroencephalography. *Front Neurosci*. 2019;13:373. doi: 10.3389/fnins.2019.00373. eCollection 2019. PubMed PMID: 31068779; PubMed Central PMCID: PMC6491820.

Cooper G, Finke C, Chien C, Brandt AU, Asseger S, Ruprecht K, Bellmann-Strobl J, Paul F, Scheel M. Standardization of T1w/T2w Ratio Improves Detection of Tissue Damage in Multiple Sclerosis. *Front Neurol*. 2019;10:334. doi: 10.3389/fneur.2019.00334. eCollection 2019. PubMed PMID: 31024428; PubMed Central PMCID: PMC6465519.

Lam M, Awasthi S, Watson HJ, Goldstein J, **Panagiotaropoulou G**, Trubetsky V, Karlsson R, Frei O, Fan CC, De Witte W, Mota NR, Mullins N, Brügger K, Lee H, Wray N, Skarabis N, Huang H, Neale B, Daly M, Mattheissen M, Walters R, Ripke S. RICOPIII: Rapid Imputation for COnsortias PIpeLIne. *Bioinformatics*. 2019 Aug 8;. doi: 10.1093/bioinformatics/btz633. [Epub ahead of print] PubMed PMID: 31393554.

Schad DJ, Garbusow M, Friedel E, Sommer C, Sebold M, Hägele C, Bernhardt N, Nebe S, Kuitunen-Paul S, **Liu S**, Eichmann U, Beck A, Wittchen HU, Walter H, Sterzer P, Zimmermann US, Smolka MN, Schlagenhauf F, Huys QJM, Heinz A, Rapp MA. Neural correlates of instrumental responding in the context of alcohol-related cues index disorder severity and relapse risk. *Eur Arch Psychiatry Clin Neurosci*. 2019 Apr;269(3):295-308. doi: 10.1007/s00406-017-0860-4. Epub 2018 Jan 8. PubMed PMID: 29313106.

Houtman J, **Freitag K**, Gimber N, Schmoranzler J, Heppner FL, Jendrach M. Beclin1-driven autophagy modulates the inflammatory response of microglia via NLRP3. *EMBO J*. 2019 Jan 7. pii: e99430. doi: 10.15252/embj.201899430. [Epub ahead of print] PubMed PMID: 30617086.

Prager O, Kamintsky L, **Hasam-Henderson LA**, **Schoknecht K**, Wuntke V, **Papageorgiou I**, Swolinsky J, Muoio V, Barklein G, Vazana U, Heinemann U, Friedman A, Kovács R. Seizure-induced microvascular injury is associated with impaired neurovascular coupling and blood-brain barrier dysfunction. *Epilepsia*. 2019 Jan 4. doi: 10.1111/epi.14631. [Epub ahead of print] PubMed PMID: 30609012.

Chien C, Brandt AU, Schmidt F, Bellmann-Strobl J, Ruprecht K, Paul F, Scheel M. MRI-Based Methods for Spinal Cord Atrophy Evaluation: A Comparison of Cervical Cord Cross-Sectional Area, Cervical Cord Volume, and Full Spinal Cord Volume in Patients with Aquaporin-4 Antibody Seropositive Neuromyelitis Optica Spectrum Disorders. *AJNR Am J Neuroradiol*. 2018 Jul;39(7):1362-1368. doi: 10.3174/ajnr.A5665. Epub 2018 May 10. PubMed PMID: 29748202.

Lückl J, **Lemale CL**, Kola V, Horst V, **Khojasteh U**, **Oliveira-Ferreira AI**, Major S, Winkler MKL, Kang EJ, **Schoknecht K**, Martus P, Hartings JA, Woitzik J, Dreier JP. The negative ultraslow potential, electrophysiological correlate of infarction in the human cortex. *Brain*. 2018 Jun 1;141(6):1734-1752. doi: 10.1093/brain/awy102. PubMed PMID: 29668855; PubMed Central PMCID: PMC5972557.

Galinovic I, Dicken V, Heitz J, Klein J, Puig J, Guibernau J, Kemmling A, Gellissen S, Villringer K, Neeb L, Gregori J, Weiler F, Pedraza S, Thomalla G, Fiehler J, Gerloff C, Fiebach JB; WAKE-UP Investigators. Homogeneous application of imaging criteria in a multicenter trial supported by investigator training: A report from the WAKE-UP study. *Eur J Radiol*. 2018 Jul;104:115-119. doi: 10.1016/j.ejrad.2018.05.011. Epub 2018 May 15. PubMed PMID: 29857856.

Thomalla G, Simonsen CZ, Boutitie F, Andersen G, Berthezene Y, Cheng B, Cheripelli B, Cho TH, Fazekas F, Fiehler J, Ford I, **Galinovic I**, Gellissen S, Golsari A, Gregori J, Günther M, Guibernau J, Häusler KG, Hennerici M, Kemmling A, Marstrand J, Modrau B, Neeb L, Perez de la Ossa N, Puig J, Ringleb P, Roy P, Scheel E, Schonewille W, Serena J, Sunaert S, Villringer K, Wouters A, Thijs V, Ebinger M, Endres M, Fiebach JB, Lemmens R, Muir KW, Nighoghossian N, Pedraza S, Gerloff C; WAKE-UP Investigators. MRI-Guided Thrombolysis for Stroke with Unknown Time of Onset. *N Engl J Med*. 2018 Aug 16;379(7):611-622. doi: 10.1056/NEJMoa1804355. Epub 2018 May 16. PubMed PMID: 29766770.

Boehmerle W, Huehnchen P, **Lee SLL**, Harms C, Endres M. TRPV4 inhibition prevents paclitaxel-induced neurotoxicity in preclinical models. *Exp Neurol*. 2018 Aug;306:64-75. doi: 10.1016/j.expneurol.2018.04.014. Epub 2018 Apr 30. PubMed PMID: 29715474.

Böge K, Zieger A, **Mungee A**, Tandon A, Fuchs LM, Schomerus G, Tam Ta TM, Dettling M, Bajbouj M, Angermeyer M, Hahn E. Perceived stigmatization and discrimination of people with mental illness: A survey-based study of the general population in five metropolitan cities in India. *Indian J Psychiatry*. 2018 Jan-Mar;60(1):24-31. doi: 10.4103/psychiatry.IndianJPsychiatry_406_17. PubMed PMID: 29736059; PubMed Central PMCID: PMC5914258.

Oyama N, **Winek K**, **Bäcker-Koduah P**, **Zhang T**, Dames C, Werich M, Kershaw O, Meisel C, Meisel A, Dirnagl U. Exploratory Investigation of Intestinal Function and Bacterial Translocation After Focal Cerebral Ischemia in the Mouse. *Front Neurol*. 2018 Nov 19;9:937. doi: 10.3389/fneur.2018.00937. eCollection 2018. PubMed PMID: 30510535; PubMed Central PMCID: PMC6254134.

Acker G, Piper SK, **Datwyler AL**, **Broggini T**, Kremenetskaia I, Nieminen-Kelhä M, Lips J, Harms U, Mueller S, Lättig-Tünnemann G, Trachsel E, Palumbo A, Neri D, **Klohs J**, Endres M, Vajkoczy P, Harms C, Czabanka M. Targeting the extradomain A of fibronectin allows identification of vascular resistance to antiangiogenic therapy in experimental glioma. *Oncotarget*. 2018 Jun 12;9(45):27760-27772. doi: 10.18632/oncotarget.25570. eCollection 2018 Jun 12. PubMed PMID: 29963235; PubMed Central PMCID: PMC6021244.

Uhl C, Markel M, **Broggini T**, Nieminen M, Kremenetskaia I, Vajkoczy P, Czabanka M. EphB4 mediates resistance to antiangiogenic therapy in experimental glioma. *Angiogenesis*. 2018 Jul 10. doi: 10.1007/s10456-018-9633-6. [Epub ahead of print] PubMed PMID: 29987450; PubMed Central PMCID: PMC6208883.

Klein C, Jonas W, Wiedmer P, **Schreyer S**, Akjüz L, Spranger J, **Hellweg R**, Steiner B. High-fat Diet and Physical Exercise Differentially Modulate Adult Neurogenesis in the Mouse Hypothalamus. *Neuroscience*. 2018 Dec 29. pii: S0306-4522(18)30855-8. doi: 10.1016/j.neuroscience.2018.12.037. [Epub ahead of print] PubMed PMID: 30599265.

Hain EG, Sparenberg M, Rasińska J, **Klein C**, Akjüz L, Steiner B. Indomethacin promotes survival of new neurons in the adult murine hippocampus accompanied by anti-inflammatory effects following MPTP-induced dopamine depletion. *J Neuroinflammation*. 2018 May 26;15(1):162. doi: 10.1186/s12974-018-1179-4. PubMed PMID: 29803225; PubMed Central PMCID: PMC5970532.

Pfeffer A, Munder T, **Schreyer S**, **Klein C**, Rasińska J, Winter Y, Steiner B. Behavioral and psychological symptoms of dementia (BPSD) and impaired cognition reflect unsuccessful neuronal compensation in the pre-plaque stage and serve as early markers for Alzheimer's disease in the APP23 mouse model. *Behav Brain Res.* 2018 Jul 16;347:300-313. doi: 10.1016/j.bbr.2018.03.030. Epub 2018 Mar 21. PubMed PMID: 29572105.

Gertz K, **Uhlemann R**, Foryst-Ludwig A, Barrientos RM, Kappert K, Thöne-Reineke C, Djoufack P, Kirschbaum C, Fink KB, Heinz A, Kintscher U, Endres M, Kronenberg G. The cytoskeleton in 'couch potato-ism': Insights from a murine model of impaired actin dynamics. *Exp Neurol.* 2018 Aug;306:34-44. doi:10.1016/j.expneurol.2018.04.004. Epub 2018 Apr 21. PubMed PMID: 29684438.

Dusek P, **Madai VI**, Huelnhagen T, Bahn E, Matej R, Sobesky J, Niendorf T, Acosta-Cabronero J, Wuerfel J. The choice of embedding media affects image quality, tissue R(2) (*), and susceptibility behaviors in post-mortem brain MR microscopy at 7.0T. *Magn Reson Med.* 2018 Dec 2. doi: 10.1002/mrm.27595. [Epub ahead of print] PubMed PMID: 30506939.

Oyama N, **Winek K**, **Bäcker-Koduah P**, **Zhang T**, Dames C, Werich M, Kershaw O, Meisel C, Meisel A, Dirnagl U. Exploratory Investigation of Intestinal Function and Bacterial Translocation After Focal Cerebral Ischemia in the Mouse. *Front Neurol.* 2018 Nov 19;9:937. doi: 10.3389/fneur.2018.00937. eCollection 2018. PubMed PMID: 30510535; PubMed Central PMCID: PMC6254134.

Ly LT, Kreye J, **Jurek B**, Leubner J, Scheibe F, Lemcke J, Wenke NK, Reincke SM, Prüss H. Affinities of human NMDA receptor autoantibodies: implications for disease mechanisms and clinical diagnostics. *J Neurol.* 2018 Nov;265(11):2625-2632. doi: 10.1007/s00415-018-9042-1. Epub 2018 Sep 5. PubMed PMID: 30187160; PubMed Central PMCID: PMC6182686.

Wendland K, Meisel A, Mergenthaler P. Investigating Gene Function for Neuronal Survival After Metabolic Stress Using Semi-Automated Fluorescence Microscopy and Automated Image Analysis. *Front Mol Neurosci.* 2018 Nov 2;11:393. doi: 10.3389/fnmol.2018.00393. eCollection 2018. PubMed PMID: 30450034; PubMed Central PMCID: PMC6224347.

Theis AK, Rózsa B, Katona G, Schmitz D, Jochenning FW. Voltage Gated Calcium Channel Activation by Backpropagating Action Potentials Downregulates NMDAR Function. *Front Cell Neurosci.* 2018 Apr 23;12:109. doi: 10.3389/fncel.2018.00109. eCollection 2018. PubMed PMID: 29755321; PubMed Central PMCID: PMC5932410.

Wittenbrink N, Ananthasubramaniam B, Münch M, Koller B, Maier B, Weschke C, Bes F, **de Zeeuw J**, Nowozin C, Wahnschaffe A, Wisniewski S, Zaleska M, Bartok O, Ashwal-Fluss R, Lammert H, Herzel H, Hummel M, Kadener S, Kunz D, Kramer A. High-accuracy determination of internal circadian time from a single blood sample. *J Clin Invest.* 2018 Aug 31;128(9):3826-3839. doi: 10.1172/JCI120874. Epub 2018 Aug 6. PubMed PMID: 29953415; PubMed Central PMCID: PMC6118629.

Bernhardt N, Lieser MK, Hlusicka EB, Habelt B, Wieske F, **Edemann-Callesen H**, Garthe A, Winter C. Learning deficits in rats overexpressing the dopamine transporter. *Sci Rep.* 2018 Sep 21;8(1):14173. doi: 10.1038/s41598-018-32608-7. PubMed PMID: 30242292; PubMed Central PMCID: PMC6154965.

Edemann-Callesen H, Habelt B, Wieske F, Jackson M, Khadka N, **Mattei D**, Bernhardt N, Heinz A, Liebetanz D, Bikson M, Padberg F, Hadar R, Nitsche MA, Winter C. Non-invasive modulation reduces repetitive behavior in a rat model through the sensorimotor cortico-striatal circuit. *Transl Psychiatry.* 2018 Jan 10;8(1):11. doi: 10.1038/s41398-017-0059-5. PubMed PMID: 29317605; PubMed Central PMCID: PMC5802458.

Watanabe S, **Mamer LE**, Raychaudhuri S, Luvsanjav D, Eisen J, Trimbuch T, Söhl-Kielczynski B, Fenske P, Milosevic I, Rosenmund C, Jorgensen EM. Synaptojanin and Endophilin Mediate Neck Formation during Ultrafast Endocytosis. *Neuron.* 2018 Jun 27;98(6):1184-1197.e6. doi: 10.1016/j.neuron.2018.06.005. PubMed PMID: 29953872; PubMed Central PMCID: PMC6086574.

Khalil AA, Villringer K, Filleböck V, Hu JY, Rocco A, Fiebach JB, Villringer A. Non-invasive monitoring of longitudinal changes in cerebral hemodynamics in acute ischemic stroke using BOLD signal delay. *J Cereb Blood Flow Metab.*

2018 Oct 18;271678X18803951. doi: 10.1177/0271678X18803951. [Epub ahead of print] PubMed PMID: 30334657.

Swaminathan A, Wichert I, Schmitz D, Maier N. Involvement of Mossy Cells in Sharp Wave-Ripple Activity In Vitro. *Cell Rep.* 2018 May 29;23(9):2541-2549. doi: 10.1016/j.celrep.2018.04.095. PubMed PMID: 29847786.

Hasselmann H, Gamradt S, Taenzer A, Nowacki J, Zain R, Patas K, Ramien C, Paul F, Wingenfeld K, Piber D, Gold SM, Otte C. Pro-inflammatory Monocyte Phenotype and Cell-Specific Steroid Signaling Alterations in Unmedicated Patients With Major Depressive Disorder. *Front Immunol.* 2018 Nov 23;9:2693. doi: 10.3389/fimmu.2018.02693. eCollection 2018. PubMed PMID: 30532752; PubMed Central PMCID: PMC6265986.

Livne M, Boldsen JK, Mikkelsen IK, Fiebach JB, Sobesky J, Mouridsen K. Boosted Tree Model Reforms Multimodal Magnetic Resonance Imaging Infarct Prediction in Acute Stroke. *Stroke.* 2018 Apr;49(4):912-918. doi: 10.1161/STROKEAHA.117.019440. Epub 2018 Mar 14. PubMed PMID: 29540608.

Pfeffer A, Munder T, **Schreyer S**, **Klein C**, Rasińska J, Winter Y, Steiner B. Behavioral and psychological symptoms of dementia (BPSD) and impaired cognition reflect unsuccessful neuronal compensation in the pre-plaque stage and serve as early markers for Alzheimer's disease in the APP23 mouse model. *Behav Brain Res.* 2018 Jul 16;347:300-313. doi: 10.1016/j.bbr.2018.03.030. Epub 2018 Mar 21. PubMed PMID: 29572105

Schiweck J, Eickholt BJ, Murk K. Important Shapeshifter: Mechanisms Allowing Astrocytes to Respond to the Changing Nervous System During Development, Injury and Disease. *Front Cell Neurosci.* 2018 Aug 21;12:261. doi: 10.3389/fncel.2018.00261. eCollection 2018. PubMed PMID: 30186118; PubMed Central PMCID: PMC6111612.

Schulze L, Henninger J, **Kadobianskyi M**, Chaigne T, Faustino AI, Hakiy N, Albadri S, Schuelke M, Maler L, Del Bene F, Judkewitz B. Transparent Danionella translucida as a genetically tractable vertebrate brain model. *Nat Methods.* 2018 Nov;15(11):977-983. doi: 10.1038/s41592-018-0144-6. Epub 2018 Oct 15. Erratum in: *Nat Methods.* 2018 Dec;15(12):1126. PubMed PMID: 30323353.

Asseger S, Schmidt F, **Chien C**, Scheel M, Ruprecht K, Bellmann-Strobl J, Brandt AU, Paul F. Pain in AQP4-IgG-positive and MOG-IgG-positive neuromyelitis optica spectrum disorders. *Mult Scler J Exp Transl Clin.* 2018 Aug 30;4(3):2055217318796684. doi: 10.1177/2055217318796684. eCollection 2018 Jul-Sep. PubMed PMID: 30186620; PubMed Central PMCID: PMC6117869.

Chien C, Scheel M, Schmitz-Hübsch T, Borisow N, Ruprecht K, Bellmann-Strobl J, Paul F, Brandt AU. Spinal cord lesions and atrophy in NMOSD with AQP4-IgG and MOG-IgG associated autoimmunity. *Mult Scler.* 2018 Nov 26;1352458518815596. doi: 10.1177/1352458518815596. [Epub ahead of print] PubMed PMID: 30475082.

Meyer N, Richter N, Fan Z, **Siemonsmeier G**, Pivneva T, Jordan P, Steinhäuser C, Semtner M, Nolte C, Kettenmann H. Oligodendrocytes in the Mouse Corpus Callosum Maintain Axonal Function by Delivery of Glucose. *Cell Rep.* 2018 Feb 27;22(9):2383-2394. doi: 10.1016/j.celrep.2018.02.022. PubMed PMID: 29490274.

Guneykaya D, Ivanov A, Hernandez DP, **Haage V**, Wojtas B, **Meyer N**, **Maricos M**, Jordan P, **Buonfiglioli A**, Gielniewski B, Ochocka N, Cömert C, Friedrich C, Artiles LS, Kaminska B, Mertins P, Beule D, Kettenmann H, Wolf SA. Transcriptional and Translational Differences of Microglia from Male and Female Brains. *Cell Rep.* 2018 Sep 4;24(10):2773-2783.e6. doi: 10.1016/j.celrep.2018.08.001. PubMed PMID: 30184509.

Bernal Sierra YA, **Rost BR**, Pofahl M, Fernandes AM, Kopton RA, Moser S, Holtkamp D, Masala N, Beed P, Tukker JJ, **Oldani S**, Bönigk W, Kohl P, Baier H, Schneider-Warme F, Hegemann P, Beck H, Seifert R, Schmitz D. Potassium channel-based optogenetic silencing. *Nat Commun.* 2018 Nov 5;9(1):4611. doi: 10.1038/s41467-018-07038-8. PubMed PMID: 30397200; PubMed Central PMCID: PMC6218482.

Hadar R, Bikovski L, Soto-Montenegro ML, Schimke J, Maier P, Ewing S, **Voget M**, Wieske F, Götz T, Desco M, Hamani C, Pascau J, Weiner I, Winter C. Early neuromodulation prevents the development of brain and behavioral abnormalities in a rodent model of schizophrenia. *Mol Psychiatry.* 2018 Apr;23(4):943-951. doi: 10.1038/mp.2017.52. Epub 2017 Apr 4. PubMed PMID: 28373685; PubMed Central PMCID: PMC5552352

von der Ahe D, Huehnchen P, **Balkaya M, Peruzzaro S, Endres M**, Boehmerle W. Suramin-Induced Neurotoxicity: Preclinical Models and Neuroprotective Strategies. *Molecules (Basel, Switzerland)*. 2018; 23(2). PubMed [journal] PMID: 29414872

Lofredi R, Neumann WJ, Bock A, **Horn A**, Huebl J, Siegert S, Schneider GH, Krauss JK, Kühn AA. Dopamine-dependent scaling of subthalamic gamma bursts with movement velocity in patients with Parkinson's disease. *eLife*. 2018; 7. PubMed [journal] PMID: 29388913

Merkel A, Aust S, Schneider GH, Visser-Vandewalle V, **Horn A**, Kühn AA, Kuhn J, Bajbouj M. Deep brain stimulation of the subcallosal cingulate gyrus in patients with treatment-resistant depression: A double-blinded randomized controlled study and long-term follow-up in eight patients. *Journal of affective disorders*. 2018; 227:521-529. PubMed [journal] PMID: 29161674

Papageorgiou IE, Valous NA, Lahrmann B, Janova H, Klafit ZJ, Koch A, Schneider UC, Vajkoczy P, Heppner FL, Grabe N, Halama N, Heinemann U, Kann O. Astrocytic glutamine synthetase is expressed in the neuronal somatic layers and down-regulated proportionally to neuronal loss in the human epileptic hippocampus. *Glia*. 2018; PubMed [journal] PMID: 29350438

Edemann-Calleesen H, Habelt B, Wieske F, Jackson M, Khadka N, **Mattei D**, Bernhardt N, Heinz A, Liebetanz D, Bikson M, Padberg F, Hadar R, Nitsche MA, Winter C. Non-invasive modulation reduces repetitive behavior in a rat model through the sensorimotor cortico-striatal circuit. *Translational psychiatry*. 2018; 8(1):11. PubMed [journal] PMID: 29317605, PMCID: PMC5802458

Finke C, Zimmermann H, Pache F, Oertel FC, **Chavarro VS**, Kramarenko Y, Bellmann-Strobl J, Ruprecht K, Brandt AU, Paul F. Association of Visual Impairment in Neuromyelitis Optica Spectrum Disorder With Visual Network Reorganization. *JAMA neurology*. 2018; PubMed [journal] PMID: 29297041

Munder T, **Pfeffer A, Schreyer S**, Guo J, Braun J, Sack I, Steiner B, **Klein C**. MR elastography detection of early viscoelastic response of the murine hippocampus to amyloid β accumulation and neuronal cell loss due to Alzheimer's disease. *Journal of magnetic resonance imaging: JMRI*. 2018; 47(1):105-114. PubMed [journal] PMID: 28422391

Thomalla G, Boutitie F, Fiebach JB, Simonsen CZ, Pedraza S, Lemmens R, Nighoghossian N, Roy P, Muir KW, Ebinger M, Ford I, Cheng B, **Galinovic I**, Cho TH, Puig J, Thijs V, Endres M, Fiehler J, Gerloff C. Clinical characteristics of unknown symptom onset stroke patients with and without diffusion-weighted imaging and fluid-attenuated inversion recovery mismatch. *International journal of stroke: official journal of the International Stroke Society*. 2018; 13(1):66-73. PubMed [journal] PMID: 28425349

Galinovic I, Kochova E, Khalil A, Villringer K, Piper SK, Fiebach JB. The ratio between cerebral blood flow and Tmax predicts the quality of collaterals in acute ischemic stroke. *PloS one*. 2018; 13(1):e0190811. PubMed [journal] PMID: 29381701

Scior A, Buntru A, Arnsburg K, Ast A, Iburg M, Juenemann K, **Pigazzini ML**, Mlody B, Puchkov D, Priller J, Wanker EE, Prigione A, Kirstein J. Complete suppression of Htt fibrilization and disaggregation of Htt fibrils by a trimeric chaperone complex. *EMBO J*. 2018; 17;37(2):282-299 PubMed [journal] PMID: 29212816

2017 (67)

Kronenberg G, **Uhlemann R**, Richter N, Klempin F, **Wegner S**, Staerck L, Wolf S, Uckert W, Kettenmann H, Endres M, Gertz K. Distinguishing features of microglia- and monocyte-derived macrophages after stroke. *Acta neuropathologica*. 2017; PubMed [journal] PMID: 29249001

