

**Abteilung "Neuro- und Sinnesphysiologie"**

**Journalbeiträge**

1. Atasoy D, Schoch S, Ho A, Nadasy KA, Liu X, Zhang W, Mukherjee K, Nosyreva ED, Fernandez-Chacon R, Missler M, Kavalali ET, Südhof TC (2007) Deletion of CASK in mice is lethal and impairs synaptic function. *P NATL ACAD SCI USA*, 104(7): 2525-30.
2. Dudanova I, Tabuchi K, Rohlmann A, Südhof TC, Missler M (2007) Deletion of alpha-neurexins does not cause a major impairment of axonal pathfinding or synapse formation. *J COMP NEUROL*, 502(2): 261-74.
3. Dutschmann M, Stettner GM (2007) Response to Letter to the Editor: Comparative analysis of the breathing phenotype of the C57BL/6J mouse line and MeCP2 deficient mice. *J PHYSIOL-LONDON*, 584(1): 361.
4. Dutschmann M, Kron M, Mörschel M, Gestreau C (2007) Activation of Orexin B receptors in the pontine Kölliker-Fuse nucleus modulates pre-inspiratory hypoglossal motor activity in rat. *RESP PHYSIOL NEUROBI*, 159(2): 232-5.
5. Funke F, Dutschmann M, Müller M (2007) Imaging of respiratory-related population activity with single-cell resolution. *AM J PHYSIOL-CELL PH*, 292(1): C508-16.
6. Goos M, Zech WD, Jaiswal MK, Balakrishnan S, Ebert S, Mitchell T, Carrì MT, Keller BU, Nau R (2007) Expression of a Cu,Zn superoxide dismutase typical for familial amyotrophic lateral sclerosis increases the vulnerability of neuroblastoma cells to infectious injury. *BMC INFECT DIS*, 7: 131.
7. Härtel K, Singaravelu K, Kaiser M, Neusch C, Hülsmann S, Deitmer JW (2007) Calcium influx mediated by the inwardly rectifying K<sup>+</sup> channel Kir4.1 (KCNJ10) at low external K<sup>+</sup> concentration. *CELL CALCIUM*, 42(3): 271-80.
8. Kron M, Mörschel M, Reuter J, Zhang W, Dutschmann M (2007) Developmental changes in brain-derived neurotrophic factor-mediated modulations of synaptic activities in the pontine Kölliker-Fuse nucleus of the rat. *J PHYSIOL-LONDON*, 583(Pt 1): 315-27.
9. Kron M, Zhang W, Dutschmann M (2007) Developmental changes in the BDNF-induced modulation of inhibitory synaptic transmission in the Kölliker-Fuse nucleus of rat. *EUR J NEUROSCI*, 26(12): 3449-57.
10. Lacmann A, Hess D, Gohla G, Roussa E, Kriegstein K (2007) Activity-dependent release of transforming growth factor-beta in a neuronal network in vitro. *NEUROSCIENCE*, 150(3): 647-57.
11. Matzke A, Sargsyan V, Holtmann B, Aramuni G, Asan E, Sendtner M, Pace G, Howells N, Zhang W, Ponta H, Orian-Rousseau V (2007) Haploinsufficiency of c-Met in cd44<sup>-/-</sup> mice identifies a collaboration of CD44 and c-Met in vivo. *MOL CELL BIOL*, 27(24): 8797-806.
12. Mironov SL (2007) ADP regulates movements of mitochondria in neurons. *BIOPHYS J*, 92(8): 2944-52.
13. Mironov SL, Langohr K (2007) Modulation of synaptic and channel activities in the respiratory network of the mice by NO/cGMP signalling pathways. *BRAIN RES*, 1130(1): 73-82.
14. Papadopoulos T, Korte M, Eulenburg V, Kubota H, Retiounskaia M, Harvey RJ, Harvey K, O'Sullivan GA, Laube B, Hülsmann S, Geiger JR, Betz H (2007) Impaired GABAergic transmission and altered hippocampal synaptic plasticity in collybistin-deficient mice. *EMBO J*, 26(17): 3888-99.
15. Pfeiffer A, Zhang W (2007) Postnatal development of GABA<sub>B</sub>-receptor-mediated modulation of potassium currents in brainstem respiratory network of mouse. *RESP PHYSIOL NEUROBI*, 158(1): 22-9.
16. Ponimaskin E, Voyno-Yasenetskaya T, Richter DW, Schachner M, Dityatev A (2007) Morphogenic signaling in neurons via neurotransmitter receptors and small GTPases. *MOL NEUROBIOL*, 35(3): 278-87.
17. Renner U, Glebov K, Lang T, Papisheva E, Balakrishnan S, Keller B, Richter DW, Jahn R, Ponimaskin E (2007) Localization of the mouse 5-hydroxytryptamine(1A) receptor in lipid microdomains depends on its palmitoylation and is involved in receptor-mediated signaling. *MOL PHARMACOL*, 72(3): 502-13.
18. Schomburg ED, Steffens H, Maznychenko AV, Pilyavskii AI, Hellström F, Kostyukov AI, Maisky VA (2007) Acute muscle inflammation enhances the monosynaptic reflexes and c-fos expression in the feline spinal cord. *EUR J PAIN*, 11(5): 579-86.
19. Stettner GM, Huppke P, Brendel C, Richter DW, Gärtner J, Dutschmann M (2007) Breathing dysfunctions associated with impaired control of postinspiratory activity in Mecp2<sup>-/-</sup> knockout mice. *J PHYSIOL-LONDON*, 579(Pt 3): 863-76.
20. St-John WM, Waki H, Dutschmann M, Paton JF (2007) Maintenance of eupnea of in situ and in vivo rats following riluzole: a blocker of persistent sodium channels. *RESP PHYSIOL NEUROBI*, 155(1): 97-100.
21. Winter SM, Hirrlinger J, Kirchhoff F, Hülsmann S (2007) Transgenic expression of fluorescent proteins in respiratory neurons. *RESP PHYSIOL NEUROBI*, 159(1): 108-14.

**Buchbeiträge**

1. Ponimaskin EG, Heine M, Zeug A, Voyno-Yasenetskaya T, Salonikidis P (2007) Monitoring receptor-mediated changes of intracellular cAMP level by using ion channels and fluorescent proteins as biosensors. In: Chattopadhyay A (Hg.) *Serotonin Receptors in Neurobiology*. CRC Press Verlag, Boca Raton, 19-40.

**Abteilung "Neuro- und Sinnesphysiologie"**

**Medizinische Dissertationen**

1. Köpp A, Dr. med., Reaktionen von Mitralzellen im Bulbus olfactorius des Goldfisches (*Carassius auratus*) bei Applikation von Strömungs- und Geruchsreizen in unterschiedlicher Geschwindigkeit. Dissertation Universität Göttingen 2007.
2. Zschüntzsch J, Dr. med., Immunocytochemische Untersuchungen zu intrazellulären Transportwegen des GABAB-Rezeptors. Dissertation Universität Göttingen 2007.

**Naturwiss. u.a. nichtmed. Diss.**

1. Gerich F, Dr. rer. nat., Redox-Modulation hippocampaler Neurone. Dissertation Universität Göttingen 2007.
2. Härtel K, Dr. rer. nat., Calcium-Oszillations-abhängige Glia-Neuron-Signale der Astrozyten des respiratorischen Netzwerkes. Dissertation Universität Göttingen 2007.