Fröhlich F, Ernst A, **Strübing I**, Basta D, Gröschel M. Apoptotic mechanisms after repeated noise trauma in the mouse medial geniculate body and primary auditory cortex. *Experimental brain research*. 2017; 235(12):3673-3682. PubMed [journal] PMID: 28918463

Koduah P, Paul F, Dörr JM. Vitamin D in the prevention, prediction and treatment of neurodegenerative and neuroinflammatory diseases. *The EPMA journal*. 2017; 8(4):313-325. PubMed [journal] PMID: 29209434, PMCID: PMC5700019

Neumann WJ, **Horn A**, Ewert S, Huebl J, **Brücke C**, Slentz C, Schneider GH, Kühn AA. A localized pallidal physiomerker in cervical dystonia. *Annals of neurology*. 2017; 82(6):912-924. PubMed [journal] PMID: 29130551

Castillo-Gómez E, Oliveira B, Tapken D, Bertrand S, Klein-Schmidt C, Pan H, Zafeiriou P, Steiner J, **Jurek B**, Trippe R, Prüss H, Zimmermann WH, Bertrand D, Ehrenreich H, Hollmann M. All naturally occurring autoantibodies against the NMDA receptor subunit NR1 have pathogenic potential irrespective of epitope and immunoglobulin class. *Molecular psychiatry*. 2017; 22(12):1776-1784. PubMed [journal] PMID: 27502473

Dietzel J, Piper SK, Ruschmann R, Wollboldt C, **Usnich T**, Hellwig S, **Galinovic I**, Audebert HJ, Endres M, Villringer K, Fiebach JB, Haeusler KG. Impact of pre-admission oral anticoagulation on ischaemic stroke volume, lesion pattern, and frequency of intracranial arterial occlusion in patients with atrial fibrillation. *Europace : European pacing, arrhythmias, and cardiac electrophysiology : journal of the working groups on cardiac pacing, arrhythmias, and cardiac cellular electrophysiology of the European Society of Cardiology*. 2017; PubMed [journal] PMID: 29165559

Borchardt V, Fan Y, Dietz M, **Melendez ALH**, Bajbouj M, Gärtner M, Li M, Walter M, Grimm S. Echoes of Affective Stimulation in Brain connectivity Networks. *Cerebral cortex (New York, N.Y.: 1991)*. 2017; :1-14. PubMed [journal] PMID: 29161351

Neumann WJ, Staub-Bartelt F, **Horn A**, Schanda J, Schneider GH, Brown P, Kühn AA. Long term correlation of subthalamic beta band activity with motor impairment in patients with Parkinson's disease. *Clinical neurophysiology: official journal of the International Federation of Clinical Neurophysiology*. 2017; 128(11):2286-2291. NIHMSID: EMS75772 PubMed [journal] PMID: 29031219, PMCID: PMC5779610

Rost BR, Schneider-Warme F, Schmitz D, Hegemann P. Optogenetic Tools for Subcellular Applications in Neuroscience. *Neuron*. 2017; 96(3):572-603. PubMed [journal] PMID: 29096074

Madipakkam AR, Rothkirch M, Dziobek I, Sterzer P. Unconscious avoidance of eye contact in autism spectrum disorder. *Scientific reports*. 2017; 7(1):13378. PubMed [journal] PMID: 29042641, PMCID: PMC5645367

Wendt S, **Maricos M**, Vana N, **Meyer N**, **Guneykaya D**, Semtner M, Kettenmann H. Changes in phagocytosis and potassium channel activity in microglia of 5xFAD mice indicate alterations in purinergic signaling in a mouse model of Alzheimer's disease. *Neurobiology of aging*. 2017; 58:41-53. PubMed [journal] PMID: 28697378

Dusek P, Bahn E, Litwin T, Jablonka-Salach K, Łuciuk A, Huelnhagen T, **Madai VI**, Dieringer MA, Bulska E, Knauth M, Niendorf T, Sobesky J, Paul F, Schneider SA, Czlonkowska A, Brück W, Wegner C, Wuerfel J. Brain iron accumulation in Wilson disease: a post mortem 7 Tesla MRI - histopathological study. *Neuropathology and applied neurobiology*. 2017; 43(6):514-532. PubMed [journal] PMID: 27543917

Irmen F, Huebl J, Schroll H, **Brücke C**, Schneider GH, Hamker FH, Kühn AA. Subthalamic nucleus stimulation impairs emotional conflict adaptation in Parkinson's disease. *Social cognitive and affective neuroscience*. 2017; 12(10):1594-1604. PubMed [journal] PMID: 28985419, PMCID: PMC5647801

Krasemann S, Madore C, Cialic R, **Baufeld C**, Calcagno N, El Fatimy R, Beckers L, O'Loughlin E, Xu Y, Fanek Z, Greco DJ, Smith ST, Tweet G, Humulock Z, Zrzavy T, Conde-Sanroman P, Gacias M, Weng Z, Chen H, Tjon E, Mazaheri F, Hartmann K, Madi A, Ulrich JD, Glatzel M, Worthmann A, Heeren J, Budnik B, Lemere C, Ikezu T, Heppner FL, Litvak V, Holtzman DM, Lassmann H, Weiner HL, Ochando J, Haass C, Butovsky O. The TREM2-APOE Pathway Drives the Transcriptional Phenotype of Dysfunctional Microglia in Neurodegenerative Diseases. *Immunity*. 2017; 47(3):566-581.e9. NIHMSID: NIHMS901481 PubMed [journal] PMID: 28930663, PMCID: PMC5719893

Reddy-Alla S, Böhme MA, **Reynolds E**, Beis C, **Grasskamp AT**, Mampell MM, **Maglione M**, Jusyte M, Rey U, Babikir H, McCarthy AW, Quentin C, Matkovic T, Bergeron DD, Mushtaq Z, Göttfert F, Oswald D, Mielke T, Hell SW, Sigris SJ, Walter AM. Stable Positioning of Unc13 Restricts Synaptic Vesicle Fusion to Defined Release Sites to Promote Synchronous Neurotransmission. *Neuron*. 2017; 95(6):1350-1364.e12. PubMed [journal] PMID: 28867551

Sigl-Glöckner J, Brecht M. Polyploidy and the Cellular and Areal Diversity of Rat Cortical Layer 5 Pyramidal Neurons. *Cell reports*. 2017; 20(11):2575-2583. PubMed [journal] PMID: 28903039

Schoknecht K, Berndt N, Rösner J, Heinemann U, Dreier JP, Kovács R, Friedman A, Liotta A. Event-Associated Oxygen Consumption Rate Increases ca. Five-Fold When Interictal Activity Transforms into Seizure-Like Events In Vitro. *International journal of molecular sciences*. 2017; 18(9). PubMed [journal] PMID: 28880249, PMCID: PMC5618574

Livne M, Madai VI, Brunecker P, Zaro-Weber O, Moeller-Hartmann W, Heiss WD, Mouridsen K, Sobesky J. A PET-Guided Framework Supports a Multiple Arterial Input Functions Approach in DSC-MRI in Acute Stroke. *Journal of neuroimaging: official journal of the American Society of Neuroimaging*. 2017; 27(5):486-492. PubMed [journal] PMID: 28207200

Lenschow C, **Sigl-Glöckner J**, Brecht M. Development of rat female genital cortex and control of female puberty by sexual touch. *PLoS biology*. 2017; 15(9):e2001283. PubMed [journal] PMID: 28934203, PMCID: PMC5608169

Herold D, **Usnich T**, Spengler S, Sajonz B, Bauer M, Bermpohl F. Decreased medial prefrontal cortex activation during self-referential processing in bipolar mania. *Journal of affective disorders*. 2017; 219:157-163. PubMed [journal] PMID: 28551555

Accolla EA, **Horn A**, Herrojo-Ruiz M, Neumann WJ, Kühn AA. Reply: Oscillatory coupling of the subthalamic nucleus in obsessive compulsive disorder. *Brain: a journal of neurology*. 2017; 140(9):e57. PubMed [journal] PMID: 29050378

Angamo EA, ul Haq R, Rösner J, Gabriel S, Gerevich Z, Heinemann U, Kovács R. Contribution of Intrinsic Lactate to Maintenance of Seizure Activity in Neocortical Slices from Patients with Temporal Lobe Epilepsy and in Rat Entorhinal Cortex. *International journal of molecular sciences*. 2017; 18(9). PubMed [journal] PMID: 28832554, PMCID: PMC5618484

Kronenberg G, **Uhlemann R**, Schöner J, **Wegner S, Boujon V**, Deigendesch N, Endres M, Gertz K. Repression of telomere-associated genes by microglia activation in neuropsychiatric disease. *European archives of psychiatry and clinical neuroscience*. 2017; 267(5):473-477. PubMed [journal] PMID: 27896432, PMCID: PMC5509772

Estebanez L, **Hoffmann D**, Voigt BC, Poulet JFA. Parvalbumin-Expressing GABAergic Neurons in Primary Motor Cortex Signal Reaching. *Cell reports*. 2017; 20(2):308-318. PubMed [journal] PMID: 28700934, PMCID: PMC5522533

Livne M, Kossen T, **Madai VI**, Zaro-Weber O, Moeller-Hartmann W, Mouridsen K, Heiss WD, Sobesky J. Multiparametric Model for Penumbral Flow Prediction in Acute Stroke. *Stroke*. 2017; 48(7):1849-1854. PubMed [journal] PMID: 28630234

Hadar R, Dong L, Del-Valle-Anton L, **Guneykaya D, Voget M, Edemann-Calleesen H**, Schweibold R, Djodari-Irani A, Goetz T, Ewing S, Kettenmann H, Wolf SA, Winter C. Deep brain stimulation during early adolescence prevents microglial alterations in a model of maternal immune activation. *Brain, behavior, and immunity*. 2017; 63:71-80. PubMed [journal] PMID: 27939248

Horn A, Reich M, Vorwerk J, Li N, Wenzel G, Fang Q, Schmitz-Hübsch T, Nickl R, Kupsch A, Volkmann J, Kühn AA, Fox MD. Connectivity Predicts deep brain stimulation outcome in Parkinson disease. *Annals of neurology*. 2017; 82(1):67-78. PubMed [journal] PMID: 28586141

Zieger A, **Mungee A**, Schomerus G, Ta TMT, Weyers A, Böge K, Dettling M, Bajbouj M, von Lersner U, Angermeyer MC, Tandon A, Hahn E. Attitude toward psychiatrists and psychiatric medication: A survey from five metropolitan cities in India. *Indian journal of psychiatry*. 2017; 59(3):341-346. PubMed [journal] PMID: 29085094, PMCID: PMC5659085

Schlemm L, **Chien C**, Bellmann-Strobl J, Dörr J, Wuerfel J, Brandt AU, Paul F, Scheel M. Gadopentetate but not gadobutrol accumulates in the dentate nucleus of multiple sclerosis patients. *Multiple sclerosis (Houndmills, Basingstoke, England)*. 2017; 23(7):963-972. PubMed [journal] PMID: 27679460

Zaqout S, Morris-Rosendahl D, Kaindl AM. Autosomal Recessive Primary Microcephaly (MCPH): An Update. *Neuropediatrics*. 2017; 48(3):135-142. PubMed [journal] PMID: 28399591

Ewert S, Plettig P, Li N, Chakravarty MM, Collins DL, Herrington TM, Kühn AA, **Horn A**. Toward defining deep brain stimulation targets in MNI space: A subcortical atlas based on multimodal MRI, histology and structural connectivity. *NeuroImage*. 2017; PubMed [journal] PMID: 28536045

Gleich T, Lorenz RC, Gallinat J, Kühn S. Functional changes in the reward circuit in response to gaming-related cues after training with a commercial video game. *NeuroImage*. 2017; 152:467-475. PubMed [journal] PMID: 28323159

Mattei D, Ivanov A, Ferrai C, Jordan P, **Guneykaya D**, **Buonfiglioli A**, Schaafsma W, Przanowski P, Deuther-Conrad W, Brust P, Hesse S, Patt M, Sabri O, Ross TL, Eggen BJL, Boddeke EWGM, Kaminska B, Beule D, Pombo A, Kettenmann H, Wolf SA. Maternal immune activation results in complex microglial transcriptome signature in the adult offspring that is reversed by minocycline treatment. *Translational psychiatry*. 2017; 7(5):e1120. PubMed [journal] PMID: 28485733, PMCID: PMC5534948

Lorenz C, Lesimple P, Bukowiecki R, Zink A, Inak G, Mlody B, Singh M, Semtner M, Mah N, Auré K, Leong M, Zabiegajlov O, **Lyras EM**, Pfiffer V, Fauler B, Eichhorst J, Wiesner B, Huebner N, Priller J, Mielke T, Meierhofer D, Izsvák Z, Meier JC, Bouillaud F, Adjaye J, Schuelke M, Wanker EE, Lombès A, Prigione A. Human iPSC-Derived Neural Progenitors Are an Effective Drug Discovery Model for Neurological mtDNA Disorders. *Cell stem cell*. 2017; 20(5):659-674.e9. PubMed [journal] PMID: 28132834

Oertel FC, Kuchling J, Zimmermann H, **Chien C**, Schmidt F, Knier B, Bellmann-Strobl J, Korn T, Scheel M, Klistorner A, Ruprecht K, Paul F, Brandt AU. Microstructural visual system changes in AQP4-antibody-seropositive NMOSD. *Neurology(R) neuroimmunology & neuroinflammation*. 2017; 4(3):e334. PubMed [journal] PMID: 28255575, PMCID: PMC5322864

Frohlich F, Basta D, **Strübing I**, Ernst A, Gröschel M. Time course of cell death due to acoustic overstimulation in the mouse medial geniculate body and primary auditory cortex. *Noise & health*. 2017; 19(88):133-139. PubMed [journal] PMID: 28615543, PMCID: PMC5501023

Szechtman H, Ahmari SE, Beninger RJ, Eilam D, Harvey BH, **Edemann-Callese H**, Winter C. Obsessive-compulsive disorder: Insights from animal models. *Neuroscience and biobehavioral reviews*. 2017; 76(Pt B):254-279. PubMed [journal] PMID: 27168347

Dreier JP, Fabricius M, Ayata C, Sakowitz OW, William Shuttleworth C, Dohmen C, Graf R, Vajkoczy P, Helbok R, Suzuki M, Schiefecker AJ, Major S, Winkler MK, Kang EJ, Milakara D, **Oliveira-Ferreira AI**, **Reiffurth C**, Revankar GS, Sugimoto K, Dengler NF, Hecht N, Foreman B, Feyen B, Kondziella D, Friberg CK, Piilgaard H, Rosenthal ES, Westover MB, **Maslarova A**, Santos E, Hertle D, Sánchez-Porras R, Jewell SL, Balança B, Platz J, Hinzman JM, Lückl J, **Schoknecht K**, Schöll M, Drenckhahn C, Feuerstein D, Eriksen N, Horst V, Bretz JS, Jahnke P, Scheel M, Bohner G, Rostrup E, Pakkenberg B, Heinemann U, Claassen J, Carlson AP, Kowoll CM, Lublinsky S, Chassidim Y, Shelef I, Friedman A, Brinker G, Reiner M, Kirov SA, Andrew RD, Farkas E, Güresir E, Vatter H, Chung LS, Brennan KC, Lieutaud T, Marinesco S, Maas AI, Sahuquillo J, Dahlem MA, Richter F, Herreras O, Boutelle MG, Okonkwo DO, Bullock MR, Witte OW, Martus P, van den Maagdenberg AM, Ferrari MD, Dijkhuizen RM, Shutter LA, Andaluz N, Schulte AP, MacVicar B, Watanabe T, Woitzik J, Lauritzen M, Strong AJ, Hartings JA. Recording, analysis, and interpretation of spreading depolarizations in neurointensive care: Review and recommendations of the COSBID research group. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2017; 37(5):1595-1625. PubMed [journal] PMID: 27317657, PMCID:

PMC5435289

Regente J, **de Zeeuw J**, Bes F, Nowozin C, Appelhoff S, Wahnschaffe A, Münch M, Kunz D. Can short-wavelength depleted bright light during single simulated night shifts prevent circadian phase shifts? *Applied ergonomics*. 2017; 61:22-30. PubMed [journal] PMID: 28237017

Major S, Petzold GC, **Reiffurth C**, Windmüller O, Foddiss M, Lindauer U, Kang EJ, Dreier JP. A role of the sodium pump in spreading ischemia in rats. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2017; 37(5):1687-1705. PubMed [journal] PMID: 26994042, PMCID: PMC5435275

Lippmann K, Kamintsky L, Kim SY, Lublinsky S, Prager O, Nichtweiss JF, **Salar S**, Kaufer D, Heinemann U, Friedman A. Epileptiform activity and spreading depolarization in the blood-brain barrier-disrupted peri-infarct hippocampus are associated with impaired GABAergic inhibition and synaptic plasticity. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2017; 37(5):1803-1819. PubMed [journal] PMID: 27252228, PMCID: PMC5435286

Hartings JA, Shuttleworth CW, Kirov SA, Ayata C, Hinzman JM, Foreman B, Andrew RD, Boutelle MG, Brennan KC, Carlson AP, Dahlem MA, Drenckhahn C, Dohmen C, Fabricius M, Farkas E, Feuerstein D, Graf R, Helbok R, Lauritzen M, Major S, **Oliveira-Ferreira AI**, Richter F, Rosenthal ES, Sakowitz OW, Sánchez-Porras R, Santos E, Schöll M, Strong AJ, Urbach A, Westover MB, Winkler MK, Witte OW, Woitzik J, Dreier JP. The continuum of spreading depolarizations in acute cortical lesion development: Examining Leão's legacy. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2017; 37(5):1571-1594. PubMed [journal] PMID: 27328690, PMCID: PMC5435288

Horn A, Kühn AA, Merkl A, Shih L, Alterman R, Fox M. Probabilistic conversion of neurosurgical DBS electrode coordinates into MNI space. *NeuroImage*. 2017; 150:395-404. PubMed [journal] PMID: 28163141

Horn A, Neumann WJ, Degen K, Schneider GH, Kühn AA. Toward an electrophysiological "sweet spot" for deep brain stimulation in the subthalamic nucleus. *Human brain mapping*. 2017; PubMed [journal] PMID: 28390148

Hadar R, Bikovski L, Soto-Montenegro ML, Schimke J, Maier P, Ewing S, **Voget M**, Wieske F, Götz T, Desco M, Hamani C, Pascau J, Weiner I, Winter C. Early neuromodulation prevents the development of brain and behavioral abnormalities in a rodent model of schizophrenia. *Molecular psychiatry*. 2017; NIHMSID: CAMS6661 PubMed [journal] PMID: 28373685, PMCID: PMC5552352

Hohlefeld FU, Ewald A, Ehlen F, Tiedt HO, **Horn A**, Kühn AA, Curio G, Klostermann F, Nikulin VV. Neural correlates of lexical decisions in Parkinson's disease revealed with multivariate extraction of cortico-subthalamic interactions. *Clinical neurophysiology: official journal of the International Federation of Clinical Neurophysiology*. 2017; 128(4):538-548. PubMed [journal] PMID: 28226288

Ravindran E, Hu H, Yuzwa SA, Hernandez-Miranda LR, Kraemer N, Ninnemann O, Musante L, Boltshauser E, Schindler D, Hübner A, Reinecker HC, Ropers HH, Birchmeier C, Miller FD, Wienker TF, Hübner C, Kaindl AM. Homozygous ARHGEF2 mutation causes intellectual disability and midbrain-hindbrain malformation. *PLoS genetics*. 2017; 13(4):e1006746. PubMed [journal] PMID: 28453519, PMCID: PMC5428974

Khalil AA, Ostwaldt AC, Nierhaus T, Ganeshan R, Audebert HJ, Villringer K, Villringer A, Fiebach JB. Relationship Between Changes in the Temporal Dynamics of the Blood-Oxygen-Level-Dependent Signal and Hypoperfusion in Acute Ischemic Stroke. *Stroke*. 2017; 48(4):925-931. PubMed [journal] PMID: 28275197

Atangana E, Schneider UC, Blecharz K, Magrini S, Wagner J, Nieminen-Kelhä M, Kremenetskaia I, Heppner FL, Engelhardt B, Vajkoczy P. Intravascular Inflammation Triggers Intracerebral Activated Microglia and Contributes to Secondary Brain Injury After Experimental Subarachnoid Hemorrhage (eSAH). *Translational stroke research*. 2017; 8(2):144-156. PubMed [journal] PMID: 27477569

Klein C, Schreyer S, Kohrs FE, **Elhamoury P, Pfeffer A**, Munder T, Steiner B. Stimulation of adult hippocampal neurogenesis by physical exercise and enriched environment is disturbed in a CADASIL mouse model. *Scientific reports*. 2017; 7:45372. PubMed [journal] PMID: 28345617, PMCID: PMC5366944

Dam K, **Füchtemeier M**, Farr TD, Boehm-Sturm P, Foddiss M, Dirnagl U, Malysheva O, Caudill MA, Jadavji NM. Increased homocysteine levels impair reference memory and reduce cortical levels of acetylcholine in a mouse model of vascular cognitive impairment. *Behavioural brain research*. 2017; 321:201-208. PubMed [journal] PMID: 28087280

Kraft A, Jubal ER, von Laer R, Döring C, **Rocha A**, Grebbin M, Zenke M, Kettenmann H, Stroh A, Momma S. Astrocytic Calcium Waves Signal Brain Injury to Neural Stem and Progenitor Cells. *Stem cell reports*. 2017; 8(3):701-714. PubMed [journal] PMID: 28216142, PMCID: PMC5355570

Albrecht A, Müller I, Ardi Z, **Çalışkan G**, Gruber D, **Ivens S**, Segal M, Behr J, Heinemann U, Stork O, Richter-Levin G. Neurobiological consequences of juvenile stress: A GABAergic perspective on risk and resilience. *Neuroscience and biobehavioral reviews*. 2017; 74(Pt A):21-43. PubMed [journal] PMID: 28088535

Thomalla G, Boutitie F, Fiebach JB, Simonsen CZ, Nighoghossian N, Pedraza S, Lemmens R, Roy P, Muir KW, Ebinger M, Ford I, Cheng B, **Galinovic I**, Cho TH, Puig J, Thijs V, Endres M, Fiehler J, Gerloff C. Stroke With Unknown Time of Symptom Onset: Baseline Clinical and Magnetic Resonance Imaging Data of the First Thousand Patients in WAKE-UP (Efficacy and Safety of MRI-Based Thrombolysis in Wake-Up Stroke: A Randomized, Doubleblind, Placebo-Controlled Trial). *Stroke*. 2017; 48(3):770-773. PubMed [journal] PMID: 28174327

Dreier JP, **Reiffurth C**. Exploitation of the spreading depolarization-induced cytotoxic edema for high-resolution, 3D mapping of its heterogeneous propagation paths. *Proceedings of the National Academy of Sciences of the United States of America*. 2017; 114(9):2112-2114. PubMed [journal] PMID: 28223494, PMCID: PMC5338536

Willmes CG, Mack TG, Ledderose J, Schmitz D, Wozny C, Eickholt BJ. Investigation of hippocampal synaptic transmission and plasticity in mice deficient in the actin-binding protein Drebrin. *Scientific reports*. 2017; 7:42652. PubMed [journal] PMID: 28198431, PMCID: PMC5309812

Butler O, Adolf J, **Gleich T**, Willmund G, Zimmermann P, Lindenberger U, Gallinat J, Kühn S. Military deployment correlates with smaller prefrontal gray matter volume and psychological symptoms in a subclinical population. *Translational psychiatry*. 2017; 7(2):e1031. PubMed [journal] PMID: 28195568, PMCID: PMC5438025

Zaqout S, Bessa P, Krämer N, Stoltenburg-Didinger G, Kaindl AM. CDK5RAP2 Is Required to Maintain the Germ Cell Pool during Embryonic Development. *Stem cell reports*. 2017; 8(2):198-204. PubMed [journal] PMID: 28162995, PMCID: PMC5312265

Boehm-Sturm P, **Füchtemeier M**, Foddiss M, Mueller S, Trueman RC, **Zille M**, Rinnenthal JL, Kypraios T, Shaw L, Dirnagl U, Farr TD. Neuroimaging Biomarkers Predict Brain Structural Connectivity Change in a Mouse Model of Vascular Cognitive Impairment. *Stroke*. 2017; 48(2):468-475. PubMed [journal] PMID: 28070001, PMCID: PMC5266417

Ehlen F, Vonberg I, Tiedt HO, **Horn A**, Fromm O, Kühn AA, Klostermann F. Thalamic deep brain stimulation decelerates automatic lexical activation. *Brain and cognition*. 2017; 111:34-43. PubMed [journal] PMID: 27816778

Villringer K, Sanz Cuesta BE, **Ostwaldt AC**, Grittner U, Brunecker P, **Khalil AA**, Schindler K, Eisenblätter O, Audebert H, Fiebach JB. DCE-MRI blood-brain barrier assessment in acute ischemic stroke. *Neurology*. 2017; 88(5):433-440. PubMed [journal] PMID: 28031392

Hadar R, **Voget M**, Vengeliene V, Haumesser JK, van Riesen C, Avchalumov Y, Spanagel R, Winter C. Altered neural oscillations and elevated dopamine levels in the reward pathway during alcohol relapse. *Behavioural brain research*. 2017; 316:131-135. PubMed [journal] PMID: 27569184

Sünwoldt J, Bosche B, Meisel A, Mergenthaler P. Neuronal Culture Microenvironments Determine Preferences in Bioenergetic Pathway Use. *Frontiers in molecular neuroscience*. 2017; 10:305. PubMed [journal] PMID: 29085280, PMCID: PMC5649214

Tiedt HO, Ehlen F, Krugel LK, **Horn A**, Kühn AA, Klostermann F. Subcortical roles in lexical task processing: Inferences from thalamic and subthalamic event-related potentials. *Human brain mapping*. 2017; 38(1):370-383. PubMed [journal] PMID: 27647660

Nowozin C, Wahnschaffe A, Rodenbeck A, **de Zeeuw J**, Hädel S, Kozakov R, Schöpp H, Münch M, Kunz D. Applying Melanopic Lux to Measure Biological Light Effects on Melatonin Suppression and Subjective Sleepiness. *Current Alzheimer research*. 2017; 14(10):1042-1052. PubMed [journal] PMID: 28545361

Gobelny A, Behrens JR, Mertens S, Otte K, Mansow-Model S, Krüger T, **Gusho E**, Bellmann-Strobl J, Paul F, Brandt AU, Schmitz-Hübsch T. Maximum walking speed in multiple sclerosis assessed with visual perceptive computing. *PloS one*. 2017; 12(12):e0189281. PubMed [journal] PMID: 29244874, PMCID: PMC5731685

Matyash M, Zabiegajlov O, **Wendt S**, Matyash V, Kettenmann H. The adenosine generating enzymes CD39/CD73 control microglial processes ramification in the mouse brain. *PloS one*. 2017; 12(4):e0175012. PubMed [journal] PMID: 28376099, PMCID: PMC5380357

Paterka M, Voss JO, Werr J, Reuter E, Franck S, Leuenberger T, **Herz J**, Radbruch H, Bopp T, Siffrin V, Zipp F. Dendritic cells tip the balance towards induction of regulatory T cells upon priming in experimental autoimmune encephalomyelitis. *Journal of autoimmunity*. 2017; 76:108-114. PubMed [journal] PMID: 27707650

2016 (64)

Bayerl SH, Nieminen-Kelhä M, **Broggini T**, Vajkoczy P, Prinz V. Lateral Chronic Cranial Window Preparation Enables In Vivo Observation Following Distal Middle Cerebral Artery Occlusion in Mice. *Journal of visualized experiments: JoVE*. 2016; (118). PubMed [journal] PMID: 28060307

Hadar R, **Edemann-Calleesen H**, Reinel C, Wieske F, **Voget M**, Popova E, Sohr R, Avchalumov Y, Priller J, van Riesen C, Puls I, Bader M, Winter C. Rats overexpressing the dopamine transporter display behavioral and neurobiological abnormalities with relevance to repetitive disorders. *Scientific reports*. 2016; 6:39145. PubMed [journal] PMID: 27974817, PMCID: PMC5156927

Chavarro VS, Mealy MA, Simpson A, Lacheta A, Pache F, Ruprecht K, Gold SM, Paul F, Brandt AU, Levy M. Insufficient treatment of severe depression in neuromyelitis optica spectrum disorder. *Neurology(R) neuroimmunology & neuroinflammation*. 2016; 3(6):e286. PubMed [journal] PMID: 27800532, PMCID: PMC5079380

Korvers L, **de Andrade Costa A**, Mersch M, Matyash V, Kettenmann H, Semtner M. Spontaneous Ca²⁺ transients in mouse microglia. *Cell calcium*. 2016; 60(6):396-406. PubMed [journal] PMID: 27697289

von Samson-Himmelstjerna F, **Madai VI**, Sobesky J, Guenther M. Walsh-ordered hadamard time-encoded pseudocontinuous ASL (WH pCASL). *Magnetic resonance in medicine*. 2016; 76(6):1814-1824. PubMed [journal] PMID: 26714671

Mungee A, Burger M, Bajbouj M. No Effect of Cathodal Transcranial Direct Current Stimulation on Fear Memory in Healthy Human Subjects. *Brain sciences*. 2016; 6(4). PubMed [journal] PMID: 27827903, PMCID: PMC5187569

Krause P, Lauritsch K, Lipp A, **Horn A**, Weschke B, Kupsch A, Kiening KL, Schneider GH, Kühn AA. Long-term results of deep brain stimulation in a cohort of eight children with isolated dystonia. *Journal of neurology*. 2016; 263(11):2319-2326. PubMed [journal] PMID: 27567612

Angamo EA, Rösner J, Liotta A, Kovács R, Heinemann U. A neuronal lactate uptake inhibitor slows recovery of extracellular ion concentration changes in the hippocampal CA3 region by affecting energy metabolism. *Journal of neurophysiology*. 2016; 116(5):2420-2430. PubMed [journal] PMID: 27559140, PMCID: PMC5116486

Rösner J, Liotta A, **Angamo EA**, Spies C, Heinemann U, Kovács R. Minimizing photodecomposition of flavin adenine dinucleotide fluorescence by the use of pulsed LEDs. *Journal of microscopy*. 2016; 264(2):215-223. PubMed [journal] PMID: 27368071

Madipakkam AR, Rothkirch M, Wilbertz G, Sterzer P. Probing the influence of unconscious fear-conditioned visual stimuli on eye movements. *Consciousness and cognition*. 2016; 46:60-70. PubMed [journal] PMID: 27684607

Neumann WJ, Degen K, Schneider GH, **Brücke C**, Huebl J, Brown P, Kühn AA. Subthalamic synchronized oscillatory activity correlates with motor impairment in patients with Parkinson's disease. *Movement disorders: official journal of the Movement Disorder Society*. 2016; 31(11):1748-1751. NIHMSID: EMS70482 PubMed [journal] PMID: 27548068, PMCID: PMC5120686

Horn A, Kipp L, Meola A, Kühn AA, Leithner C. Teaching NeuroImages: Stroke mimicking thalamotomy: Cessation of tremor following ventrolateral thalamic ischemia. *Neurology*. 2016; 87(17):e208-e209. PubMed [journal] PMID: 27777349

Grauel MK, **Maglione M**, Reddy-Alla S, **Willmes CG**, Brockmann MM, Trimbuch T, Rosenmund T, Pangalos M, **Vardar G**, Stumpf A, Walter AM, **Rost BR**, Eickholt BJ, Haucke V, Schmitz D, Sigrist SJ, Rosenmund C. RIM-binding protein 2 regulates release probability by fine-tuning calcium channel localization at murine hippocampal synapses. *Proceedings of the National Academy of Sciences of the United States of America*. 2016; 113(41):11615-11620. PubMed [journal] PMID: 27671655, PMCID: PMC5068320

Böhme MA, Beis C, Reddy-Alla S, **Reynolds E**, Mampell MM, **Grasskamp AT**, Lützkendorf J, Bergeron DD, Driller JH, Babikir H, Göttfert F, Robinson IM, O'Kane CJ, Hell SW, Wahl MC, Stelzl U, Loll B, Walter AM, Sigrist SJ. Active zone scaffolds differentially accumulate Unc13 isoforms to tune Ca(2+) channel-vesicle coupling. *Nature neuroscience*. 2016; 19(10):1311-20. PubMed [journal] PMID: 27526206

Hasselmann H, Bellmann-Strobl J, Ricken R, Oberwahrenbrock T, Rose M, Otte C, Adli M, Paul F, Brandt AU, Finke C, Gold SM. Characterizing the phenotype of multiple sclerosis-associated depression in comparison with idiopathic major depression. *Multiple sclerosis (Houndmills, Basingstoke, England)*. 2016; 22(11):1476-1484. PubMed [journal] PMID: 26746809

Behrens JR, Mertens S, Krüger T, Grobelny A, Otte K, Mansow-Model S, **Gusho E**, Paul F, Brandt AU, Schmitz-Hübsch T. Validity of visual perceptive computing for static posturography in patients with multiple sclerosis. *Multiple sclerosis (Houndmills, Basingstoke, England)*. 2016; 22(12):1596-1606. PubMed [journal] PMID: 26814201

Kreye J, Wenke NK, Chayka M, Leubner J, Murugan R, Maier N, **Jurek B**, Ly LT, Brandl D, **Rost BR**, Stumpf A, Schulz P, Radbruch H, Hauser AE, Pache F, Meisel A, Harms L, Paul F, Dirnagl U, Garner C, Schmitz D, Wardemann H, Prüss H. Human cerebrospinal fluid monoclonal N-methyl-D-aspartate receptor autoantibodies are sufficient for encephalitis pathogenesis. *Brain : a journal of neurology*. 2016; 139(Pt 10):2641-2652. PubMed [journal] PMID: 27543972

Rummel J, **Voget M**, Hadar R, Ewing S, Sohr R, Klein J, Sartorius A, Heinz A, Mathé AA, Vollmayr B, Winter C. Testing different paradigms to optimize antidepressant deep brain stimulation in different rat models of depression. *Journal of psychiatric research*. 2016; 81:36-45. PubMed [journal] PMID: 27367210

Broggini T, Wüstner M, Harms C, Stange L, Blaes J, Thomé C, Harms U, Mueller S, Weiler M, Wick W, Vajkoczy P, Czabanka M. NDRG1 overexpressing gliomas are characterized by reduced tumor vascularization and resistance to antiangiogenic treatment. *Cancer letters*. 2016; 380(2):568-76. PubMed [journal] PMID: 26297987

Winek K, Dirnagl U, Meisel A. The Gut Microbiome as Therapeutic Target in Central Nervous System Diseases: Implications for Stroke. *Neurotherapeutics: the journal of the American Society for Experimental NeuroTherapeutics*. 2016; 13(4):762-774. PubMed [journal] PMID: 27714645, PMCID: PMC5081128

Laginha I, Kopp MA, Druschel C, Schaser KD, Brommer B, **Hellmann RC**, Watzlawick R, Ossami-Saidi RR, Prüss H, Failli V, Meisel C, Liebscher T, Prilipp E, Niedeggen A, Ekkernkamp A, Grittner U, Piper SK, Dirnagl U, Killig M, Romagnani C, Schwab JM. Natural Killer (NK) Cell Functionality after human Spinal Cord Injury (SCI): protocol of a prospective, longitudinal study. *BMC neurology*. 2016; 16:170. PubMed [journal] PMID: 27618987, PMCID: PMC5020484

Herold D, Spengler S, Sajonz B, **Usnich T**, Bermpohl F. Common and distinct networks for self-referential and social stimulus processing in the human brain. *Brain structure & function*. 2016; 221(7):3475-85. PubMed [journal] PMID: 26365506

Accolla EA, Herrojo Ruiz M, **Horn A**, Schneider GH, Schmitz-Hübsch T, Draganski B, Kühn AA. Brain networks modulated by subthalamic nucleus deep brain stimulation. *Brain: a journal of neurology*. 2016; 139(Pt 9):2503-15. PubMed [journal] PMID: 27412387

Baufeld C, Osterloh A, Prokop S, Miller KR, Heppner FL. High-fat diet-induced brain region-specific phenotypic spectrum of CNS resident microglia. *Acta neuropathologica*. 2016; 132(3):361-75. PubMed [journal] PMID: 27393312, PMCID: PMC4992033

Langenfurth A, Gu S, Bautze V, Zhang C, Neumann JE, Schüller U, **Stock K**, Wolf SA, Maier AM, Mastrella G, Pak A, Cheng H, Kälin RE, Holmbeck K, Strotmann J, Kettenmann H, Glass R. Decreased demand for olfactory periglomerular cells impacts on neural precursor cell viability in the rostral migratory stream. *Scientific reports*. 2016; 6:32203. PubMed [journal] PMID: 27573347, PMCID: PMC5004164

Gertz K, Kronenberg G, **Uhlemann R**, Prinz V, **Marquina R**, Corada M, Dejana E, Endres M. Partial loss of VE-cadherin improves long-term outcome and cerebral blood flow after transient brain ischemia in mice. *BMC neurology*. 2016; 16(1):144. PubMed [journal] PMID: 27538712, PMCID: PMC4991103

Donath S, An J, **Lee SL**, Gertz K, **Datwyler AL**, Harms U, Müller S, Farr TD, **Füchtemeier M**, Lättig-Tünnemann G, Lips J, Foddiss M, Mosch L, Bernard R, Grittner U, **Balkaya M**, Kronenberg G, Dirnagl U, Endres M, Harms C. Interaction of ARC and Daxx: A Novel Endogenous Target to Preserve Motor Function and Cell Loss after Focal Brain Ischemia in Mice. *The Journal of neuroscience : the official journal of the Society for Neuroscience*. 2016; 36(31):8132-48. PubMed [journal] PMID: 27488634, PMCID: PMC4971361

Huebl J, **Brücke C**, Merkl A, Bajbouj M, Schneider GH, Kühn AA. Processing of emotional stimuli is reflected by modulations of beta band activity in the subgenual anterior cingulate cortex in patients with treatment resistant depression. *Social cognitive and affective neuroscience*. 2016; 11(8):1290-8. PubMed [journal] PMID: 27013105, PMCID: PMC4967800

Szulzewsky F, Arora S, de Witte L, Ulas T, **Markovic D**, Schultze JL, Holland EC, Synowitz M, Wolf SA, Kettenmann H. Human glioblastoma-associated microglia/monocytes express a distinct RNA profile compared to human control and murine samples. *Glia*. 2016; 64(8):1416-36. PubMed [journal] PMID: 27312099

Ku MC, Edes I, Bendix I, Pohlmann A, Waiczies H, Prozorovski T, Günther M, Martin C, Pagès G, Wolf SA, Kettenmann H, Uckert W, Niendorf T, Waiczies S. ERK1 as a Therapeutic Target for Dendritic Cell Vaccination against High-Grade Gliomas. *Molecular cancer therapeutics*. 2016; 15(8):1975-87. PubMed [journal] PMID: 27256374

Vardar G, Chang S, Arancillo M, Wu YJ, Trimbuch T, Rosenmund C. Distinct Functions of Syntaxin-1 in Neuronal Maintenance, Synaptic Vesicle Docking, and Fusion in Mouse Neurons. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2016; 36(30):7911-24. PubMed [journal] PMID: 27466336

Madai VI, Martin SZ, von Samson-Himmelstjerna FC, Herzig CX, Mutke MA, **Wood CN**, Thamm T, Zweynert S, Bauer M, Hetzer S, Günther M, Sobesky J. Correction for Susceptibility Distortions Increases the Performance of Arterial

Spin Labeling in Patients with Cerebrovascular Disease. *Journal of neuroimaging: official journal of the American Society of Neuroimaging*. 2016; 26(4):436-44. PubMed [journal] PMID: 26902457

Klein C, Rasińska J, **Empl L**, Sparenberg M, **Poshtiban A**, Hain EG, Iggena D, Rivalan M, Winter Y, Steiner B. Physical exercise counteracts MPTP-induced changes in neural precursor cell proliferation in the hippocampus and restores spatial learning but not memory performance in the water maze. *Behavioural brain research*. 2016; 307:227-38. PubMed [journal] PMID: 27012392

Salar S, **Lapilover E**, **Müller J**, **Hollnagel JO**, Lippmann K, Friedman A, Heinemann U. Synaptic plasticity in area CA1 of rat hippocampal slices following intraventricular application of albumin. *Neurobiology of disease*. 2016; 91:155-65. PubMed [journal] PMID: 26972679

Hadar R, Vengeliene V, Barroeta Hlusicke E, Canals S, Noori HR, Wieske F, **Rummel J**, Harnack D, Heinz A, Spanagel R, Winter C. Paradoxical augmented relapse in alcohol-dependent rats during deep-brain stimulation in the nucleus accumbens. *Translational psychiatry*. 2016; 6(6):e840. PubMed [journal] PMID: 27327255, PMCID: PMC4931598

Wendt S, Wogram E, **Korvers L**, Kettenmann H. Experimental Cortical Spreading Depression Induces NMDA Receptor Dependent Potassium Currents in Microglia. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2016; 36(23):6165-74. PubMed [journal] PMID: 27277795

Wogram E, **Wendt S**, Matyash M, Pivneva T, Draguhn A, Kettenmann H. Satellite microglia show spontaneous electrical activity that is uncorrelated with activity of the attached neuron. *The European journal of neuroscience*. 2016; 43(11):1523-34. PubMed [journal] PMID: 27060918

Merkl A, Neumann WJ, Huebl J, Aust S, **Horn A**, Krauss JK, Dziobek I, Kuhn J, Schneider GH, Bajbouj M, Kühn AA. Modulation of Beta-Band Activity in the Subgenual Anterior Cingulate Cortex during Emotional Empathy in Treatment-Resistant Depression. *Cerebral cortex (New York, N.Y.: 1991)*. 2016; 26(6):2626-38. PubMed [journal] PMID: 25994959

Dengler NF, **Madai VI**, Wuerfel J, von Samson-Himmelstjerna FC, Dusek P, Niendorf T, Sobesky J, Vajkoczy P. Moyamoya Vessel Pathology Imaged by Ultra-High-Field Magnetic Resonance Imaging at 7.0T. *Journal of stroke and cerebrovascular diseases: the official journal of National Stroke Association*. 2016; 25(6):1544-51. PubMed [journal] PMID: 27053027

Albrecht A, **Ivens S**, **Papageorgiou IE**, **Çalışkan G**, Saiepour N, Brück W, Richter-Levin G, Heinemann U, Stork O. Shifts in excitatory/inhibitory balance by juvenile stress: A role for neuron-astrocyte interaction in the dentate gyrus. *Glia*. 2016; 64(6):911-22. PubMed [journal] PMID: 26875694

Uhlemann R, Gertz K, **Boehmerle W**, Schwarz T, Nolte C, Freyer D, Kettenmann H, Endres M, Kronenberg G. Actin dynamics shape microglia effector functions. *Brain structure & function*. 2016; 221(5):2717-34. PubMed [journal] PMID: 25989853

Klein C, Jonas W, Iggena D, **Empl L**, Rivalan M, Wiedmer P, Spranger J, Hellweg R, Winter Y, Steiner B. Exercise prevents high-fat diet-induced impairment of flexible memory expression in the water maze and modulates adult hippocampal neurogenesis in mice. *Neurobiology of learning and memory*. 2016; 131:26-35. PubMed [journal] PMID: 26968656

Winek K, **Engel O**, **Koduah P**, Heimesaat MM, Fischer A, Bereswill S, Dames C, Kershaw O, Gruber AD, Curato C, Oyama N, Meisel C, Meisel A, Dirnagl U. Depletion of Cultivable Gut Microbiota by Broad-Spectrum Antibiotic Pretreatment Worsens Outcome After Murine Stroke. *Stroke*. 2016; 47(5):1354-63. PubMed [journal] PMID: 27056982, PMCID: PMC4839545

Winek K, Meisel A, Dirnagl U. Gut microbiota impact on stroke outcome: Fad or fact? *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2016; 36(5):891-8. PubMed [journal] PMID: 26945017, PMCID: PMC4853845

Schindlbeck KA, **Galinovic I**, Fiebach JB. Response to Letter Regarding Article, "Spot Sign in Acute Intracerebral Hemorrhage in Dynamic T1-Weighted Magnetic Resonance Imaging". *Stroke*. 2016; 47(5):e85. PubMed [journal] PMID: 27012740

Çalışkan G, Müller I, Semtner M, Winkelmann A, Raza AS, **Hollnagel JO**, Rösler A, Heinemann U, Stork O, Meier JC. Identification of Parvalbumin Interneurons as Cellular Substrate of Fear Memory Persistence. *Cerebral cortex (New York, N.Y.: 1991)*. 2016; 26(5):2325-2340. PubMed [journal] PMID: 26908632, PMCID: PMC4830301

Klaft ZJ, **Hollnagel JO**, **Salar S**, **Çalışkan G**, **Schulz SB**, Schneider UC, Horn P, Koch A, Holtkamp M, Gabriel S, Gerevich Z, Heinemann U. Adenosine A1 receptor-mediated suppression of carbamazepine-resistant seizure-like events in human neocortical slices. *Epilepsia*. 2016; 57(5):746-56. PubMed [journal] PMID: 27087530

Watzlawick R, Rind J, Sena ES, Brommer B, **Zhang T**, Kopp MA, Dirnagl U, Macleod MR, Howells DW, Schwab JM. Olfactory Ensheathing Cell Transplantation in Experimental Spinal Cord Injury: Effect size and Reporting Bias of 62 Experimental Treatments: A Systematic Review and Meta-Analysis. *PLoS biology*. 2016; 14(5):e1002468. PubMed [journal] PMID: 27244556, PMCID: PMC4886956

Villringer K, **Serrano-Sandoval R**, Grittner U, **Galinovic I**, Schneider A, **Ostwaldt AC**, Brunecker P, Rocco A, Fiebach JB. Subtracted Dynamic MR Perfusion Source Images (sMRP-SI) provide Collateral Blood Flow Assessment in MCA Occlusions and Predict Tissue Fate. *European radiology*. 2016; 26(5):1396-403. PubMed [journal] PMID: 26210207

a Dzaye OD, **Hu F**, Derkow K, **Haage V**, Euskirchen P, Harms C, Lehnardt S, Synowitz M, Wolf SA, Kettenmann H. Glioma Stem Cells but Not Bulk Glioma Cells Upregulate IL-6 Secretion in Microglia/Brain Macrophages via Toll-like Receptor 4 Signaling. *Journal of neuropathology and experimental neurology*. 2016; 75(5):429-40. PubMed [journal] PMID: 27030742, PMCID: PMC5009477

Elagabani MN, Briševac D, **Kintscher M**, Pohle J, Köhr G, Schmitz D, Kornau HC. Subunit-selective N-Methyl-D-aspartate (NMDA) Receptor Signaling through Brefeldin A-resistant Arf Guanine Nucleotide Exchange Factors BRAG1 and BRAG2 during Synapse Maturation. *The Journal of biological chemistry*. 2016; 291(17):9105-18. PubMed [journal] PMID: 26884337, PMCID: PMC4861478

Pannell M, Meier MA, Szulzewsky F, Matyash V, Endres M, Kronenberg G, Prinz V, Waiczies S, Wolf SA, Kettenmann H. The subpopulation of microglia expressing functional muscarinic acetylcholine receptors expands in stroke and Alzheimer's disease. *Brain structure & function*. 2016; 221(2):1157-72. PubMed [journal] PMID: 25523105

Antonio LL, Anderson ML, **Angamo EA**, Gabriel S, Klaft ZJ, Liotta A, **Salar S**, Sandow N, Heinemann U. In vitro seizure like events and changes in ionic concentration. *Journal of neuroscience methods*. 2016; 260:33-44. PubMed [journal] PMID: 26300181

Volz MS, Finke C, Harms L, **Jurek B**, Paul F, Flöel A, Prüss H. Altered paired associative stimulation-induced plasticity in NMDAR encephalitis. *Annals of clinical and translational neurology*. 2016; 3(2):101-13. PubMed [journal] PMID: 26900584, PMCID: PMC4748309

ul Haq R, Anderson ML, **Hollnagel JO**, **Worschech F**, Sherkheli MA, Behrens CJ, Heinemann U. Serotonin dependent masking of hippocampal sharp wave ripples. *Neuropharmacology*. 2016; 101:188-203. PubMed [journal] PMID: 26409781

Schindlbeck KA, **Santaella A**, **Galinovic I**, Krause T, Rocco A, Nolte CH, Villringer K, Fiebach JB. Spot Sign in Acute Intracerebral Hemorrhage in Dynamic T1-Weighted Magnetic Resonance Imaging. *Stroke*. 2016; 47(2):417-23. PubMed [journal] PMID: 26715459

Broggini T, Piffko A, Hoffmann CJ, Harms C, Vajkoczy P, Czabanka M. Passive Entrapment of Tumor Cells Determines Metastatic Dissemination to Spinal Bone and Other Osseous Tissues. *PloS one*. 2016; 11(9):e0162540. PubMed [journal] PMID: 27603673, PMCID: PMC5014376

Hain EG, **Klein C**, Munder T, Braun J, Riek K, Mueller S, Sack I, Steiner B. Dopaminergic Neurodegeneration in the Mouse Is Associated with Decrease of Viscoelasticity of Substantia Nigra Tissue. *PloS one*. 2016; 11(8):e0161179. PubMed [journal] PMID: 27526042, PMCID: PMC4985068

Madai VI, Wood CN, Galinovic I, Grittner U, Piper SK, Revankar GS, Martin SZ, Zaro-Weber O, Moeller-Hartmann W, von Samson-Himmelstjerna FC, Heiss WD, Ebinger M, Fiebach JB, Sobesky J. Clinical-Radiological Parameters Improve the Prediction of the Thrombolysis Time Window by Both MRI Signal Intensities and DWI-FLAIR Mismatch. *Cerebrovascular diseases (Basel, Switzerland)*. 2016; 42(1-2):57-65. PubMed [journal] PMID: 26986943

Neumann WJ, Staub F, **Horn A**, Schanda J, Mueller J, Schneider GH, Brown P, Kühn AA. Deep Brain Recordings Using an Implanted Pulse Generator in Parkinson's Disease. *Neuromodulation: journal of the International Neuromodulation Society*. 2016; 19(1):20-24. NIHMSID: EMS68249 PubMed [journal] PMID: 26387795, PMCID: PMC4881811

Liu S, Schad DJ, Kuschpel MS, Rapp MA, Heinz A. Music and Video Gaming during Breaks: Influence on Habitual versus Goal-Directed Decision Making. *PloS one*. 2016; 11(3):e0150165. PubMed [journal] PMID: 26982326, PMCID: PMC4794202

Münch M, Nowozin C, Regente J, Bes F, **De Zeeuw J**, Hädel S, Wahnschaffe A, Kunz D. Blue-Enriched Morning Light as a Countermeasure to Light at the Wrong Time: Effects on Cognition, Sleepiness, Sleep, and Circadian Phase. *Neuropsychobiology*. 2016; 74(4):207-218. PubMed [journal] PMID: 28637029

Veauthier C, **Hasselmann H, Gold SM**, Paul F. The Berlin Treatment Algorithm: recommendations for tailored innovative therapeutic strategies for multiple sclerosis-related fatigue. *The EPMA journal*. 2016; 7:25. PubMed [journal] PMID:27904656, PMCID: PMC5121967

Seemanova E, Varon R, Vejvalka J, Jarolim P, Seeman P, Chrzanowska KH, Digweed M, Resnick I, Kremensky I, Saar K, Hoffmann K, Dutrannoy V, Karbasiyan M, **Ghani M**, Barić I, Tekin M, Kovacs P, Krawczak M, Reis A, Sperling K, Nothnagel M. The Slavic NBN Founder Mutation: A Role for Reproductive Fitness? *PloS one*. 2016; 11(12):e0167984. PubMed [journal] PMID: 27936167, PMCID: PMC5148078

Zaqout S, Kaindl AM. Golgi-Cox Staining Step by Step. *Frontiers in neuroanatomy*. 2016; 10:38. PubMed [journal] PMID: 27065817, PMCID: PMC4814522

2015 (72)

Prinz V, Hetzer AM, Müller S, **Balkaya M**, Leithner C, Kronenberg G, Endres M. MRI heralds secondary nigral lesion after brain ischemia in mice: a secondary time window for neuroprotection. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2015; 35(12):1903-9. PubMed [journal] PMID: 26126863, PMCID: PMC4671115

Rost BR, Schneider F, Grauel MK, Wozny C, **Bentz C**, Blessing A, Rosenmund T, Jentsch TJ, Schmitz D, Hegemann P, Rosenmund C. Optogenetic acidification of synaptic vesicles and lysosomes. *Nature neuroscience*. 2015; 18(12):1845-1852. NIHMSID: EMS65612 PubMed [journal] PMID: 26551543, PMCID: PMC4869830

Krause P, Brüggemann N, Völzmann S, **Horn A**, Kupsch A, Schneider GH, Lohmann K, Kühn A. Long-term effect on dystonia after pallidal deep brain stimulation (DBS) in three members of a family with a THAP1 mutation. *Journal of neurology*. 2015; 262(12):2739-44. PubMed [journal] PMID: 26486352

Madai VI, von Samson-Himmelstjerna FC, Sandow N, Weiler F, Bauer M, Vajkoczy P, Günther M, Dusek P, Von Gottberg P, Niendorf T, Wuerfel J, Sobesky J. Ultrahigh-field MPRAGE Magnetic Resonance Angiography at 7.0 T in patients with cerebrovascular disease. *European journal of radiology*. 2015; 84(12):2613-7. PubMed [journal] PMID: 26462794

Schroll H, **Horn A**, Gröschel C, **Brücke C**, Lütjens G, Schneider GH, Krauss JK, Kühn AA, Hamker FH. Differential contributions of the globus pallidus and ventral thalamus to stimulus-response learning in humans. *NeuroImage*. 2015; 122:233-45. PubMed [journal] PMID: 26220740

Liu S, Kuschpel MS, Schad DJ, Heinz A, Rapp MA. Differential Effects of Music and Video Gaming During Breaks on Auditory and Visual Learning. *Cyberpsychology, behavior and social networking*. 2015; 18(11):647-53. PubMed [journal] PMID: 26448497

Ostwaldt AC, Rozanski M, Schaefer T, Ebinger M, Jungehülsing GJ, Villringer K, Fiebach JB. Hyperintense acute reperfusion marker is associated with higher contrast agent dosage in acute ischaemic stroke. *European radiology*. 2015; 25(11):3161-6. PubMed [journal] PMID: 25899419

Ostwaldt AC, Galinovic I, Hotter B, Grittner U, Nolte CH, Audebert HJ, Villringer K, Fiebach JB. Relative FLAIR Signal Intensities over Time in Acute Ischemic Stroke: Comparison of Two Methods. *Journal of neuroimaging : official journal of the American Society of Neuroimaging*. 2015; 25(6):964-8. PubMed [journal] PMID: 25682912

Gleich T, Lorenz RC, Pöhland L, Raufelder D, Deserno L, Beck A, Heinz A, Kühn S, Gallinat J. Frontal glutamate and reward processing in adolescence and adulthood. *Brain structure & function*. 2015; 220(6):3087-99. PubMed [journal] PMID: 25009315

Engel O, Akyüz L, **da Costa Goncalves AC**, **Winek K**, Dames C, Thielke M, Herold S, Böttcher C, Priller J, Volk HD, Dirnagl U, Meisel C, Meisel A. Cholinergic Pathway Suppresses Pulmonary Innate Immunity Facilitating Pneumonia After Stroke. *Stroke*. 2015; 46(11):3232-40. PubMed [journal] PMID: 26451017

Maslarova A, Lippmann K, **Salar S**, Rösler A, Heinemann U. Differential participation of pyramidal cells in generation of spontaneous sharp wave-ripples in the mouse subiculum in vitro. *Neurobiology of learning and memory*. 2015; 125:113-9. PubMed [journal] PMID: 26318491

Leithner C, **Füchtemeier M**, Jorks D, Mueller S, Dirnagl U, Royl G. Infarct Volume Prediction by Early Magnetic Resonance Imaging in a Murine Stroke Model Depends on Ischemia Duration and Time of Imaging. *Stroke*. 2015; 46(11):3249-59. PubMed [journal] PMID: 26451016

Wendland K, Thielke M, Meisel A, Mergenthaler P. Intrinsic hypoxia sensitivity of the cytomegalovirus promoter. *Cell death & disease*. 2015; 6:e1905. PubMed [journal] PMID: 26469954, PMCID: PMC4632289

Rothkirch M, **Madipakkam AR**, Rehn E, Sterzer P. Making eye contact without awareness. *Cognition*. 2015; 143:108-14. PubMed [journal] PMID: 26133642

Zaro-Weber O, **Livne M**, Martin SZ, von Samson-Himmelstjerna FC, Moeller-Hartmann W, Schuster A, Brunecker P, Heiss WD, Sobesky J, **Madai VI**. Comparison of the 2 Most Popular Deconvolution Techniques for the Detection of Penumbra Flow in Acute Stroke. *Stroke*. 2015; 46(10):2795-9. PubMed [journal] PMID: 26306755

Wu YJ, Tejero R, Arancillo M, **Vardar G**, Korotkova T, **Kintscher M**, Schmitz D, Ponomarenko A, Tabares L, Rosenmund C. Syntaxin 1B is important for mouse postnatal survival and proper synaptic function at the mouse neuromuscular junctions. *Journal of neurophysiology*. 2015; 114(4):2404-17. PubMed [journal] PMID: 26203110, PMCID: PMC4620129

Schweizer S, Harms C, Lerch H, **Flynn J**, Hecht J, **Yildirim F**, Meisel A, Märtsch S. Inhibition of histone methyltransferases SUV39H1 and G9a leads to neuroprotection in an in vitro model of cerebral ischemia. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2015; 35(10):1640-7. PubMed [journal] PMID: 25966950, PMCID: PMC4640311

Mishto M, **Raza ML**, de Biase D, Ravizza T, Vasuri F, Martucci M, Keller C, Bellavista E, Buchholz TJ, Kloetzel PM, Pession A, Vezzani A, Heinemann U. The immunoproteasome $\beta 5i$ subunit is a key contributor to ictogenesis in a rat model of chronic epilepsy. *Brain, behavior, and immunity*. 2015; 49:188-96. PubMed [journal] PMID: 26044087

Lorenz RC, **Gleich T**, Buchert R, Schlagenhaut F, Kühn S, Gallinat J. Interactions between glutamate, dopamine, and the neuronal signature of response inhibition in the human striatum. *Human brain mapping*. 2015; 36(10):4031-40. PubMed [journal] PMID: 26177932

Broggini T, Czabanka M, Piffko A, Harms C, Hoffmann C, Mrowka R, Wenke F, Deutsch U, Grötzinger C, Vajkoczy P. ICAM1 depletion reduces spinal metastasis formation in vivo and improves neurological outcome. *European spine journal: official publication of the European Spine Society, the European Spinal Deformity Society, and the European Section of the Cervical Spine Research Society*. 2015; 24(10):2173-81. PubMed [journal] PMID: 25711910

Madipakkam AR, Rothkirch M, Guggenmos M, Heinz A, Sterzer P. Gaze Direction Modulates the Relation between Neural Responses to Faces and Visual Awareness. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2015; 35(39):13287-99. PubMed [journal] PMID: 26424878

Voget M, Rummel J, Avchalumov Y, Sohr R, Haumesser JK, Rea E, Mathé AA, Hadar R, van Riesen C, Winter C. Altered local field potential activity and serotonergic neurotransmission are further characteristics of the Flinders sensitive line rat model of depression. *Behavioural brain research*. 2015; 291:299-305. PubMed [journal] PMID: 26025511

Iggena D, **Klein C**, Garthe A, Winter Y, Kempermann G, Steiner B. Only watching others making their experiences is insufficient to enhance adult neurogenesis and water maze performance in mice. *Scientific reports*. 2015; 5:14141. PubMed [journal] PMID: 26369255, PMCID: PMC4642579

Hellmann-Regen J, **Uhlemann R**, Regen F, Heuser I, Otte C, Endres M, Gertz K, Kronenberg G. Direct inhibition of retinoic acid catabolism by fluoxetine. *Journal of neural transmission (Vienna, Austria: 1996)*. 2015; 122(9):1329-38. PubMed [journal] PMID: 25981674

Winter C, Bregman T, **Voget M**, Raymond R, Hadar R, Nobrega JN, Hamani C. Acute high frequency stimulation of the prefrontal cortex or nucleus accumbens does not increase hippocampal neurogenesis in rats. *Journal of psychiatric research*. 2015; 68:27-9. NIHMSID: CAMS6547 PubMed [journal] PMID: 26228396, PMCID: PMC5303012

Hotter B, **Ostwaldt AC**, **Levichev-Connolly A**, Rozanski M, Audebert HJ, Fiebach JB. Natural course of total mismatch and predictors for tissue infarction. *Neurology*. 2015; 85(9):770-5. PubMed [journal] PMID: 26231256

Kramme J, Gregori J, Diehl V, **Madai VI**, von Samson-Himmelstjerna FC, Lentschig M, Sobesky J, Günther M. Improving perfusion quantification in arterial spin labeling for delayed arrival times by using optimized acquisition schemes. *Zeitschrift für medizinische Physik*. 2015; 25(3):221-9. PubMed [journal] PMID: 25125192

Ostwaldt AC, **Usnich T**, Nolte CH, Villringer K, Fiebach JB. Case report of a young stroke patient showing interim normalization of the MRI diffusion-weighted imaging lesion. *BMC medical imaging*. 2015; 15:33. PubMed [journal] PMID: 26303115, PMCID: PMC4548688

Kufner A, **Galinovic I**, **Ambrosi V**, Nolte CH, Endres M, Fiebach JB, Ebinger M. Hyperintense Vessels on FLAIR: Hemodynamic Correlates and Response to Thrombolysis. *AJNR. American journal of neuroradiology*. 2015; 36(8):1426-30. PubMed [journal] PMID: 25977482

Bros H, Hauser A, Paul F, Niesner R, Infante-Duarte C. Assessing Mitochondrial Movement Within Neurons: Manual Versus Automated Tracking Methods. *Traffic (Copenhagen, Denmark)*. 2015; 16(8):906-17. PubMed [journal] PMID: 25903548

Schneider UC, Davids AM, Brandenburg S, Müller A, Elke A, Magrini S, **Atangana E**, Turkowski K, Finger T, Gutenberg A, Gehlhaar C, Brück W, Heppner FL, Vajkoczy P. Microglia inflict delayed brain injury after subarachnoid hemorrhage. *Acta neuropathologica*. 2015; 130(2):215-31. PubMed [journal] PMID: 25956409

Hohlefeld FU, Ehlen F, Tiedt HO, Krugel LK, **Horn A**, Kühn AA, Curio G, Klostermann F, Nikulin VV. Correlation between cortical and subcortical neural dynamics on multiple time scales in Parkinson's disease. *Neuroscience*. 2015; 298:145-60. PubMed [journal] PMID: 25881724

Neumann WJ, Jha A, Bock A, Huebl J, **Horn A**, Schneider GH, Sander TH, Litvak V, Kühn AA. Cortico-pallidal oscillatory connectivity in patients with dystonia. *Brain: a journal of neurology*. 2015; 138(Pt 7):1894-906. PubMed [journal] PMID: 25935723

Edemann-Callesen H, Voget M, Empl L, Vogel M, Wieske F, **Rummel J**, Heinz A, Mathé AA, Hadar R, Winter C. Medial Forebrain Bundle Deep Brain Stimulation has Symptom-specific Anti-depressant Effects in Rats and as Opposed to Ventromedial Prefrontal Cortex Stimulation Interacts With the Reward System. *Brain stimulation*. 2015; 8(4):714-23. PubMed [journal] PMID: 25819024

Gleich T, Deserno L, Lorenz RC, Boehme R, Pankow A, Buchert R, Kühn S, Heinz A, Schlagenhaut F, Gallinat J. Prefrontal and Striatal Glutamate Differently Relate to Striatal Dopamine: Potential Regulatory Mechanisms of Striatal Presynaptic Dopamine Function? *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2015; 35(26):9615-21. PubMed [journal] PMID: 26134644

Papageorgiou IE, Fetani AF, Lewen A, Heinemann U, Kann O. Widespread activation of microglial cells in the hippocampus of chronic epileptic rats correlates only partially with neurodegeneration. *Brain structure & function*. 2015; 220(4):2423-39. PubMed [journal] PMID: 24878824

Huebl J, **Brücke C**, Schneider GH, Blahak C, Krauss JK, Kühn AA. Bradykinesia induced by frequency-specific pallidal stimulation in patients with cervical and segmental dystonia. *Parkinsonism & related disorders*. 2015; 21(7):800-3. PubMed [journal] PMID: 25976986

Jarosch MS, Gebhardt C, Fano S, **Huchzermeyer C, Ul Haq R**, Behrens CJ, Heinemann U. Early adenosine release contributes to hypoxia-induced disruption of stimulus-induced sharp wave-ripple complexes in rat hippocampal area CA3. *The European journal of neuroscience*. 2015; 42(2):1808-17. PubMed [journal] PMID: 25959377

Schotten S, Meijer M, Walter AM, Huson V, **Mamer L**, Kalogreades L, Veer MT, Ruiter M, Brose N, Rosenmund C, Sørensen JB, Verhage M, Cornelisse LN. Correction: Additive effects on the energy barrier for synaptic vesicle fusion cause supralinear effects on the vesicle fusion rate. *eLife*. 2015; 4. PubMed [journal] PMID: 26041332, PMCID: PMC4453435

Johanning FW, **Theis AK**, Pannasch U, Rückl M, Rüdiger S, Schmitz D. Ryanodine Receptor Activation Induces Long-Term Plasticity of Spine Calcium Dynamics. *PLoS biology*. 2015; 13(6):e1002181. PubMed [journal] PMID: 26098891, PMCID: PMC4476683

Walsh JT, Hendrix S, **Boato F**, Smirnov I, Zheng J, Lukens JR, Gadani S, Hechler D, Gölz G, Rosenberger K, Kammertöns T, Vogt J, Vogelaar C, Siffrin V, Radjavi A, Fernandez-Castaneda A, Gaultier A, Gold R, Kanneganti TD, Nitsch R, Zipp F, Kipnis J. MHCII-independent CD4+ T cells protect injured CNS neurons via IL-4. *The Journal of clinical investigation*. 2015; 125(6):2547. PubMed [journal] PMID: 25938785, PMCID: PMC4497772

Kondziella D, Friberg CK, Wellwood I, **Reiffurth C**, Fabricius M, Dreier JP. Continuous EEG monitoring in aneurysmal subarachnoid hemorrhage: a systematic review. *Neurocritical care*. 2015; 22(3):450-61. PubMed [journal] PMID: 25277888

Dreier JP, **Reiffurth C**. The stroke-migraine depolarization continuum. *Neuron*. 2015; 86(4):902-922. PubMed [journal] PMID: 25996134

Römer C, Engel O, Winek K, Hochmeister S, **Zhang T**, Royl G, Klehmet J, Dirnagl U, Meisel C, Meisel A. Blocking stroke-induced immunodeficiency increases CNS antigen-specific autoreactivity but does not worsen functional outcome after experimental stroke. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2015; 35(20):7777-94. PubMed [journal] PMID: 25995466

Gruber D, Gilling KE, Albrecht A, Bartsch JC, **Çalışkan G**, Richter-Levin G, Stork O, Heinemann U, Behr J. 5-HT receptor-mediated modulation of granule cell inhibition after juvenile stress recovers after a second exposure to adult stress. *Neuroscience*. 2015; 293:67-79. PubMed [journal] PMID: 25748530

Schwerk A, Altschüler J, Roch M, Gossen M, Winter C, Berg J, Kurtz A, Akyüz L, Steiner B. Adipose-derived human mesenchymal stem cells induce long-term neurogenic and anti-inflammatory effects and improve cognitive but not motor performance in a rat model of Parkinson's disease. *Regenerative medicine*. 2015; 10(4):431-46. PubMed [journal] PMID: 26022763

Stroedicke M, Bounab Y, Stempel N, Klockmeier K, Yigit S, Friedrich RP, Chaurasia G, Li S, Hesse F, Riechers SP, Russ J, **Nicoletti C**, Boeddrich A, Wiglenda T, Haenig C, Schnoegl S, Fournier D, Graham RK, Hayden MR, Sigrist S, Bates GP, Priller J, Andrade-Navarro MA, Futschik ME, Wanker EE. Systematic interaction network filtering identifies CRMP1 as a novel suppressor of huntingtin misfolding and neurotoxicity. *Genome research*. 2015; 25(5):701-13. PubMed [journal] PMID: 25908449, PMCID: PMC4417118

Jadavji NM, Farr TD, Lips J, **Khalil AA**, Boehm-Sturm P, Foddiss M, Harms C, **Füchtemeier M**, Dirnagl U. Elevated levels of plasma homocysteine, deficiencies in dietary folic acid and uracil-DNA glycosylase impair learning in a mouse model of vascular cognitive impairment. *Behavioural brain research*. 2015; 283:215-26. PubMed [journal] PMID: 25655513

Schotten S, Meijer M, Walter AM, Huson V, **Mamer L**, Kalogreades L, ter Veer M, Ruiters M, Brose N, Rosenmund C, Sørensen JB, Verhage M, Cornelisse LN. Additive effects on the energy barrier for synaptic vesicle fusion cause supralinear effects on the vesicle fusion rate. *eLife*. 2015; 4:e05531. PubMed [journal] PMID: 25871846, PMCID: PMC4426983

Martin SZ, **Madai VI**, von Samson-Himmelstjerna FC, Mutke MA, Bauer M, Herzig CX, Hetzer S, Günther M, Sobesky J. 3D GRASE pulsed arterial spin labeling at multiple inflow times in patients with long arterial transit times: comparison with dynamic susceptibility-weighted contrast-enhanced MRI at 3 Tesla. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2015; 35(3):392-401. PubMed [journal] PMID: 25407272, PMCID: PMC4348376

Füchtemeier M, Brinckmann MP, Foddiss M, Kunz A, Po C, Curato C, Dirnagl U, Farr TD. Vascular change and opposing effects of the angiotensin type 2 receptor in a mouse model of vascular cognitive impairment. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2015; 35(3):476-84. PubMed [journal] PMID: 25492118, PMCID:PMC4348389

Horn A, Kühn AA. Lead-DBS: a toolbox for deep brain stimulation electrode localizations and visualizations. *NeuroImage*. 2015; 107:127-35. PubMed [journal] PMID: 25498389

Grosser S, **Hollnagel JO**, Gilling KE, Bartsch JC, Heinemann U, Behr J. Gating of hippocampal output by β -adrenergic receptor activation in the pilocarpine model of epilepsy. *Neuroscience*. 2015; 286:325-37. PubMed [journal] PMID: 25498224

Walsh JT, Hendrix S, **Boato F**, Smirnov I, Zheng J, Lukens JR, Gadani S, Hechler D, Gözl G, Rosenberger K, Kammertöns T, Vogt J, Vogelaar C, Siffrin V, Radjavi A, Fernandez-Castaneda A, Gaultier A, Gold R, Kanneganti TD, Nitsch R, Zipp F, Kipnis J. MHCII-independent CD4⁺ T cells protect injured CNS neurons via IL-4. *The Journal of clinical investigation*. 2015; 125(2):699-714. PubMed [journal] PMID: 25607842, PMCID: PMC4319416

Schwerk A, Altschüler J, Roch M, Gossen M, Winter C, Berg J, Kurtz A, Steiner B. Human adipose-derived mesenchymal stromal cells increase endogenous neurogenesis in the rat subventricular zone acutely after 6-hydroxydopamine lesioning. *Cytotherapy*. 2015; 17(2):199-214. PubMed [journal] PMID: 25457280

Berg J, Roch M, Altschüler J, Winter C, **Schwerk A**, Kurtz A, Steiner B. Human adipose-derived mesenchymal stem cells improve motor functions and are neuroprotective in the 6-hydroxydopamine-rat model for Parkinson's disease when cultured in monolayer cultures but suppress hippocampal neurogenesis and hippocampal memory function when cultured in spheroids. *Stem cell reviews*. 2015; 11(1):133-49. PubMed [journal] PMID: 25120226

Hu F, a Dzaye OD, Hahn A, Yu Y, Scavetta RJ, Dittmar G, Kaczmarek AK, Dunning KR, Ricciardelli C, Rinnenthal JL, Heppner FL, Lehnardt S, Synowitz M, Wolf SA, Kettenmann H. Glioma-derived versican promotes tumor expansion via glioma-associated microglial/macrophages Toll-like receptor 2 signaling. *Neuro-oncology*. 2015; 17(2):200-10. PubMed [journal] PMID: 25452390, PMCID: PMC4288527

Schoknecht K, David Y, Heinemann U. The blood-brain barrier-gatekeeper to neuronal homeostasis: clinical implications in the setting of stroke. *Seminars in cell & developmental biology*. 2015; 38:35-42. PubMed [journal] PMID: 25444848

Usnich T, Spengler S, Sajonz B, Herold D, Bauer M, Bempohl F. Perception of social stimuli in mania: an fMRI study. *Psychiatry research*. 2015; 231(1):71-6. PubMed [journal] PMID: 25480523

Hollnagel JO, ul Haq R, Behrens CJ, **Maslarova A**, Mody I, Heinemann U. No evidence for role of extracellular choline-acetyltransferase in generation of gamma oscillations in rat hippocampal slices in vitro. *Neuroscience*. 2015; 284:459-69. PubMed [journal] PMID: 25453770

Sadow N, Kim S, Raue C, Päsler D, Klawft ZJ, Antonio LL, **Hollnagel JO**, Kovacs R, Kann O, Horn P, Vajkoczy P, Holtkamp M, Meencke HJ, Cavalheiro EA, Pragst F, Gabriel S, Lehmann TN, Heinemann U. Drug resistance in cortical and hippocampal slices from resected tissue of epilepsy patients: no significant impact of p-glycoprotein and multidrug resistance-associated proteins. *Frontiers in neurology*. 2015; 6:30. PubMed [journal] PMID: 25741317, PMCID: PMC4332373

Çalışkan G, Albrecht A, **Hollnagel JO**, Rösler A, Richter-Levin G, Heinemann U, Stork O. Long-term changes in the CA3 associative network of fear-conditioned mice. *Stress (Amsterdam, Netherlands)*. 2015; 18(2):188-97. PubMed [journal] PMID: 25556979

Çalışkan G, Schulz SB, Gruber D, Behr J, Heinemann U, Gerevich Z. Corticosterone and corticotropin-releasing factor acutely facilitate gamma oscillations in the hippocampus in vitro. *The European journal of neuroscience*. 2015; 41(1):31-44. PubMed [journal] PMID: 25306895

Lorenz RC, **Gleich T**, Gallinat J, Kühn S. Video game training and the reward system. *Frontiers in human neuroscience*. 2015; 9:40. PubMed [journal] PMID: 25698962, PMCID: PMC4318496

Dreier JP, **Reiffurth C**, Woitzik J, Hartings JA, Drenckhahn C, Windler C, Friedman A, MacVicar B, Herreras O. How spreading depolarization can be the pathophysiological correlate of both migraine aura and stroke. *Acta neurochirurgica. Supplement*. 2015; 120:137-40. PubMed [journal] PMID: 25366613

Janssen A, Fiebiger S, **Bros H**, Hertwig L, **Romero-Suarez S**, Hamann I, Chanvillard C, Bellmann-Strobl J, Paul F, Millward JM, Infante-Duarte C. Treatment of Chronic Experimental Autoimmune Encephalomyelitis with Epigallocatechin-3-Gallate and Glatiramer Acetate Alters Expression of Heme-Oxygenase-1. *PloS one*. 2015; 10(6):e0130251. PubMed [journal] PMID: 26114502, PMCID: PMC4482710

Atangana EN, Homburg D, Vajkoczy P, Schneider UC. Mouse cerebral magnetic resonance imaging fails to visualize brain volume changes after experimental subarachnoid hemorrhage. *Acta neurochirurgica*. 2015; 157(1):37-42. PubMed [journal] PMID: 25398554

Bros H, Niesner R, Infante-Duarte C. An ex vivo model for studying mitochondrial trafficking in neurons. *Methods in molecular biology (Clifton, N.J.)*. 2015; 1264:465-72. PubMed [journal] PMID: 25631035

Fiebich JB, Stief JD, Ganeshan R, Hotter B, **Ostwaldt AC**, Nolte CH, Villringer K. Reliability of Two Diameters Method in Determining Acute Infarct Size. Validation as New Imaging Biomarker. *PloS one*. 2015; 10(10):e0140065. PubMed [journal] PMID: 26447761, PMCID: PMC4598169

Kuschpel MS, **Liu S**, Schad DJ, Heinzl S, Heinz A, Rapp MA. Differential effects of wakeful rest, music and video game playing on working memory performance in the n-back task. *Frontiers in psychology*. 2015; 6:1683. PubMed [journal] PMID: 26579055, PMCID: PMC4626555

Kraemer N, **Issa-Jahns L**, Neubert G, **Ravindran E**, Mani S, Ninnemann O, Kaindl AM. Novel Alternative Splice Variants of Mouse Cdk5rap2. *PloS one*. 2015; 10(8):e0136684. PubMed [journal] PMID: 26322982, PMCID: PMC4556188

Kraemer N, **Ravindran E**, **Zaqout S**, Neubert G, Schindler D, Ninnemann O, Gräf R, Seiler AE, Kaindl AM. Loss of CDK5RAP2 affects neural but not non-neural mESC differentiation into cardiomyocytes. *Cell cycle (Georgetown, Tex.)*. 2015; 14(13):2044-57. PubMed [journal] PMID: 25942099, PMCID: PMC4613649

Szulzewsky F, Pelz A, Feng X, Synowitz M, Markovic D, Langmann T, Holtman IR, Wang X, Eggen BJ, Boddeke HW, Hambardzumyan D, Wolf SA, Kettenmann H. Glioma-associated microglia/macrophages display an expression profile different from M1 and M2 polarization and highly express Gpnmb and Spp1. *PloS one*. 2015; 10(2):e0116644. PubMed [journal] PMID: 25658639, PMCID: PMC4320099

2014 (47)

Hu F, **Ku MC**, **Markovic D**, **a Dzaye OD**, Lehnardt S, Synowitz M, Wolf SA, Kettenmann H. Glioma-associated microglial MMP9 expression is upregulated by TLR2 signaling and sensitive to minocycline. *International journal of cancer*. 2014; 135(11):2569-78. NIHMSID: NIHMS619703 PubMed [journal] PMID: 24752463, PMCID: PMC4519695

Balog J, Matthies U, Naumann L, **Voget M**, Winter C, Lehmann K. Social experience modulates ocular dominance plasticity differentially in adult male and female mice. *NeuroImage*. 2014; 103:454-61. PubMed [journal] PMID: 25173416

Stock K, Garthe A, de Almeida Sassi F, Glass R, Wolf SA, Kettenmann H. The capsaicin receptor TRPV1 as a novel modulator of neural precursor cell proliferation. *Stem cells (Dayton, Ohio)*. 2014; 32(12):3183-95. PubMed [journal] PMID: 25092424

Richter N, **Wendt S**, Georgieva PB, Hambardzumyan D, Nolte C, Kettenmann H. Glioma-associated microglia and macrophages/monocytes display distinct electrophysiological properties and do not communicate via gap junctions. *Neuroscience letters*. 2014; 583:130-5. NIHMSID: NIHMS631100 PubMed [journal] PMID: 25261595, PMCID: PMC4274622

Schoknecht K, Prager O, Vazana U, Kamintsky L, Harhausen D, **Zille M**, Figge L, Chassidim Y, Schellenberger E, Kovács R, Heinemann U, Friedman A. Monitoring stroke progression: in vivo imaging of cortical perfusion, blood-brain barrier permeability and cellular damage in the rat photothrombosis model. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2014; 34(11):1791-801. PubMed [journal] PMID: 25160672, PMCID: PMC4269756

Barow E, Neumann WJ, **Brücke C**, Huebl J, **Horn A**, Brown P, Krauss JK, Schneider GH, Kühn AA. Deep brain stimulation suppresses pallidal low frequency activity in patients with phasic dystonic movements. *Brain: a journal of neurology*. 2014; 137(Pt 11):3012-3024. NIHMSID: EMS67545 PubMed [journal] PMID: 25212852, PMCID: PMC4813762

Bros H, Millward JM, Paul F, Niesner R, Infante-Duarte C. Oxidative damage to mitochondria at the nodes of Ranvier precedes axon degeneration in ex vivo transected axons. *Experimental neurology*. 2014; 261:127-35. PubMed [journal] PMID: 24973623

Huebl J, Spitzer B, **Brücke C**, Schönecker T, Kupsch A, Alesch F, Schneider GH, Kühn AA. Oscillatory subthalamic nucleus activity is modulated by dopamine during emotional processing in Parkinson's disease. *Cortex; a journal devoted to the study of the nervous system and behavior*. 2014; 60:69-81. PubMed [journal] PMID: 24713195

Siegert S, Herrojo Ruiz M, **Brücke C**, Huebl J, Schneider GH, Ullsperger M, Kühn AA. Error signals in the subthalamic nucleus are related to post-error slowing in patients with Parkinson's disease. *Cortex; a journal devoted to the study of the nervous system and behavior*. 2014; 60:103-20. PubMed [journal] PMID: 24525245

Neumann WJ, Huebl J, **Brücke C**, Gabriëls L, Bajbouj M, Merkl A, Schneider GH, Nuttin B, Brown P, Kühn AA. Different patterns of local field potentials from limbic DBS targets in patients with major depressive and obsessive compulsive disorder. *Molecular psychiatry*. 2014; 19(11):1186-92. NIHMSID: EMS67548 PubMed [journal] PMID: 24514569, PMCID: PMC4813757

Kühn AA, Krause P, Lauritsch K, Zentner C, **Brücke C**, Schneider GH. Early surgical treatment in a case of myoclonus dystonia syndrome. *Journal of child neurology*. 2014; 29(11):NP149-50. PubMed [journal] PMID: 24453142

von Bernuth H, **Ravindran E**, Du H, Fröhler S, Strehl K, Krämer N, **Issa-Jahns L**, Amulic B, Ninnemann O, Xiao MS, Eirich K, Kölsch U, Hauptmann K, John R, Schindler D, Wahn V, Chen W, Kaindl AM. Combined immunodeficiency develops with age in Immunodeficiency-centromeric instability-facial anomalies syndrome 2 (ICF2). *Orphanet journal of rare diseases*. 2014; 9:116. PubMed [journal] PMID: 25330735, PMCID: PMC4230835

Lorenz RC, **Gleich T**, Beck A, Pöhland L, Raufelder D, Sommer W, Rapp MA, Kühn S, Gallinat J. Reward anticipation in the adolescent and aging brain. *Human brain mapping*. 2014; 35(10):5153-65. PubMed [journal] PMID: 24801222

Hohlefeld FU, **Huchzermeyer C**, Huebl J, Schneider GH, **Brücke C**, Schönecker T, Kühn AA, Curio G, Nikulin VV. Interhemispheric functional interactions between the subthalamic nuclei of patients with Parkinson's disease. *The European journal of neuroscience*. 2014; 40(8):3273-83. PubMed [journal] PMID: 25195608

Herrojo Ruiz M, Rusconi M, **Brücke C**, Haynes JD, Schönecker T, Kühn AA. Encoding of sequence boundaries in the subthalamic nucleus of patients with Parkinson's disease. *Brain: a journal of neurology*. 2014; 137(Pt 10):2715-30. PubMed [journal] PMID: 25031238

Boehmerle W, Huehnchen P, **Peruzzaro S**, **Balkaya M**, Endres M. Electrophysiological, behavioral and histological characterization of paclitaxel, cisplatin, vincristine and bortezomib-induced neuropathy in C57Bl/6 mice. *Scientific reports*. 2014; 4:6370. PubMed [journal] PMID: 25231679, PMCID: PMC5377307

Zille M, Harhausen D, De Saint-Hubert M, Michel R, Reutelingsperger CP, Dirnagl U, Wunder A. A dual-labeled Annexin A5 is not suited for SPECT imaging of brain cell death in experimental murine stroke. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2014; 34(9). PubMed [journal] PMID: 24984896, PMCID: PMC4158671

Förstera B, **a Dzaye OD**, Winkelmann A, Semtner M, **Benedetti B**, **Markovic DS**, Synowitz M, Wend P, Fähling M, Junier MP, Glass R, Kettenmann H, Meier JC. Intracellular glycine receptor function facilitates glioma formation in vivo. *Journal of cell science*. 2014; 127(Pt 17):3687-98. PubMed [journal] PMID: 24994934

Salar S, **Maslarova A**, Lippmann K, Nichtweiss J, Weissberg I, Sheintuch L, Kunz WS, Shorer Z, Friedman A, Heinemann U. Blood-brain barrier dysfunction can contribute to pharmacoresistance of seizures. *Epilepsia*. 2014; 55(8):1255-63. PubMed [journal] PMID: 24995798

Thomalla G, Fiebach JB, Østergaard L, Pedraza S, Thijs V, Nighoghossian N, Roy P, Muir KW, Ebinger M, Cheng B, **Galinovic I**, Cho TH, Puig J, Boutitie F, Simonsen CZ, Endres M, Fiehler J, Gerloff C. A multicenter, randomized, double-blind, placebo-controlled trial to test efficacy and safety of magnetic resonance imaging-based thrombolysis in wake-up stroke (WAKE-UP). *International journal of stroke: official journal of the International Stroke Society*. 2014; 9(6):829-36. PubMed [journal] PMID: 23490032

Hollnagel JO, **Maslarova A**, **Haq RU**, Heinemann U. GABAB receptor dependent modulation of sharp wave-ripple complexes in the rat hippocampus in vitro. *Neuroscience letters*. 2014; 574:15-20. PubMed [journal] PMID: 24796812

Bar-Klein G, Cacheaux LP, Kamintsky L, Prager O, Weissberg I, **Schoknecht K**, Cheng P, Kim SY, Wood L, Heinemann U, Kaufer D, Friedman A. Losartan prevents acquired epilepsy via TGF- β signaling suppression. *Annals of neurology*. 2014; 75(6):864-75. NIHMSID: NIHMS578617 PubMed [journal] PMID: 24659129, PMCID: PMC4077937

Mungee A, Kazzar P, Feeser M, Nitsche MA, Schiller D, Bajbouj M. Transcranial direct current stimulation of the prefrontal cortex: a means to modulate fear memories. *Neuroreport*. 2014; 25(7):480-4. PubMed [journal] PMID: 24384505

Pannell M, Szulzewsky F, Matyash V, Wolf SA, Kettenmann H. The subpopulation of microglia sensitive to neurotransmitters/neurohormones is modulated by stimulation with LPS, interferon- γ , and IL-4. *Glia*. 2014; 62(5):667-79. PubMed [journal] PMID: 24504982

Mattei D, Djodari-Irani A, Hadar R, Pelz A, de Cossío LF, Goetz T, Matyash M, Kettenmann H, Winter C, Wolf SA. Minocycline rescues decrease in neurogenesis, increase in microglia cytokines and deficits in sensorimotor gating in an animal model of schizophrenia. *Brain, behavior, and immunity*. 2014; 38:175-84. PubMed [journal] PMID: 24509090

Galinovic I, Puig J, Neeb L, Guibernau J, Kemmling A, Siemonsen S, Pedraza S, Cheng B, Thomalla G, Fiehler J, Fiebich JB. Visual and region of interest-based inter-rater agreement in the assessment of the diffusion-weighted imaging-fluid-attenuated inversion recovery mismatch. *Stroke*. 2014; 45(4):1170-2. PubMed [journal] PMID: 24558091

Kuchling J, Sinnecker T, Bozin I, Dörr J, **Madai VI**, Sobesky J, Niendorf T, Paul F, Wuerfel J. [Ultrahigh field MRI in context of neurological diseases]. *Der Nervenarzt*. 2014; 85(4):445-58. PubMed [journal] PMID: 24549692

Mergenthaler P, **Wendland K**, Meisel A. A versatile tool for the analysis of neuronal survival. *Methods (San Diego, Calif.)*. 2014; 66(2):325-9. PubMed [journal] PMID: 23981362

Przanowski P, Dabrowski M, Ellert-Miklaszewska A, Kloss M, Mieczkowski J, Kaza B, Ronowicz A, **Hu F**, Piotrowski A, Kettenmann H, Komorowski J, Kaminska B. The signal transducers Stat1 and Stat3 and their novel target Jmjd3 drive the expression of inflammatory genes in microglia. *Journal of molecular medicine (Berlin, Germany)*. 2014; 92(3):239-54. PubMed [journal] PMID: 24097101, PMCID: PMC3940857

Langenfurth A, Rinnenthal JL, **Vinnakota K**, Prinz V, Carlo AS, Stadelmann C, Siffrin V, Peaschke S, Endres M, Heppner F, Glass R, Wolf SA, Kettenmann H. Membrane-type 1 metalloproteinase is upregulated in microglia/brain macrophages in neurodegenerative and neuroinflammatory diseases. *Journal of neuroscience research*. 2014; 92(3):275-86. PubMed [journal] PMID: 24323769

Winkelmann A, Maggio N, Eller J, **Caliskan G**, Semtner M, Häussler U, Jüttner R, Dugladze T, Smolinsky B, Kowalczyk S, Chronowska E, Schwarz G, Rathjen FG, Rechavi G, Haas CA, Kulik A, Gloveli T, Heinemann U, Meier JC. Changes in neural network homeostasis trigger neuropsychiatric symptoms. *The Journal of clinical investigation*. 2014; 124(2):696-711. PubMed [journal] PMID: 24430185, PMCID: PMC3904623

Nelissen S, Vanganswinkel T, Geurts N, Geboes L, Lemmens E, Vidal PM, Lemmens S, Willems L, **Boato F**, Dooley D, Pehl D, Pejler G, Maurer M, Metz M, Hendrix S. Mast cells protect from post-traumatic spinal cord damage in mice by degrading inflammation-associated cytokines via mouse mast cell protease 4. *Neurobiology of disease*. 2014; 62:260-72. PubMed [journal] PMID: 24075853

Kühn S, **Gleich T**, Lorenz RC, Lindenberger U, Gallinat J. Playing Super Mario induces structural brain plasticity: gray matter changes resulting from training with a commercial video game. *Molecular psychiatry*. 2014; 19(2):265-71. PubMed [journal] PMID: 24166407

Klippenstein V, Ghisi V, Wietstruk M, Plested AJ. Photoinactivation of glutamate receptors by genetically encoded unnatural amino acids. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2014; 34(3):980-91. PubMed [journal] PMID: 24431456

Chang CL, Trimbuch T, Chao HT, Jordan JC, Herman MA, Rosenmund C. Investigation of synapse formation and function in a glutamatergic-GABAergic two-neuron microcircuit. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2014; 34(3):855-68. PubMed [journal] PMID: 24431444

Herrojo Ruiz M, **Brücke C**, Nikulin VV, Schneider GH, Kühn AA. Beta-band amplitude oscillations in the human internal globus pallidus support the encoding of sequence boundaries during initial sensorimotor sequence learning. *NeuroImage*. 2014; 85 Pt 2:779-93. PubMed [journal] PMID: 23711534

Grosse-Dresselhaus F, **Galinovic I**, Villringer K, Audebert HJ, Fiebach JB. Difficulty of MRI based identification of lesion age by acute infra-tentorial ischemic stroke. *PLoS one*. 2014; 9(3):e92868. PubMed [journal] PMID: 24651570, PMCID: PMC3961416

Madai VI, **Galinovic I**, Grittner U, Zaro-Weber O, Schneider A, Martin SZ, von Samson-Himmelstjerna FC, Stengl KL, Mutke MA, Moeller-Hartmann W, Ebinger M, Fiebach JB, Sobesky J. DWI intensity values predict FLAIR lesions in acute ischemic stroke. *PLoS one*. 2014; 9(3):e92295. PubMed [journal] PMID: 24658092, PMCID: PMC3962388

Zille M, **Riabinska A**, Terzi MY, **Balkaya M**, Prinz V, Schmerl B, Nieminen-Kelhä M, Endres M, Vajkoczy P, Pina AL. Influence of pigment epithelium-derived factor on outcome after striatal cerebral ischemia in the mouse. *PLoS one*. 2014; 9(12):e114595. PubMed [journal] PMID: 25470280, PMCID: PMC4255036

Yildirim F, **Ji S**, Kronenberg G, Barco A, Olivares R, Benito E, Dirnagl U, Gertz K, Endres M, Harms C, Meisel A. Histone acetylation and CREB binding protein are required for neuronal resistance against ischemic injury. *PLoS one*. 2014; 9(4):e95465. PubMed [journal] PMID: 24748101, PMCID: PMC3991684

Macas J, **Ku MC**, Nern C, Xu Y, Bühler H, Remke M, Synowitz M, Franz K, Seifert V, Plate KH, Kettenmann H, Glass R, Momma S. Generation of neuronal progenitor cells in response to tumors in the human brain. *Stem cells (Dayton, Ohio)*. 2014; 32(1):244-57. PubMed [journal] PMID: 24170295

Leuenberger T, Pfueller CF, Luessi F, Bendix I, Paterka M, Prozorovski T, Treue D, Luenstedt S, **Herz J**, Siffrin V, Infante-Duarte C, Zipp F, Waiczies S. Modulation of dendritic cell immunobiology via inhibition of 3-hydroxy-3-methylglutaryl-CoA (HMG-CoA) reductase. *PLoS one*. 2014; 9(7):e100871. PubMed [journal] PMID: 25013913, PMCID: PMC4094470

Dieringer MA, Deimling M, Santoro D, Wuerfel J, **Madai VI**, Sobesky J, von Knobelsdorff-Brenkenhoff F, Schulz-Menger J, Niendorf T. Rapid parametric mapping of the longitudinal relaxation time T1 using two-dimensional variable flip angle magnetic resonance imaging at 1.5 Tesla, 3 Tesla, and 7 Tesla. *PLoS one*. 2014; 9(3):e91318. PubMed [journal] PMID: 24621588, PMCID: PMC3951399

Mutke MA, **Madai VI**, von Samson-Himmelstjerna FC, Zaro Weber O, Revankar GS, Martin SZ, Stengl KL, Bauer M, Hetzer S, Günther M, Sobesky J. Clinical evaluation of an arterial-spin-labeling product sequence in stenotic disease of the brain. *PLoS one*. 2014; 9(2):e87143. PubMed [journal] PMID: 24516546, PMCID: PMC3916330

Feeser M, Prehn K, Kazzer P, **Mungee A**, Bajbouj M. Transcranial direct current stimulation enhances cognitive control during emotion regulation. *Brain stimulation*. 2014; 7(1):105-12. PubMed [journal] PMID: 24095257

Stöber F, Baldauf K, Ziabreva I, Harhausen D, **Zille M**, Neubert J, Reymann KG, Scheich H, Dirnagl U, Schröder UH, Wunder A, Goldschmidt J. Single-cell resolution mapping of neuronal damage in acute focal cerebral ischemia using thallium autometallography. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2014; 34(1):144-52. PubMed [journal] PMID: 24129748, PMCID: PMC3887354

Klein C, Hain EG, Braun J, Riek K, Mueller S, Steiner B, Sack I. Enhanced adult neurogenesis increases brain stiffness: in vivo magnetic resonance elastography in a mouse model of dopamine depletion. *PLoS one*. 2014; 9(3):e92582. PubMed [journal] PMID: 24667730, PMCID: PMC3965445

Rea E, Rummel J, Schmidt TT, Hadar R, Heinz A, Mathé AA, Winter C. Anti-anhedonic effect of deep brain stimulation of the prefrontal cortex and the dopaminergic reward system in a genetic rat model of depression: an intracranial self-stimulation paradigm study. *Brain stimulation*. 2014; 7(1):21-8. PubMed [journal] PMID: 24139146

Ostwaldt AC, Rozanski M, Schmidt WU, Nolte CH, Hotter B, Jungehuelsing GJ, Villringer K, Fiebach JB. Early time course of FLAIR signal intensity differs between acute ischemic stroke patients with and without hyperintense acute reperfusion marker. *Cerebrovascular diseases (Basel, Switzerland)*. 2014; 37(2):141-6. PubMed [journal] PMID: 24481492

2013 (43)

Leuenberger T, Paterka M, Reuter E, **Herz J**, Niesner RA, Radbruch H, Bopp T, Zipp F, Siffrin V. The role of CD8+ T cells and their local interaction with CD4+ T cells in myelin oligodendrocyte glycoprotein35-55-induced experimental autoimmune encephalomyelitis. *Journal of immunology (Baltimore, Md.: 1950)*. 2013; 191(10):4960-8. PubMed [journal] PMID: 24123686

Farang HG, Froehler S, Oexle K, **Ravindran E**, Schindler D, Staab T, Huebner A, Kraemer N, Chen W, Kaindl AM. Abnormal centrosome and spindle morphology in a patient with autosomal recessive primary microcephaly type 2 due to compound heterozygous WDR62 gene mutation. *Orphanet journal of rare diseases*. 2013; 8:178. PubMed [journal] PMID: 24228726, PMCID: PMC4225825

Kopp MA, Druschel C, Meisel C, Liebscher T, Prilipp E, Watzlawick R, Cinelli P, Niedeggen A, Schaser KD, Wanner GA, Curt A, Lindemann G, Nugaeva N, Fehlings MG, Vajkoczy P, Cabraja M, Dengler J, Ertel W, Ekkernkamp A, Martus P, Volk HD, Unterwalder N, Kölsch U, Brommer B, **Hellmann RC**, Saïdy RR, **Laginha I**, Prüss H, Failli V, Dirnagl U, Schwab JM. The SCIentinel study--prospective multicentre study to define the spinal cord injury-induced immune depression syndrome (SCI-IDS)--study protocol and interim feasibility data. *BMC neurology*. 2013; 13:168. PubMed [journal] PMID: 24206943, PMCID: PMC3827331

Vinnakota K, Hu F, Ku MC, Georgieva PB, Szulzewsky F, Pohlmann A, Waiczies S, Waiczies H, Niendorf T, Lehnardt S, Hanisch UK, Synowitz M, **Markovic D**, Wolf SA, Glass R, Kettenmann H. Toll-like receptor 2 mediates microglia/brain macrophage MT1-MMP expression and glioma expansion. *Neuro-oncology*. 2013; 15(11):1457-68. PubMed [journal] PMID: 24014382, PMCID: PMC3813418

Hohlefeld FU, **Huchzermeyer C**, Huebl J, Schneider GH, Nolte G, **Brücke C**, Schönecker T, Kühn AA, Curio G, Nikulin VV. Functional and effective connectivity in subthalamic local field potential recordings of patients with Parkinson's disease. *Neuroscience*. 2013; 250:320-32. PubMed [journal] PMID: 23876322

Oswal A, Litvak V, **Brücke C**, Huebl J, Schneider GH, Kühn AA, Brown P. Cognitive factors modulate activity within the human subthalamic nucleus during voluntary movement in Parkinson's disease. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2013; 33(40):15815-26. PubMed [journal] PMID: 24089489, PMCID: PMC3787500

Fiebiger SM, **Bros H**, Grobosch T, Janssen A, Chanvillard C, Paul F, Dörr J, Millward JM, Infante-Duarte C. The antioxidant idebenone fails to prevent or attenuate chronic experimental autoimmune encephalomyelitis in the mouse. *Journal of neuroimmunology*. 2013; 262(1-2):66-71. PubMed [journal] PMID: 23871488

Issa L, Kraemer N, Rickert CH, Siffringer M, Ninnemann O, Stoltenburg-Didinger G, Kaindl AM. CDK5RAP2 expression during murine and human brain development correlates with pathology in primary autosomal recessive microcephaly. *Cerebral cortex (New York, N.Y.: 1991)*. 2013; 23(9):2245-60. PubMed [journal] PMID: 22806269

Schweizer S, Meisel A, Märtsch S. Epigenetic mechanisms in cerebral ischemia. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2013; 33(9):1335-46. PubMed [journal] PMID: 23756691, PMCID: PMC3764391

Maslarova A, Salar S, Lapilover E, Friedman A, Veh RW, Heinemann U. Increased susceptibility to acetylcholine in the entorhinal cortex of pilocarpine-treated rats involves alterations in KCNQ channels. *Neurobiology of disease*. 2013; 56:14-24. PubMed [journal] PMID: 23583611

Brücke C, Bock A, Huebl J, Krauss JK, Schönecker T, Schneider GH, Brown P, Kühn AA. Thalamic gamma oscillations correlate with reaction time in a Go/noGo task in patients with essential tremor. *NeuroImage*. 2013; 75:36-45. PubMed [journal] PMID: 23466935

Sielska M, Przanowski P, Wylot B, Gabrusiewicz K, Maleszewska M, Kijewska M, Zawadzka M, Kucharska J, **Vinnakota K**, Kettenmann H, Kotulska K, Grajkowska W, Kaminska B. Distinct roles of CSF family cytokines in macrophage infiltration and activation in glioma progression and injury response. *The Journal of pathology*. 2013; 230(3):310-21. PubMed [journal] PMID: 23520016

Bulavina L, Szulzewsky F, **Rocha A**, Krabbe G, Robson SC, Matyash V, Kettenmann H. NTPDase1 activity attenuates microglial phagocytosis. Purinergic signalling. 2013; 9(2):199-205. PubMed [journal] PMID: 23208703, PMCID: PMC3646122

Czabanka M, Bruenner J, Parmaksiz G, **Broggini T**, Topalovic M, Bayerl SH, Auf G, Kremenetskaia I, Nieminen M, Jabouille A, Mueller S, Harms U, Harms C, Koch A, Heppner FL, Vajkoczy P. Combined temozolomide and sunitinib treatment leads to better tumour control but increased vascular resistance in O6-methylguanine methyltransferase-methylated gliomas. *European journal of cancer (Oxford, England: 1990)*. 2013; 49(9):2243-52. PubMed [journal] PMID: 23499430

Hetze S, **Engel O, Römer C**, Mueller S, Dirnagl U, Meisel C, Meisel A. Superiority of preventive antibiotic treatment compared with standard treatment of poststroke pneumonia in experimental stroke: a bed to bench approach. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2013; 33(6):846-54. PubMed [journal] PMID: 23361393, PMCID: PMC3677122

Harms C, **Datwyler AL**, Wiekhorst F, Trahms L, Lindquist R, Schellenberger E, Mueller S, Schütz G, Roohi F, Ide A, **Füchtemeier M**, Gertz K, Kronenberg G, Harms U, Endres M, Dirnagl U, Farr TD. Certain types of iron oxide nanoparticles are not suited to passively target inflammatory cells that infiltrate the brain in response to stroke. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2013; 33(5):e1-9. PubMed [journal] PMID: 23443176, PMCID: PMC3652690

Kufner A, Nolte CH, Ebinger M. Response to letter regarding article, "smoking-thrombolysis paradox: recanalization and reperfusion rates after intravenous tissue plasminogen activator in smokers with ischemic stroke". *Stroke*. 2013; 44(5):e59. PubMed [journal] PMID: 23741741

Parnis J, Montana V, Delgado-Martinez I, Matyash V, Parpura V, Kettenmann H, Sekler I, Nolte C. Mitochondrial exchanger NCLX plays a major role in the intracellular Ca²⁺ signaling, gliotransmission, and proliferation of astrocytes. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2013; 33(17):7206-19. PubMed [journal] PMID: 23616530

Issa L, Mueller K, Seufert K, Kraemer N, Rosenkotter H, Ninnemann O, Buob M, Kaindl AM, Morris-Rosendahl DJ. Clinical and cellular features in patients with primary autosomal recessive microcephaly and a novel CDK5RAP2 mutation. *Orphanet journal of rare diseases*. 2013; 8:59. PubMed [journal] PMID: 23587236, PMCID: PMC3639195

Kang EJ, Major S, Jorks D, **Reiffurth C**, Offenhauser N, Friedman A, Dreier JP. Blood-brain barrier opening to large molecules does not imply blood-brain barrier opening to small ions. *Neurobiology of disease*. 2013; 52:204-18. PubMed [journal] PMID: 23291193

Ku MC, Wolf SA, Respondek D, Matyash V, Pohlmann A, Waiczies S, Waiczies H, Niendorf T, Synowitz M, Glass R, Kettenmann H. GDNF mediates glioblastoma-induced microglia attraction but not astrogliosis. *Acta neuropathologica*. 2013; 125(4):609-20. PubMed [journal] PMID: 23344256

Balkaya M, Kröber J, Gertz K, **Peruzzaro S**, Endres M. Characterization of long-term functional outcome in a murine model of mild brain ischemia. *Journal of neuroscience methods*. 2013; 213(2):179-87. PubMed [journal] PMID: 23291083

Hellmann-Regen J, Kronenberg G, **Uhlemann R**, Freyer D, Endres M, Gertz K. Accelerated degradation of retinoic acid by activated microglia. *Journal of neuroimmunology*. 2013; 256(1-2):1-6. PubMed [journal] PMID: 23385081

Hendrix S, Kramer P, Pehl D, Warnke K, **Boato F**, Nelissen S, Lemmens E, Pejler G, Metz M, Siebenhaar F, Maurer M. Mast cells protect from post-traumatic brain inflammation by the mast cell-specific chymase mouse mast cell protease-4. *FASEB journal: official publication of the Federation of American Societies for Experimental Biology*. 2013; 27(3):920-9. PubMed [journal] PMID: 23193170

Namsolleck P, **Boato F**, Schwengel K, Paulis L, Matho KS, Geurts N, Thöne-Reineke C, Lucht K, Seidel K, Hallberg A, Dahlöf B, Unger T, Hendrix S, Steckelings UM. AT2-receptor stimulation enhances axonal plasticity after spinal cord injury by upregulating BDNF expression. *Neurobiology of disease*. 2013; 51:177-91. PubMed [journal] PMID: 23174180

Giovanoli S, Engler H, Engler A, Richetto J, **Voget M**, Willi R, Winter C, Riva MA, Mortensen PB, Feldon J, Schedlowski M, Meyer U. Stress in puberty unmasks latent neuropathological consequences of prenatal immune activation in mice. *Science (New York, N.Y.)*. 2013; 339(6123):1095-9. PubMed [journal] PMID: 23449593

Mergenthaler P, Muselmann C, **Sünwoldt J**, Isaev NK, Wieloch T, Dirnagl U, Meisel A, Ruscher K. A functional role of the cyclin-dependent kinase inhibitor 1 (p21(WAF1/CIP1)) for neuronal preconditioning. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2013; 33(3):351-5. PubMed [journal] PMID: 23299246, PMCID: PMC3587824

Balkaya M, Kröber JM, Rex A, Endres M. Assessing post-stroke behavior in mouse models of focal ischemia. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2013; 33(3):330-8. PubMed [journal] PMID: 23232947, PMCID: PMC3587814

Kononenko NL, Diril MK, Puchkov D, **Kintscher M**, Koo SJ, Pfuhl G, Winter Y, Wienisch M, Klingauf J, Breustedt J, Schmitz D, Maritzen T, Haucke V. Compromised fidelity of endocytic synaptic vesicle protein sorting in the absence of stonin 2. *Proceedings of the National Academy of Sciences of the United States of America*. 2013; 110(6):E526-35. PubMed [journal] PMID: 23345427, PMCID: PMC3568307

Albrecht A, **Çalışkan G**, Oitzl MS, Heinemann U, Stork O. Long-lasting increase of corticosterone after fear memory reactivation: anxiolytic effects and network activity modulation in the ventral hippocampus. *Neuropsychopharmacology: official publication of the American College of Neuropsychopharmacology*. 2013; 38(3):386-94. PubMed [journal] PMID: 22968818, PMCID: PMC3547189

Dreier JP, Isele T, **Reiffurth C**, Offenhauser N, Kirov SA, Dahlem MA, Herreras O. Is spreading depolarization characterized by an abrupt, massive release of Gibbs free energy from the human brain cortex? *The Neuroscientist: a review journal bringing neurobiology, neurology and psychiatry*. 2013; 19(1):25-42. NIHMSID: NIHMS407508 PubMed [journal] PMID: 22829393, PMCID: PMC3526686

An J, Mehrhof F, Harms C, Lättig-Tünnemann G, **Lee SL**, Endres M, Li M, Sellge G, Mandić AD, Trautwein C, Donath S. ARC is a novel therapeutic approach against acetaminophen-induced hepatocellular necrosis. *Journal of hepatology*. 2013; 58(2):297-305. PubMed [journal] PMID: 23046676

Kufner A, Nolte CH, **Galinovic I**, Brunecker P, Kufner GM, Endres M, Fiebach JB, Ebinger M. Smoking-thrombolysis paradox: recanalization and reperfusion rates after intravenous tissue plasminogen activator in smokers with ischemic stroke. *Stroke*. 2013; 44(2):407-13. PubMed [journal] PMID: 23287785

Kufner A, Galinovic I, Brunecker P, Cheng B, Thomalla G, Gerloff C, Campbell BC, Nolte CH, Endres M, Fiebach JB, Ebinger M. Early infarct FLAIR hyperintensity is associated with increased hemorrhagic transformation after thrombolysis. *European journal of neurology*. 2013; 20(2):281-5. PubMed [journal] PMID: 22900825

Boato F, Rosenberger K, Nelissen S, Geboes L, Peters EM, Nitsch R, Hendrix S. Absence of IL-1 β positively affects neurological outcome, lesion development and axonal plasticity after spinal cord injury. *Journal of neuroinflammation*. 2013; 10:6. PubMed [journal] PMID: 23317037, PMCID: PMC3585738

Bormuth I, **Yan K**, Yonemasu T, Gummert M, Zhang M, Wichert S, Grishina O, Pieper A, Zhang W, Goebbels S, Tarabykin V, Nave KA, Schwab MH. Neuronal basic helix-loop-helix proteins Neurod2/6 regulate cortical commissure formation before midline interactions. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2013; 33(2):641-51. PubMed [journal] PMID: 23303943

Ostwaldt AC, Galinovic I, Grosse-Dresselhaus F, Neeb L, Villringer K, Rocco A, Nolte CH, Jungehülsing GJ, Fiebach JB. MRI follow-up after 24 h is an accurate surrogate parameter for treatment success after thrombolysis. *Cerebrovascular diseases (Basel, Switzerland)*. 2013; 36(5-6):464-5. PubMed [journal] PMID: 24296961

Krabbe G, Halle A, Matyash V, Rinnenthal JL, **Eom GD**, Bernhardt U, Miller KR, Prokop S, Kettenmann H, Heppner FL. Functional impairment of microglia coincides with Beta-amyloid deposition in mice with Alzheimer-like pathology. *PloS one*. 2013; 8(4):e60921. PubMed [journal] PMID: 23577177, PMCID: PMC3620049

Kintscher M, Wozny C, Jochenning FW, Schmitz D, Breustedt J. Role of RIM1 α in short- and long-term synaptic plasticity at cerebellar parallel fibres. *Nature communications*. 2013; 4:2392. PubMed [journal] PMID: 23999086

Harhausen D, Sudmann V, **Khojasteh U, Müller J, Zille M**, Graham K, Thiele A, Dyrks T, Dirnagl U, Wunder A. Specific imaging of inflammation with the 18 kDa translocator protein ligand DPA-714 in animal models of epilepsy and stroke. *PloS one*. 2013; 8(8):e69529. PubMed [journal] PMID: 23936336, PMCID: PMC3732268

Neeb L, Villringer K, **Galinoic I**, Grosse-Dresselhaus F, Ganeshan R, Gierhake D, Kunze C, Grittner U, Fiebach JB. Adapting the computed tomography criteria of hemorrhagic transformation to stroke magnetic resonance imaging. *Cerebrovascular diseases extra*. 2013; 3(1):103-10. PubMed [journal] PMID: 24052796, PMCID: PMC3776466

Rinnenthal JL, Börnchen C, Radbruch H, Andresen V, Mossakowski A, Siffrin V, Seelemann T, Spiecker H, Moll I, **Herz J**, Hauser AE, Zipp F, Behne MJ, Niesner R. Parallelized TCSPC for dynamic intravital fluorescence lifetime imaging: quantifying neuronal dysfunction in neuroinflammation. *PloS one*. 2013; 8(4):e60100. PubMed [journal] PMID: 23613717, PMCID: PMC3629055

Batti L, Mukhtarov M, Audero E, Ivanov A, Paolicelli RC, **Zurborg S**, Gross C, Bregestovski P, Heppenstall PA. Transgenic mouse lines for non-invasive ratiometric monitoring of intracellular chloride. *Frontiers in molecular neuroscience*. 2013; 6:11. PubMed [journal] PMID: 23734096, PMCID: PMC3659292

Wang H, Schupp M, **Zurborg S**, Heppenstall PA. Residues in the pore region of *Drosophila* transient receptor potential A1 dictate sensitivity to thermal stimuli. *The Journal of physiology*. 2013; 591(1):185-201. PubMed [journal] PMID: 23027824, PMCID: PMC3630780

Schulz SB, Heidmann KE, Mike A, Klaft ZJ, Heinemann U, Gerevich Z. First and second generation antipsychotics influence hippocampal gamma oscillations by interactions with 5-HT₃ and D₃ receptors. *British journal of pharmacology*. 2012; 167(7):1480-91. PubMed [journal] PMID: 22817643, PMCID: PMC3514761

Lapilover EG, Lippmann K, **Salar S, Maslarova A**, Dreier JP, Heinemann U, Friedman A. Peri-infarct blood-brain barrier dysfunction facilitates induction of spreading depolarization associated with epileptiform discharges. *Neurobiology of disease*. 2012; 48(3):495-506. NIHMSID: NIHMS393327 PubMed [journal] PMID: 22782081, PMCID: PMC3588590

Fano S, **Çalışkan G**, Heinemann U. Differential effects of blockade of ERG channels on gamma oscillations and excitability in rat hippocampal slices. *The European journal of neuroscience*. 2012; 36(12):3628-35. PubMed [journal] PMID: 23050739

Hellmann-Regen J, Gertz K, **Uhlemann R**, Colla M, Endres M, Kronenberg G. Retinoic acid as target for local pharmacokinetic interaction with modafinil in neural cells. *European archives of psychiatry and clinical neuroscience*. 2012; 262(8):697-704. PubMed [journal] PMID: 22434147

Klaft ZJ, **Schulz SB**, **Maslarova A**, Gabriel S, Heinemann U, Gerevich Z. Extracellular ATP differentially affects epileptiform activity via purinergic P2X7 and adenosine A1 receptors in naive and chronic epileptic rats. *Epilepsia*. 2012; 53(11):1978-86. PubMed [journal] PMID: 23106524

Failli V, Kopp MA, Gericke C, Martus P, Klingbeil S, Brommer B, **Laginha I**, Chen Y, DeVivo MJ, Dirnagl U, Schwab JM. Functional neurological recovery after spinal cord injury is impaired in patients with infections. *Brain: a journal of neurology*. 2012; 135(Pt 11):3238-50. PubMed [journal] PMID: 23100450

Cheng B, Ebinger M, **Kufner A**, Köhrmann M, Wu O, Kang DW, Liebeskind D, Tourdias T, Singer OC, Christensen S, Warach S, Luby M, Fiebach JB, Fiehler J, Gerloff C, Thomalla G. Hyperintense vessels on acute stroke fluid-attenuated inversion recovery imaging: associations with clinical and other MRI findings. *Stroke*. 2012; 43(11):2957-61. NIHMSID: NIHMS406650 PubMed [journal] PMID: 22933582, PMCID: PMC3495102

Ofek K, **Schoknecht K**, Melamed-Book N, Heinemann U, Friedman A, Soreq H. Fluoxetine induces vasodilatation of cerebral arterioles by co-modulating NO/muscarinic signalling. *Journal of cellular and molecular medicine*. 2012; 16(11):2736-44. PubMed [journal] PMID: 22697296, PMCID: PMC4118242

Winkler MK, Chassidim Y, Lublinsky S, Revankar GS, Major S, Kang EJ, **Oliveira-Ferreira AI**, Woitzik J, Sandow N, Scheel M, Friedman A, Dreier JP. Impaired neurovascular coupling to ictal epileptic activity and spreading depolarization in a patient with subarachnoid hemorrhage: possible link to blood-brain barrier dysfunction. *Epilepsia*. 2012; 53 Suppl 6:22-30. NIHMSID: NIHMS452887 PubMed [journal] PMID: 23134492, PMCID: PMC3625730

Liotta A, Rösner J, **Huchzermeyer C**, Wojtowicz A, Kann O, Schmitz D, Heinemann U, Kovács R. Energy demand of synaptic transmission at the hippocampal Schaffer-collateral synapse. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2012; 32(11):2076-83. PubMed [journal] PMID: 22929439, PMCID: PMC3493999

Albus K, **Wahab A**, Heinemann U. Primary afterdischarge in organotypic hippocampal slice cultures: effects of standard antiepileptic drugs. *Epilepsia*. 2012; 53(11):1928-36. PubMed [journal] PMID: 22812925

Coquery N, Blesch A, Stroh A, Fernández-Klett F, Klein J, Winter C, Priller J. Intrahippocampal transplantation of mesenchymal stromal cells promotes neuroplasticity. *Cytherapy*. 2012; 14(9):1041-53. PubMed [journal] PMID: 22762522

Kaindl AM, Degos V, Peineau S, Gouadon E, Chhor V, Loron G, Le Charpentier T, Josserand J, Ali C, Vivien D, Collingridge GL, Lombet A, **Issa L**, Rene F, Loeffler JP, Kavelaars A, Verney C, Mantz J, Gressens P. Activation of microglial N-methyl-D-aspartate receptors triggers inflammation and neuronal cell death in the developing and mature brain. *Annals of neurology*. 2012; 72(4):536-49. PubMed [journal] PMID: 23109148

Kraemer N, Neubert G, **Issa L**, Ninnemann O, Seiler AE, Kaindl AM. Reference genes in the developing murine brain and in differentiating embryonic stem cells. *Neurological research*. 2012; 34(7):664-8. PubMed [journal] PMID: 22735032

Kronenberg G, **Balkaya M**, Prinz V, Gertz K, Ji S, Kirste I, Heuser I, Kampmann B, Hellmann-Regen J, Gass P, Sohr R, Hellweg R, Waeber C, Juckel G, Hörtnagl H, Stumm R, Endres M. Exofocal dopaminergic degeneration as antidepressant target in mouse model of poststroke depression. *Biological psychiatry*. 2012; 72(4):273-81. PubMed [journal] PMID: 22464799

Stock K, Kumar J, Synowitz M, Petrosino S, Imperatore R, Smith ES, Wend P, Purfürst B, Nuber UA, Gurok U, Matyash V, **Wälzlein JH**, Chirasani SR, Dittmar G, Cravatt BF, Momma S, Lewin GR, Ligresti A, De Petrocellis L, Cristino L, Di Marzo V, Kettenmann H, Glass R. Neural precursor cells induce cell death of high-grade astrocytomas through stimulation of TRPV1. *Nature medicine*. 2012; 18(8):1232-8. NIHMSID: NIHMS375805 PubMed [journal] PMID: 22820645, PMCID: PMC3480991

Galinovic I, **Ostwaldt AC**, Soemmer C, **Bros H**, Hotter B, Brunecker P, Fiebach JB. Automated vs manual delineations of regions of interest- a comparison in commercially available perfusion MRI software. *BMC medical imaging*. 2012; 12:16. PubMed [journal] PMID: 22809148, PMCID: PMC3423015

Kaden D, Harmeier A, Weise C, Munter LM, Althoff V, **Rost BR**, Hildebrand PW, Schmitz D, Schaefer M, Lurz R, Skodda S, Yamamoto R, Arlt S, Finckh U, Multhaup G. Novel APP/A β mutation K16N produces highly toxic heteromeric A β oligomers. *EMBO molecular medicine*. 2012; 4(7):647-59. PubMed [journal] PMID: 22514144, PMCID: PMC3407951

Neumann WJ, Huebl J, **Brücke C**, Ruiz MH, Kupsch A, Schneider GH, Kühn AA. Enhanced low-frequency oscillatory activity of the subthalamic nucleus in a patient with dystonia. *Movement disorders: official journal of the Movement Disorder Society*. 2012; 27(8):1063-6. PubMed [journal] PMID: 22700436

Gertz K, Kronenberg G, Kälin RE, Baldinger T, Werner C, **Balkaya M**, **Eom GD**, Hellmann-Regen J, Kröber J, Miller KR, Lindauer U, Laufs U, Dirnagl U, Heppner FL, Endres M. Essential role of interleukin-6 in post-stroke angiogenesis. *Brain: a journal of neurology*. 2012; 135(Pt 6):1964-80. PubMed [journal] PMID: 22492561, PMCID: PMC3359750

Tress O, **Maglione M**, May D, Pivneva T, Richter N, Seyfarth J, Binder S, Zlomuzica A, Seifert G, Theis M, Dere E, Kettenmann H, Willecke K. Plasmal gap junctional communication is essential for maintenance of myelin in the CNS. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2012; 32(22):7499-518. PubMed [journal] PMID: 22649229

Hetze S, **Römer C**, Teufelhart C, Meisel A, **Engel O**. Gait analysis as a method for assessing neurological outcome in a mouse model of stroke. *Journal of neuroscience methods*. 2012; 206(1):7-14. PubMed [journal] PMID: 22343052

Vogt J, Glumm R, Schlüter L, Schmitz D, **Rost BR**, Streu N, Rister B, Suman Bharathi B, Gagiannis D, Hildebrandt H, Weinhold B, Mühlenhoff M, Naumann T, Savaskan NE, Brauer AU, Reutter W, Heimrich B, Nitsch R, Horstkorte R. Homeostatic regulation of NCAM polysialylation is critical for correct synaptic targeting. *Cellular and molecular life sciences: CMLS*. 2012; 69(7):1179-91. PubMed [journal] PMID: 22068610

Loske P, **Boato F**, Hendrix S, Piepgras J, Just I, Ahnert-Hilger G, Höltje M. Minimal essential length of Clostridium botulinum C3 peptides to enhance neuronal regenerative growth and connectivity in a non-enzymatic mode. *Journal of neurochemistry*. 2012; 120(6):1084-96. PubMed [journal] PMID: 22239108

Zille M, Farr TD, Przesdzing I, **Müller J**, Sommer C, Dirnagl U, Wunder A. Visualizing cell death in experimental focal cerebral ischemia: promises, problems, and perspectives. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2012; 32(2):213-31. PubMed [journal] PMID: 22086195, PMCID: PMC3272608

Ebinger M, **Kufner A**, **Galinovic I**, Brunecker P, Malzahn U, Nolte CH, Endres M, Fiebach JB. Fluid-attenuated inversion recovery images and stroke outcome after thrombolysis. *Stroke*. 2012; 43(2):539-42. PubMed [journal] PMID: 22033987

Ebinger M, Scheitz JF, **Kufner A**, Endres M, Fiebach JB, Nolte CH. MRI-based intravenous thrombolysis in stroke patients with unknown time of symptom onset. *European journal of neurology*. 2012; 19(2):348-50. PubMed [journal] PMID:21895879

Schulz SB, Kluft ZJ, Rösler AR, Heinemann U, Gerevich Z. Purinergic P2X, P2Y and adenosine receptors differentially modulate hippocampal gamma oscillations. *Neuropharmacology*. 2012; 62(2):914-24. PubMed [journal] PMID: 22001427

Brücke C, Huebl J, Schönecker T, Neumann WJ, Yarrow K, Kupsch A, Blahak C, Lütjens G, Brown P, Krauss JK, Schneider GH, Kühn AA. Scaling of movement is related to pallidal γ oscillations in patients with dystonia. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2012; 32(3):1008-19. PubMed [journal] PMID: 22262899

Madai VI, von Samson-Himmelstjerna FC, Bauer M, Stengl KL, Mutke MA, **Tovar-Martinez E**, Wuerfel J, Endres M, Niendorf T, Sobesky J. Ultrahigh-field MRI in human ischemic stroke--a 7 tesla study. *PloS one*. 2012; 7(5):e37631. PubMed [journal] PMID: 22701525, PMCID: PMC3365122

Xu C, Schmidt WU, **Galinovic I**, Villringer K, Hotter B, **Ostwaldt AC**, **Denisova N**, Kellner E, Kiselev V, Fiebach JB. The potential of microvessel density in prediction of infarct growth: a two-month experimental study in vessel size imaging. *Cerebrovascular diseases (Basel, Switzerland)*. 2012; 33(4):303-9. PubMed [journal] PMID: 22343905

Kann O, Taubenberger N, **Huchzermeyer C**, **Papageorgiou IE**, Benninger F, Heinemann U, Kovács R. Muscarinic receptor activation determines the effects of store-operated Ca(2+)-entry on excitability and energy metabolism in pyramidal neurons. *Cell calcium*. 2012; 51(1):40-50. PubMed [journal] PMID: 22088219

Kintscher M, Breustedt J, Miceli S, Schmitz D, Wozny C. Group II metabotropic glutamate receptors depress synaptic transmission onto subicular burst firing neurons. *PloS one*. 2012; 7(9):e45039. PubMed [journal] PMID: 22984605, PMCID: PMC3439391

2011 (30)

Boato F, Hechler D, Rosenberger K, Lüdecke D, Peters EM, Nitsch R, Hendrix S. Interleukin-1 beta and neurotrophin-3 synergistically promote neurite growth in vitro. *Journal of neuroinflammation*. 2011; 8:183. PubMed [journal] PMID: 22200088, PMCID: PMC3275552

Magno L, Kretz O, Bert B, Ersözlü S, Vogt J, Fink H, Kimura S, Vogt A, Monyer H, Nitsch R, Naumann T. The integrity of cholinergic basal forebrain neurons depends on expression of Nkx2-1. *The European journal of neuroscience*. 2011; 34(11):1767-82. NIHMSID: NIHMS410055 PubMed [journal] PMID: 22098391, PMCID: PMC3486784

Thomalla G, Cheng B, Ebinger M, Hao Q, Tourdias T, Wu O, Kim JS, Breuer L, Singer OC, Warach S, Christensen S, Treszl A, Forkert ND, **Galinovic I**, Rosenkranz M, Engelhorn T, Köhrmann M, Endres M, Kang DW, Dousset V, Sorensen AG, Liebeskind DS, Fiebach JB, Fiehler J, Gerloff C. DWI-FLAIR mismatch for the identification of patients with acute ischaemic stroke within 4.5 h of symptom onset (PRE-FLAIR): a multicentre observational study. *The Lancet. Neurology*. 2011; 10(11):978-86. PubMed [journal] PMID: 21978972

Balkaya M, Prinz V, Custodis F, Gertz K, Kronenberg G, Kroeber J, Fink K, Plehm R, Gass P, Laufs U, Endres M. Stress worsens endothelial function and ischemic stroke via glucocorticoids. *Stroke*. 2011; 42(11):3258-64. PubMed [journal] PMID: 21921276

Papageorgiou IE, Gabriel S, Fetani AF, Kann O, Heinemann U. Redistribution of astrocytic glutamine synthetase in the hippocampus of chronic epileptic rats. *Glia*. 2011; 59(11):1706-18. PubMed [journal] PMID: 21780187

Prüss H, Kopp MA, Brommer B, Gatzemeier N, **Laginha I**, Dirnagl U, Schwab JM. Non-resolving aspects of acute inflammation after spinal cord injury (SCI): indices and resolution plateau. *Brain pathology (Zurich, Switzerland)*. 2011; 21(6):652-60. PubMed [journal] PMID: 21418368

Datwyler AL, Lättig-Tünnemann G, Yang W, Paschen W, **Lee SL**, Dirnagl U, Endres M, Harms C. SUMO2/3 conjugation is an endogenous neuroprotective mechanism. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2011; 31(11):2152-9. PubMed [journal] PMID: 21863037, PMCID: PMC3210338

Herz J, Paterka M, Niesner RA, Brandt AU, Siffrin V, Leuenberger T, Birkenstock J, Mossakowski A, Glumm R, Zipp F, Radbruch H. In vivo imaging of lymphocytes in the CNS reveals different behaviour of naïve T cells in health and autoimmunity. *Journal of neuroinflammation*. 2011; 8:131. PubMed [journal] PMID: 21978405, PMCID: PMC3206448

Maslarova A, Alam M, **Reiffurth C**, **Lapilover E**, Gorji A, Dreier JP. Chronically epileptic human and rat neocortex display a similar resistance against spreading depolarization in vitro. *Stroke*. 2011; 42(10):2917-22. PubMed [journal] PMID: 21836085

Rost BR, Nicholson P, Ahnert-Hilger G, Rummel A, Rosenmund C, Breustedt J, Schmitz D. Activation of metabotropic GABA receptors increases the energy barrier for vesicle fusion. *Journal of cell science*. 2011; 124(Pt 18):3066-73. PubMed [journal] PMID: 21852427

Zurberg S, Piszczek A, Martínez C, Hublitz P, Al Banchaabouchi M, Moreira P, Perlas E, Heppenstall PA. Generation and characterization of an Advillin-Cre driver mouse line. *Molecular pain*. 2011; 7:66. PubMed [journal] PMID: 21906401, PMCID: PMC3185264

Marchal JA, **Ghani M**, Schindler D, Gavvovidis I, Winkler T, Esquitino V, Sternberg N, Busche A, Krawitz P, Hecht J, Robinson P, Mundlos S, Gaul-Neumann L, Sperling K, Trimborn M, Neitzel H. Misregulation of mitotic chromosome segregation in a new type of autosomal recessive primary microcephaly. *Cell cycle (Georgetown, Tex.)*. 2011; 10(17):2967-77. PubMed [journal] PMID: 21857152

Wiegand HF, Beed P, Bendels MH, Leibold C, Schmitz D, Jochenning FW. Complementary sensory and associative microcircuitry in primary olfactory cortex. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2011; 31(34):12149-58. PubMed [journal] PMID: 21865457

Fano S, **Caliskan G**, Behrens CJ, Heinemann U. Histaminergic modulation of acetylcholine-induced γ oscillations in rat hippocampus. *Neuroreport*. 2011; 22(11):520-4. PubMed [journal] PMID: 21697749

Becker R, Reinacher M, **Freyer F**, Villringer A, Ritter P. How ongoing neuronal oscillations account for evoked fMRI variability. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2011; 31(30):11016-27. PubMed [journal] PMID: 21795550

Tress O, **Maglione M**, Zlomuzica A, May D, Dicke N, Degen J, Dere E, Kettenmann H, Hartmann D, Willecke K. Pathologic and phenotypic alterations in a mouse expressing a connexin47 missense mutation that causes Pelizaeus-Merzbacher-like disease in humans. *PLoS genetics*. 2011; 7(7):e1002146. PubMed [journal] PMID: 21750683, PMCID: PMC3131295

Ehninger D, **Wang LP**, Klempin F, Römer B, Kettenmann H, Kempermann G. Enriched environment and physical activity reduce microglia and influence the fate of NG2 cells in the amygdala of adult mice. *Cell and tissue research*. 2011; 345(1):69-86. PubMed [journal] PMID: 21688212, PMCID: PMC3132349

Madai VI, Altaner A, Stengl KL, Zaro-Weber O, Heiss WD, von Samson-Himmelstjerna FC, Sobesky J. Crossed cerebellar diaschisis after stroke: can perfusion-weighted MRI show functional inactivation? *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2011; 31(6):1493-500. PubMed [journal] PMID: 21386854, PMCID: PMC3130318

Seifert S, **Pannell M**, Uckert W, Färber K, Kettenmann H. Transmitter- and hormone-activated Ca(2+) responses in adult microglia/brain macrophages in situ recorded after viral transduction of a recombinant Ca(2+) sensor. *Cell calcium*. 2011; 49(6):365-75. PubMed [journal] PMID: 21536328

Kraemer N, **Issa L**, Hauck SC, Mani S, Ninnemann O, Kaindl AM. What's the hype about CDK5RAP2? Cellular and molecular life sciences: CMLS. 2011; 68(10):1719-36. PubMed [journal] PMID: 21327915

Markovic DS, **Vinnakota K**, van Rooijen N, Kiwit J, Synowitz M, Glass R, Kettenmann H. Minocycline reduces glioma expansion and invasion by attenuating microglial MT1-MMP expression. Brain, behavior, and immunity. 2011; 25(4):624-8. PubMed [journal] PMID: 21324352

Bahmani P, Schellenberger E, **Klohs J**, Steinbrink J, **Cordell R**, **Zille M**, **Müller J**, Harhausen D, Hofstra L, Reutelingsperger C, Farr TD, Dirnagl U, Wunder A. Visualization of cell death in mice with focal cerebral ischemia using fluorescent annexin A5, propidium iodide, and TUNEL staining. Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism. 2011; 31(5):1311-20. PubMed [journal] PMID: 21245871, PMCID: PMC3099638

Benedetti B, Matyash V, Kettenmann H. Astrocytes control GABAergic inhibition of neurons in the mouse barrel cortex. The Journal of physiology. 2011; 589(Pt 5):1159-72. PubMed [journal] PMID: 21224221, PMCID: PMC3060594

Huebl J, Schoenecker T, Siegert S, **Brücke C**, Schneider GH, Kupsch A, Yarrow K, Kühn AA. Modulation of subthalamic alpha activity to emotional stimuli correlates with depressive symptoms in Parkinson's disease. Movement disorders: official journal of the Movement Disorder Society. 2011; 26(3):477-83. PubMed [journal] PMID: 21287598

Wenzlaff H, Bauer M, Maess B, Heekeren HR. Neural characterization of the speed-accuracy tradeoff in a perceptual decision-making task. The Journal of neuroscience: the official journal of the Society for Neuroscience. 2011; 31(4):1254-66. PubMed [journal] PMID: 21273410

Wahab A, Albus K, Heinemann U. Age- and region-specific effects of anticonvulsants and bumetanide on 4-aminopyridine-induced seizure-like events in immature rat hippocampal-entorhinal cortex slices. Epilepsia. 2011; 52(1):94-103. PubMed [journal] PMID: 21083847

Jorks D, Major S, **Oliveira-Ferreira AI**, Kleeberg J, Dreier JP. Endothelin-1(1-31) induces spreading depolarization in rats. Acta neurochirurgica. Supplement. 2011; 110(Pt 1):111-7. PubMed [journal] PMID: 21116925

Liotta A, **Caliskan G**, **ul Haq R**, **Hollnagel JO**, Rösler A, Heinemann U, Behrens CJ. Partial disinhibition is required for transition of stimulus-induced sharp wave-ripple complexes into recurrent epileptiform discharges in rat hippocampal slices. Journal of neurophysiology. 2011; 105(1):172-87. PubMed [journal] PMID: 20881199

Tashiro K, Teissier A, Kobayashi N, Nakanishi A, Sasaki T, **Yan K**, Tarabykin V, Vigier L, Sumiyama K, Hirakawa M, Nishihara H, Pierani A, Okada N. A mammalian conserved element derived from SINE displays enhancer properties recapitulating Satb2 expression in early-born callosal projection neurons. PloS one. 2011; 6(12):e28497. PubMed [journal] PMID: 22174821, PMCID: PMC3234267

Galinovic I, **Ostwaldt AC**, Soemmer C, **Bros H**, Hotter B, Brunecker P, Schmidt WU, Jungehülsing J, Fiebach JB. Search for a map and threshold in perfusion MRI to accurately predict tissue fate: a protocol for assessing lesion growth in patients with persistent vessel occlusion. Cerebrovascular diseases (Basel, Switzerland). 2011; 32(2):186-93. PubMed [journal] PMID: 21849778

Galinovic I, Brunecker P, **Ostwaldt AC**, Soemmer C, Hotter B, Fiebach JB. Fully automated postprocessing carries a risk of substantial overestimation of perfusion deficits in acute stroke magnetic resonance imaging. Cerebrovascular diseases (Basel, Switzerland). 2011; 31(4):408-13. PubMed [journal] PMID: 21346342

Beed P, Bendels MH, **Wiegand HF**, Leibold C, Jochenning FW, Schmitz D. Analysis of excitatory microcircuitry in the medial entorhinal cortex reveals cell-type-specific differences. *Neuron*. 2010; 68(6):1059-66. PubMed [journal] PMID: 21172609

Wójtowicz AM, Fidzinski P, Heinemann U, Behr J. Beta-adrenergic receptor activation induces long-lasting potentiation in burst-spiking but not regular-spiking cells at CA1-subiculum synapses. *Neuroscience*. 2010; 171(2):367-72. PubMed [journal] PMID: 20870013

Leithner C, Müller S, **Füchtemeier M**, Lindauer U, Dirnagl U, Royl G. Determination of the brain-blood partition coefficient for water in mice using MRI. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2010; 30(11):1821-4. PubMed [journal] PMID: 20842161, PMCID: PMC3023928

Noack J, Richter K, Laube G, **Haghighi HA**, Veh RW, Engelmann M. Different importance of the volatile and non-volatile fractions of an olfactory signature for individual social recognition in rats versus mice and short-term versus long-term memory. *Neurobiology of learning and memory*. 2010; 94(4):568-75. PubMed [journal] PMID: 20888419

Siffrin V, Radbruch H, Glumm R, Niesner R, Paterka M, **Herz J**, Leuenberger T, Lehmann SM, Luenstedt S, Rinnenthal JL, Laube G, Luche H, Lehnardt S, Fehling HJ, Griesbeck O, Zipp F. In vivo imaging of partially reversible th17 cell-induced neuronal dysfunction in the course of encephalomyelitis. *Immunity*. 2010; 33(3):424-36. PubMed [journal] PMID: 20870176

Herz J, Zipp F, Siffrin V. Neurodegeneration in autoimmune CNS inflammation. *Experimental neurology*. 2010; 225(1):9-17. PubMed [journal] PMID: 19961850

Rost BR, Breustedt J, Schoenherr A, Grosse G, Ahnert-Hilger G, Schmitz D. Autaptic cultures of single hippocampal granule cells of mice and rats. *The European journal of neuroscience*. 2010; 32(6):939-47. PubMed [journal] PMID: 20726880

Füchtemeier M, Leithner C, Offenhauser N, Foddiss M, Kohl-Bareis M, Dirnagl U, Lindauer U, Royl G. Elevating intracranial pressure reverses the decrease in deoxygenated hemoglobin and abolishes the post-stimulus overshoot upon somatosensory activation in rats. *NeuroImage*. 2010; 52(2):445-54. PubMed [journal] PMID: 20420930

Decker JM, **Wójtowicz AM**, Bartsch JC, Liotta A, Braunewell KH, Heinemann U, Behrens CJ. C-type natriuretic peptide modulates bidirectional plasticity in hippocampal area CA1 in vitro. *Neuroscience*. 2010; 169(1):8-22. PubMed [journal] PMID: 20438814

Wahab A, Albus K, Heinemann U. Drug refractoriness of epileptiform activity in organotypic hippocampal slice cultures depends on the mode of provocation. *Epilepsy research*. 2010; 90(3):304-8. PubMed [journal] PMID: 20599358

Oliveira-Ferreira AI, Milakara D, Alam M, Jorks D, Major S, Hartings JA, Lückl J, Martus P, Graf R, Dohmen C, Bohner G, Woitzik J, Dreier JP. Experimental and preliminary clinical evidence of an ischemic zone with prolonged negative DC shifts surrounded by a normally perfused tissue belt with persistent electrocorticographic depression. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2010; 30(8):1504-19. PubMed [journal] PMID: 20332797, PMCID: PMC2949249

Hechler D, **Boato F**, Nitsch R, Hendrix S. Differential regulation of axon outgrowth and reinnervation by neurotrophin-3 and neurotrophin-4 in the hippocampal formation. *Experimental brain research*. 2010; 205(2):215-21. PubMed [journal] PMID: 20640412

Ebinger M, **Ostwaldt AC**, **Galinovic I**, Rozanski M, Brunecker P, Nolte CH, Endres M, Fiebich JB. Clinical and radiological courses do not differ between fluid-attenuated inversion recovery-positive and negative patients with stroke after thrombolysis. *Stroke*. 2010; 41(8):1823-5. PubMed [journal] PMID: 20595662

Piper S, Bahmani P, **Klohs J**, Bourayou R, Brunecker P, **Müller J**, Harhausen D, Lindauer U, Dirnagl U, Steinbrink J, Wunder A. Non-invasive surface-stripping for epifluorescence small animal imaging. *Biomedical optics express*. 2010; 1(1):97-105. PubMed [journal] PMID: 21258449, PMCID: PMC3005168

Wahab A, Albus K, Gabriel S, Heinemann U. In search of models of pharmacoresistant epilepsy. *Epilepsia*. 2010; 51 Suppl 3:154-9. PubMed [journal] PMID: 20618423

Maglione M, Tress O, Haas B, Karram K, Trotter J, Willecke K, Kettenmann H. Oligodendrocytes in mouse corpus callosum are coupled via gap junction channels formed by connexin47 and connexin32. *Glia*. 2010; 58(9):1104-17. PubMed [journal] PMID: 20468052

Schmitt KR, **Boato F**, Diestel A, Hechler D, Kruglov A, Berger F, Hendrix S. Hypothermia-induced neurite outgrowth is mediated by tumor necrosis factor-alpha. *Brain pathology (Zurich, Switzerland)*. 2010; 20(4):771-9. PubMed [journal] PMID: 20070303

Reyes-Haro D, **Müller J**, Boresch M, Pivneva T, **Benedetti B**, Scheller A, Nolte C, Kettenmann H. Neuron-astrocyte interactions in the medial nucleus of the trapezoid body. *The Journal of general physiology*. 2010; 135(6):583-94. PubMed [journal] PMID: 20479112, PMCID: PMC2888059

Boato F, Hendrix S, Huelsenbeck SC, Hofmann F, Grosse G, Djalali S, Klimaschewski L, Auer M, Just I, Ahnert-Hilger G, Höltje M. C3 peptide enhances recovery from spinal cord injury by improved regenerative growth of descending fiber tracts. *Journal of cell science*. 2010; 123(Pt 10):1652-62. PubMed [journal] PMID: 20406886

Lindauer U, Leithner C, Kaasch H, Rohrer B, Foddiss M, **Füchtemeier M**, Offenhauser N, Steinbrink J, Royl G, Kohl-Bareis M, Dirnagl U. Neurovascular coupling in rat brain operates independent of hemoglobin deoxygenation. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2010; 30(4):757-68. PubMed [journal] PMID: 20040927, PMCID: PMC2949158

Kronenberg G, Gertz K, Baldinger T, Kirste I, Eckart S, **Yildirim F**, **Ji S**, Heuser I, Schröck H, Hörtnagl H, Sohr R, Djoufack PC, Jüttner R, Glass R, Przesdzing I, Kumar J, Freyer D, Hellweg R, Kettenmann H, Fink KB, Endres M. Impact of actin filament stabilization on adult hippocampal and olfactory bulb neurogenesis. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2010; 30(9):3419-31. PubMed [journal] PMID: 20203201

Kaindl AM, Passemard S, Kumar P, Kraemer N, **Issa L**, Zwirner A, Gerard B, Verloes A, Mani S, Gressens P. Many roads lead to primary autosomal recessive microcephaly. *Progress in neurobiology*. 2010; 90(3):363-83. PubMed [journal] PMID: 19931588

Herz J, Siffrin V, Hauser AE, Brandt AU, Leuenberger T, Radbruch H, Zipp F, Niesner RA. Expanding two-photon intravital microscopy to the infrared by means of optical parametric oscillator. *Biophysical journal*. 2010; 98(4):715-23. PubMed [journal] PMID: 20159168, PMCID: PMC2820639

Trimborn M, **Ghani M**, Walther DJ, Dopatka M, Dutrannoy V, Busche A, Meyer F, Nowak S, Nowak J, Zabel C, Klose J, Esquitino V, Garshasbi M, Kuss AW, Ropers HH, Mueller S, Poehlmann C, Gavvovidis I, Schindler D, Sperling K, Neitzel H. Establishment of a mouse model with misregulated chromosome condensation due to defective Mchp1 function. *PloS one*. 2010; 5(2):e9242. PubMed [journal] PMID: 20169082, PMCID: PMC2821930

Leithner C, Royl G, Offenhauser N, **Füchtemeier M**, Kohl-Bareis M, Villringer A, Dirnagl U, Lindauer U. Pharmacological uncoupling of activation induced increases in CBF and CMRO2. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2010; 30(2):311-22. PubMed [journal] PMID: 19794398, PMCID: PMC2949119

Ebinger M, **Galinovic I**, Rozanski M, Brunecker P, Endres M, Fiebach JB. Fluid-attenuated inversion recovery evolution within 12 hours from stroke onset: a reliable tissue clock? *Stroke*. 2010; 41(2):250-5. PubMed [journal] PMID: 20035068

Lindauer U, Dirnagl U, **Füchtemeier M**, Böttiger C, Offenhauser N, Leithner C, Royl G. Pathophysiological interference with neurovascular coupling - when imaging based on hemoglobin might go blind. *Frontiers in neuroenergetics*. 2010; 2. PubMed [journal] PMID: 20953238, PMCID: PMC2955428

2009 (25)

Decker JM, **Wójtowicz AM**, **Ul Haq R**, Braunewell KH, Heinemann U, Behrens CJ. C-type natriuretic peptide decreases hippocampal network oscillations in adult rats in vitro. *Neuroscience*. 2009; 164(4):1764-75. PubMed [journal] PMID: 19778593

Magno L, Catanzariti V, Nitsch R, Krude H, Naumann T. Ongoing expression of Nkx2.1 in the postnatal mouse forebrain: potential for understanding NKX2.1 haploinsufficiency in humans? *Brain research*. 2009; 1304:164-86. PubMed [journal] PMID: 19766601

Meuth SG, Herrmann AM, Simon OJ, Siffrin V, Melzer N, Bittner S, Meuth P, Langer HF, Hallermann S, Boldakowa N, **Herz J**, Munsch T, Landgraf P, Aktas O, Heckmann M, Lessmann V, Budde T, Kieseier BC, Zipp F, Wiendl H. Cytotoxic CD8+ T cell-neuron interactions: perforin-dependent electrical silencing precedes but is not causally linked to neuronal cell death. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2009; 29(49):15397-409. PubMed [journal] PMID: 20007464

Freyer F, **Becker R**, Anami K, Curio G, Villringer A, Ritter P. Ultrahigh-frequency EEG during fMRI: pushing the limits of imaging-artifact correction. *NeuroImage*. 2009; 48(1):94-108. PubMed [journal] PMID: 19539035

Caspani O, **Zurborg S**, Labuz D, Heppenstall PA. The contribution of TRPM8 and TRPA1 channels to cold allodynia and neuropathic pain. *PLoS one*. 2009; 4(10):e7383. PubMed [journal] PMID: 19812688, PMCID: PMC2753652

Wahab A, Heinemann U, Albus K. Effects of gamma-aminobutyric acid (GABA) agonists and a GABA uptake inhibitor on pharmacoresistant seizure like events in organotypic hippocampal slice cultures. *Epilepsy research*. 2009; 86(2-3):113-23. PubMed [journal] PMID: 19535226

Nierhaus T, Schön T, **Becker R**, Ritter P, Villringer A. Background and evoked activity and their interaction in the human brain. *Magnetic resonance imaging*. 2009; 27(8):1140-50. PubMed [journal] PMID: 19497696

Reinacher M, **Becker R**, Villringer A, Ritter P. Oscillatory brain states interact with late cognitive components of the somatosensory evoked potential. *Journal of neuroscience methods*. 2009; 183(1):49-56. PubMed [journal] PMID: 19589356

Trimbuch T, Beed P, Vogt J, Schuchmann S, Maier N, **Kintscher M**, Breustedt J, Schuelke M, Streu N, Kieselmann O, Brunk I, Laube G, Strauss U, Battfeld A, Wende H, Birchmeier C, Wiese S, Sendtner M, Kawabe H, Kishimoto-Suga M, Brose N, Baumgart J, Geist B, Aoki J, Savaskan NE, Bräuer AU, Chun J, Ninnemann O, Schmitz D, Nitsch R. Synaptic PRG-1 modulates excitatory transmission via lipid phosphate-mediated signaling. *Cell*. 2009; 138(6):1222-35. NIHMSID: NIHMS474744 PubMed [journal] PMID: 19766573, PMCID: PMC3716297

David Y, Cacheaux LP, **Ivens S**, **Lapilover E**, Heinemann U, Kaufer D, Friedman A. Astrocytic dysfunction in epileptogenesis: consequence of altered potassium and glutamate homeostasis? *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2009; 29(34):10588-99. NIHMSID: NIHMS196667 PubMed [journal] PMID: 19710312, PMCID: PMC2875068

Müller J, Reyes-Haro D, Pivneva T, Nolte C, Schaette R, Lübke J, Kettenmann H. The principal neurons of the medial nucleus of the trapezoid body and NG2(+) glial cells receive coordinated excitatory synaptic input. *The Journal of general physiology*. 2009; 134(2):115-27. PubMed [journal] PMID: 19635853, PMCID: PMC2717692

Markovic DS, Vinnakota K, Chirasani S, Synowitz M, Raguét H, **Stock K**, Sliwa M, Lehmann S, Kälin R, van Rooijen N, Holmbeck K, Heppner FL, Kiwit J, Matyash V, Lehnardt S, Kaminska B, Glass R, Kettenmann H. Gliomas induce and exploit microglial MT1-MMP expression for tumor expansion. *Proceedings of the National Academy of Sciences of the United States of America*. 2009; 106(30):12530-5. PubMed [journal] PMID: 19617536, PMCID: PMC2718387

Klohs J, Baeva N, Steinbrink J, Bourayou R, Boettcher C, Royl G, Megow D, Dirnagl U, Priller J, Wunder A. In vivo near-infrared fluorescence imaging of matrix metalloproteinase activity after cerebral ischemia. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2009; 29(7):1284-92. PubMed [journal] PMID: 19417756

Dreier JP, Major S, Manning A, Woitzik J, Drenckhahn C, Steinbrink J, Tolias C, **Oliveira-Ferreira AI**, Fabricius M, Hartings JA, Vajkoczy P, Lauritzen M, Dirnagl U, Bohner G, Strong AJ. Cortical spreading ischaemia is a novel process involved in ischaemic damage in patients with aneurysmal subarachnoid haemorrhage. *Brain: a journal of neurology*. 2009; 132(Pt 7):1866-81. PubMed [journal] PMID: 19420089, PMCID: PMC2702835

Schulze-Topphoff U, Prat A, Prozorovski T, Siffrin V, Paterka M, **Herz J**, Bendix I, Ifergan I, Schadock I, Mori MA, Van Horssen J, Schröter F, Smorodchenko A, Han MH, Bader M, Steinman L, Aktas O, Zipp F. Activation of kinin receptor B1 limits encephalitogenic T lymphocyte recruitment to the central nervous system. *Nature medicine*. 2009; 15(7):788-93. NIHMSID: NIHMS791794 PubMed [journal] PMID: 19561616, PMCID: PMC4903020

Harmeier A, Wozny C, **Rost BR**, Munter LM, Hua H, Georgiev O, Beyermann M, Hildebrand PW, Weise C, Schaffner W, Schmitz D, Multhaup G. Role of amyloid-beta glycine 33 in oligomerization, toxicity, and neuronal plasticity. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2009; 29(23):7582-90. PubMed [journal] PMID: 19515926

Klohs J, Steinbrink J, Bourayou R, Mueller S, **Cordell R**, Licha K, Schirner M, Dirnagl U, Lindauer U, Wunder A. Near-infrared fluorescence imaging with fluorescently labeled albumin: a novel method for non-invasive optical imaging of blood-brain barrier impairment after focal cerebral ischemia in mice. *Journal of neuroscience methods*. 2009; 180(1):126-32. PubMed [journal] PMID: 19427539

Siffrin V, Brandt AU, Radbruch H, **Herz J**, Boldakowa N, Leuenberger T, Werr J, Hahner A, Schulze-Topphoff U, Nitsch R, Zipp F. Differential immune cell dynamics in the CNS cause CD4+ T cell compartmentalization. *Brain: a journal of neurology*. 2009; 132(Pt 5):1247-58. PubMed [journal] PMID: 19179377

Höltje M, Djalali S, Hofmann F, Münster-Wandowski A, Hendrix S, **Boato F**, Dreger SC, Grosse G, Henneberger C, Grantyn R, Just I, Ahnert-Hilger G. A 29-amino acid fragment of Clostridium botulinum C3 protein enhances neuronal outgrowth, connectivity, and reinnervation. *FASEB journal: official publication of the Federation of American Societies for Experimental Biology*. 2009; 23(4):1115-26. PubMed [journal] PMID: 19047066

Ji S, Kronenberg G, **Balkaya M**, Färber K, Gertz K, Kettenmann H, Endres M. Acute neuroprotection by pioglitazone after mild brain ischemia without effect on long-term outcome. *Experimental neurology*. 2009; 216(2):321-8. PubMed [journal] PMID: 19146854

Kempf F, **Brücke C**, Salih F, Trottenberg T, Kupsch A, Schneider GH, Doyle Gaynor LM, Hoffmann KT, Vesper J, Wöhrle J, Altenmüller DM, Krauss JK, Mazzone P, Di Lazzaro V, Yelnik J, Kühn AA, Brown P. Gamma activity and reactivity in human thalamic local field potentials. *The European journal of neuroscience*. 2009; 29(5):943-53. PubMed [journal] PMID: 19291224

Wójtowicz AM, van den Boom L, **Chakrabarty A**, Maggio N, **Haq RU**, Behrens CJ, Heinemann U. Monoamines block kainate- and carbachol-induced gamma-oscillations but augment stimulus-induced gamma-oscillations in rat hippocampus in vitro. *Hippocampus*. 2009; 19(3):273-88. PubMed [journal] PMID: 19173289

Wunder A, **Klohs J**, Dirnagl U. Non-invasive visualization of CNS inflammation with nuclear and optical imaging. *Neuroscience*. 2009; 158(3):1161-73. PubMed [journal] PMID: 18983900

Kühn AA, Tsui A, Aziz T, Ray N, **Brücke C**, Kupsch A, Schneider GH, Brown P. Pathological synchronisation in the subthalamic nucleus of patients with Parkinson's disease relates to both bradykinesia and rigidity. *Experimental neurology*. 2009; 215(2):380-7. PubMed [journal] PMID: 19070616

Chirasani SR, **Markovic DS**, Synowitz M, Eichler SA, Wisniewski P, Kaminska B, Otto A, Wanker E, Schäfer M, Chiarugi P, Meier JC, Kettenmann H, Glass R. Transferrin-receptor-mediated iron accumulation controls proliferation and glutamate release in glioma cells. *Journal of molecular medicine (Berlin, Germany)*. 2009; 87(2):153-67. PubMed [journal] PMID: 19066835

Peters O, Schipke CG, Philipps A, Haas B, Pannasch U, **Wang LP**, **Benedetti B**, Kingston AE, Kettenmann H. Astrocyte function is modified by Alzheimer's disease-like pathology in aged mice. *Journal of Alzheimer's disease: JAD*. 2009; 18(1):177-89. PubMed [journal] PMID: 19584439

2008 (18)

Decker JM, **Wojtowicz A**, Heinemann U, Braunewell KH. C-Type natriuretic peptide modulates pre- and postsynaptic properties in hippocampal area CA1 in vitro. *Biochemical and biophysical research communications*. 2008; 377(3):820-5. PubMed [journal] PMID: 18952057

Morara S, **Wang LP**, Filippov V, Dickerson IM, Grohovaz F, Provini L, Kettenmann H. Calcitonin gene-related peptide (CGRP) triggers Ca²⁺ responses in cultured astrocytes and in Bergmann glial cells from cerebellar slices. *The European journal of neuroscience*. 2008; 28(11):2213-20. NIHMSID: NIHMS696636 PubMed [journal] PMID: 19046367, PMCID: PMC4461196

Kühn AA, **Brücke C**, Schneider GH, Trottenberg T, Kivi A, Kupsch A, Capelle HH, Krauss JK, Brown P. Increased beta activity in dystonia patients after drug-induced dopamine deficiency. *Experimental neurology*. 2008; 214(1):140-3. PubMed [journal] PMID: 18760276

Walzlein JH, Synowitz M, Engels B, **Markovic DS**, Gabrusiewicz K, Nikolaev E, Yoshikawa K, Kaminska B, Kempermann G, Uckert W, Kaczmarek L, Kettenmann H, Glass R. The antitumorigenic response of neural precursors depends on subventricular proliferation and age. *Stem cells (Dayton, Ohio)*. 2008; 26(11):2945-54. PubMed [journal] PMID: 18757298

Klohs J, Gräfe M, Graf K, Steinbrink J, Dietrich T, Stibenz D, Bahmani P, Kronenberg G, Harms C, Endres M, Lindauer U, Greger K, Stelzer EH, Dirnagl U, Wunder A. In vivo imaging of the inflammatory receptor CD40 after cerebral ischemia using a fluorescent antibody. *Stroke*. 2008; 39(10):2845-52. PubMed [journal] PMID: 18635859

Ritter P, **Freyer F**, Curio G, Villringer A. High-frequency (600 Hz) population spikes in human EEG delineate thalamic and cortical fMRI activation sites. *NeuroImage*. 2008; 42(2):483-90. PubMed [journal] PMID: 18586526

Kühn AA, **Brücke C**, Hübl J, Schneider GH, Kupsch A, Eusebio A, Ashkan K, Holland P, Aziz T, Vandenberghe W, Nuttin B, Brown P. Motivation modulates motor-related feedback activity in the human basal ganglia. *Current biology: CB*. 2008; 18(15):R648-R650. PubMed [journal] PMID: 18682201

Bourayou R, Boeth H, Benav H, Betz T, Lindauer U, Nierhaus T, **Klohs J**, Wunder A, Dirnagl U, Steinbrink J. Fluorescence tomography technique optimized for noninvasive imaging of the mouse brain. *Journal of biomedical optics*. 2008; 13(4):041311. PubMed [journal] PMID: 19021319

Wang LP, **Cheung G**, Kronenberg G, Gertz K, **Ji S**, Kempermann G, Endres M, Kettenmann H. Mild brain ischemia induces unique physiological properties in striatal astrocytes. *Glia*. 2008; 56(9):925-34. PubMed [journal] PMID: 18442086

Kühn AA, Kempf F, **Brücke C**, Gaynor Doyle L, Martinez-Torres I, Pogosyan A, Trottenberg T, Kupsch A, Schneider GH, Hariz MI, Vandenberghe W, Nuttin B, Brown P. High-frequency stimulation of the subthalamic nucleus suppresses oscillatory beta activity in patients with Parkinson's disease in parallel with improvement in motor performance. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2008; 28(24):6165-73. PubMed [journal] PMID: 18550758

Albus K, **Wahab A**, Heinemann U. Standard antiepileptic drugs fail to block epileptiform activity in rat organotypic hippocampal slice cultures. *British journal of pharmacology*. 2008; 154(3):709-24. PubMed [journal] PMID: 18414393, PMCID: PMC2439516

Brücke C, Kempf F, Kupsch A, Schneider GH, Krauss JK, Aziz T, Yarrow K, Pogosyan A, Brown P, Kühn AA. Movement-related synchronization of gamma activity is lateralized in patients with dystonia. *The European journal of neuroscience*. 2008; 27(9):2322-9. PubMed [journal] PMID: 18430031

Royl G, **Füchtemeier M**, Leithner C, Megow D, Offenhauser N, Steinbrink J, Kohl-Bareis M, Dirnagl U, Lindauer U. Hypothermia effects on neurovascular coupling and cerebral metabolic rate of oxygen. *NeuroImage*. 2008; 40(4):1523-32. PubMed [journal] PMID: 18343160

Weingärtner O, Lütjohann D, **Ji S**, Weisshoff N, List F, Sudhop T, von Bergmann K, Gertz K, König J, Schäfers HJ, Endres M, Böhm M, Laufs U. Vascular effects of diet supplementation with plant sterols. *Journal of the American College of Cardiology*. 2008; 51(16):1553-61. PubMed [journal] PMID: 18420097

Yildirim F, Gertz K, Kronenberg G, Harms C, Fink KB, Meisel A, Endres M. Inhibition of histone deacetylation protects wildtype but not gelsolin-deficient mice from ischemic brain injury. *Experimental neurology*. 2008; 210(2):531-42. PubMed [journal] PMID: 18234195

Androulidakis AG, **Brücke C**, Kempf F, Kupsch A, Aziz T, Ashkan K, Kühn AA, Brown P. Amplitude modulation of oscillatory activity in the subthalamic nucleus during movement. *The European journal of neuroscience*. 2008; 27(5):1277-84. PubMed [journal] PMID: 18312587

Huchzermeyer C, Albus K, Gabriel HJ, Otáhal J, Taubenberger N, Heinemann U, Kovács R, Kann O. Gamma oscillations and spontaneous network activity in the hippocampus are highly sensitive to decreases in pO₂ and concomitant changes in mitochondrial redox state. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2008; 28(5):1153-62. PubMed [journal] PMID: 18234893

Becker R, Ritter P, Villringer A. Influence of ongoing alpha rhythm on the visual evoked potential. *NeuroImage*. 2008; 39(2):707-16. PubMed [journal] PMID: 17977023

Steinbrink J, Liebert A, Wabnitz H, Macdonald R, Obrig H, Wunder A, Bourayou R, Betz T, **Klohs J**, Lindauer U, Dirnagl U, Villringer A. Towards noninvasive molecular fluorescence imaging of the human brain. *Neurodegenerative diseases*. 2008; 5(5):296-303. PubMed [journal] PMID: 18520164

2007 (13)

Waiczies S, Bendix I, Prozorovski T, Ratner M, Nazarenko I, Pfueller CF, Brandt AU, **Herz J**, Brocke S, Ullrich O, Zipp F. Geranylgeranylation but not GTP loading determines rho migratory function in T cells. *Journal of immunology (Baltimore, Md.: 1950)*. 2007; 179(9):6024-32. PubMed [journal] PMID: 17947676

Motazacker MM, **Rost BR**, Hucho T, Garshasbi M, Kahrizi K, Ullmann R, Abedini SS, Nieh SE, Amini SH, Goswami C, Tzschach A, Jensen LR, Schmitz D, Ropers HH, Najmabadi H, Kuss AW. A defect in the ionotropic glutamate receptor 6 gene (GRIK2) is associated with autosomal recessive mental retardation. *American journal of human genetics*. 2007; 81(4):792-8. PubMed [journal] PMID: 17847003, PMCID: PMC2227928

Kempf F, **Brücke C**, Kühn AA, Schneider GH, Kupsch A, Chen CC, Androulidakis AG, Wang S, Vandenberghe W, Nuttin B, Aziz T, Brown P. Modulation by dopamine of human basal ganglia involvement in feedback control of movement. *Current biology: CB*. 2007; 17(15):R587-9. PubMed [journal] PMID: 17686426

Brücke C, Kupsch A, Schneider GH, Hariz MI, Nuttin B, Kopp U, Kempf F, Trottenberg T, Doyle L, Chen CC, Yarrow K, Brown P, Kühn AA. The subthalamic region is activated during valence-related emotional processing in patients with Parkinson's disease. *The European journal of neuroscience*. 2007; 26(3):767-74. PubMed [journal] PMID: 17686048

Kronenberg G, **Wang LP**, Geraerts M, **Babu H**, Synowitz M, Vicens P, Lutsch G, Glass R, Yamaguchi M, Baekelandt V, Debyser Z, Kettenmann H, Kempermann G. Local origin and activity-dependent generation of nestin-expressing protoplasmic astrocytes in CA1. *Brain structure & function*. 2007; 212(1):19-35. PubMed [journal] PMID: 17717696

Ritter P, **Becker R**, Graefe C, Villringer A. Evaluating gradient artefact correction of EEG data acquired simultaneously with fMRI. *Magnetic resonance imaging*. 2007; 25(6):923-32. PubMed [journal] PMID: 17462844

Kempf F, Kühn AA, Kupsch A, **Brücke C**, Weise L, Schneider GH, Brown P. Premovement activities in the subthalamic area of patients with Parkinson's disease and their dependence on task. *The European journal of neuroscience*. 2007; 25(10):3137-45. PubMed [journal] PMID: 17561827

Babu H, **Cheung G**, Kettenmann H, Palmer TD, Kempermann G. Enriched monolayer precursor cell cultures from micro-dissected adult mouse dentate gyrus yield functional granule cell-like neurons. *PloS one*. 2007; 2(4):e388. PubMed [journal] PMID: 17460755, PMCID: PMC1849968

Zurborg S, Yurgionas B, Jira JA, Caspani O, Heppenstall PA. Direct activation of the ion channel TRPA1 by Ca²⁺. *Nature neuroscience*. 2007; 10(3):277-9. PubMed [journal] PMID: 17259981

Kehrer C, Dugladze T, Maziashvili N, Wójtowicz A, Schmitz D, Heinemann U, Gloveli T. Increased inhibitory input to CA1 pyramidal cells alters hippocampal gamma frequency oscillations in the MK-801 model of acute psychosis. *Neurobiology of disease*. 2007; 25(3):545-52. PubMed [journal] PMID: 17169567

Sliwa M, **Markovic D**, Gabrusiewicz K, Synowitz M, Glass R, Zawadzka M, Wesolowska A, Kettenmann H, Kaminska B. The invasion promoting effect of microglia on glioblastoma cells is inhibited by cyclosporin A. *Brain : a journal of neurology*. 2007; 130(Pt 2):476-89. PubMed [journal] PMID: 17107968

Tomkins O, Friedman O, **Ivens S**, **Reiffurth C**, Major S, Dreier JP, Heinemann U, Friedman A. Blood-brain barrier disruption results in delayed functional and structural alterations in the rat neocortex. *Neurobiology of disease*. 2007; 25(2):367-77. PubMed [journal] PMID: 17188501

Siffrin V, Brandt AU, **Herz J**, Zipp F. New insights into adaptive immunity in chronic neuroinflammation. *Advances in immunology*. 2007; 96:1-40. PubMed [journal] PMID: 17981203

2006 (4)

Gertz K, Priller J, Kronenberg G, Fink KB, Winter B, Schröck H, **Ji S**, Milosevic M, Harms C, Böhm M, Dirnagl U, Laufs U, Endres M. Physical activity improves long-term stroke outcome via endothelial nitric oxide synthase-dependent augmentation of neovascularization and cerebral blood flow. *Circulation research*. 2006; 99(10):1132-40. PubMed [journal] PMID: 17038638

Synowitz M, Glass R, Färber K, **Markovic D**, Kronenberg G, Herrmann K, Schnermann J, Nolte C, van Rooijen N, Kiwit J, Kettenmann H. A1 adenosine receptors in microglia control glioblastoma-host interaction. *Cancer research*. 2006; 66(17):8550-7. PubMed [journal] PMID: 16951167

Meisel A, Harms C, **Yildirim F**, Bösel J, Kronenberg G, Harms U, Fink KB, Endres M. Inhibition of histone deacetylation protects wild-type but not gelsolin-deficient neurons from oxygen/glucose deprivation. *Journal of neurochemistry*. 2006; 98(4):1019-31. PubMed [journal] PMID: 16895577

Klohs J, Steinbrink J, Nierhaus T, Bourayou R, Lindauer U, Bahmani P, Dirnagl U, Wunder A. Noninvasive near-infrared imaging of fluorochromes within the brain of live mice: an in vivo phantom study. *Molecular imaging*. 2006; 5(3):180-7. PubMed [journal] PMID: 16954033

2005 (5)

Kronenberg G, **Wang LP**, Synowitz M, Gertz K, Katchanov J, Glass R, Harms C, Kempermann G, Kettenmann H, Endres M. Nestin-expressing cells divide and adopt a complex electrophysiologic phenotype after transient brain ischemia. *Journal of cerebral blood flow and metabolism: official journal of the International Society of Cerebral Blood Flow and Metabolism*. 2005; 25(12):1613-24. PubMed [journal] PMID: 15959463

Becker R, Ritter P, Moosmann M, Villringer A. Visual evoked potentials recovered from fMRI scan periods. *Human brain mapping*. 2005; 26(3):221-30. PubMed [journal] PMID: 15954138

Markovic DS, Glass R, Synowitz M, Rooijen Nv, Kettenmann H. Microglia stimulate the invasiveness of glioma cells by increasing the activity of metalloprotease-2. *Journal of neuropathology and experimental neurology*. 2005; 64(9):754-62. PubMed [journal] PMID: 16141784

Wang LP, Kempermann G, Kettenmann H. A subpopulation of precursor cells in the mouse dentate gyrus receives synaptic GABAergic input. *Molecular and cellular neurosciences*. 2005; 29(2):181-9. PubMed [journal] PMID: 15911343

Glass R, Synowitz M, Kronenberg G, **Walzlein JH**, **Markovic DS**, **Wang LP**, Gast D, Kiwit J, Kempermann G, Kettenmann H. Glioblastoma-induced attraction of endogenous neural precursor cells is associated with improved survival. *The Journal of neuroscience: the official journal of the Society for Neuroscience*. 2005; 25(10):2637-46. PubMed [journal] PMID: 15758174

2003 (1)

Filippov V, Kronenberg G, Pivneva T, Reuter K, Steiner B, **Wang LP**, Yamaguchi M, Kettenmann H, Kempermann G. Subpopulation of nestin-expressing progenitor cells in the adult murine hippocampus shows electrophysiological and morphological characteristics of astrocytes. *Molecular and cellular neurosciences*. 2003; 23(3):373-82. PubMed [journal] PMID: 12837622