

Publications 2004 - DBCM

Abdelli S, Ansite J, Roduit R, Borsello T, Matsumoto I, Sawada T, Allaman-Pillet N, Henry H, Beckmann JS, Hering BR, Bonny C, Intracellular Stress Signalling Pathways Activated During Human Islet Preparation And Following Acute Cytokine Exposure *Diabetes*, 2004, Vol 53 November.

Abderrahmani, A., Niederhauser, G., Plaisance, V., Roerich, M.-E, Lenain, V., Coppola, T., Regazzi, R. and Waeber, G. Complexin I regulates glucose-induced secretion in pancreatic b-cells. (2004) *J. Cell. Sci.* 117, 2239-2247.

Abderrahmani, A., Niederhauser, G., Plaisance, V., Haefliger, J.-A., Regazzi, R. and Waeber, G. Neuronal traits are required for glucose-induced insulin secretion. (2004) *FEBS Lett.* 565, 133-138.

Bartling B., Yang J.-Y., Michod D., Widmann, C., Lewensohn R., and Zhivotovsky B (2004). RasGTPase-activating protein is a target of caspases in spontaneous apoptosis of lung carcinoma cells and in response to etoposide. *Carcinogenesis* 25, 909-921.

Basset, O., Boittin, F.-X., Dorchies, O.M., Chatton, J.-Y., van Breemen, C., Rüegg, U.T. (2004) Involvement of both inositol 1,4,5-trisphosphate and ryanodine receptors in nicotinic calcium responses in dystrophic myotubes assessed by near-plasma membrane calcium measurement. *J. Biol. Chem.* **279**:47092-47100.

Bernardinelli, Y., Magistretti, P.J., Chatton, J.-Y. (2004) Astrocytes generate Na⁺-mediated metabolic waves. *Proc. Natl. Acad. Sci. USA* **101**:14937-14942.

P. Bezzi, V. Gundersen, J.L. Galbete, G. Seifert, C. Steinhauser, E. Pilati and A. Volterra. Astrocytes contain a vesicular compartment competent for regulated exocytosis of glutamate *Nature Neuroscience*, (7): 623-620 (2004)

Blümcke I., Müller S., R. Buslei, B.M. Riederer, O.D. Wiestler 2004 "Microtubule-associated protein-2 immunoreactivity: a useful tool in differential diagnosis of low-grade neuroepithelial tumors. ", *Acta Neuropathologica*. 108: 89-96.

Borsello T, The cell permeable peptides strategy is a promising new tool for the prevention of neurodegeneration, *Discovery Medicine*, 2004, Vol 4 issue 23 October.

Brody SA, Dulawa SC, Conquet F, Geyer MA. Assessment of a prepulse inhibition deficit in a mutant mouse lacking mGlu5 receptors. *Mol Psychiatry*. 2004 Jan;9(1):35-41.

Brunet, J-F., Grollmund, L., Chatton, J.-Y., Lengacher, S., Magistretti, P.J., Villemure, J.G. and Pellerin, L. (2004) Early acquisition of typical metabolic features upon differentiation of mouse neural stem cells into astrocytes. *Glia* **46**:8-17.

Cabungcal, J. H., D. Singer, et al. (2004). "Spatial bias deficit in rats with low glutathione during development: An animal behaviour model with relevance to schizophrenia." *Schizophrenia Research* 67(1): 118-118.

Chattopadhyaya B., Di Cristo G., Higashiyama H., Knott G.W., Kuhlman S.J., Welker E., Huang Z.J. (2004) Experience and activity-dependent maturation of perisomatic GABAergic innervation in primary visual cortex during a postnatal critical period. *J Neurosci* 24:9598-9611.

Cheviet, S., Coppola, T., Haynes, L-P., Burgoyne, B. and Regazzi, R. The Rab-binding protein Noc2 is associated with insulin-containing secretory granules and is essential for pancreatic b-cell exocytosis. (2004) *Mol. Endocrinol.* 18, 117-126.

Cheviet, S., Waselle, L. and Regazzi, R. NOC-ing out exocrine and endocrine secretion. (2004) *Trends Cell Biol.* 14, 525-528.

Di Cristo G., Wu C., Chattopadhyaya B., Ango F., Knott G., Welker E., Svoboda K., Huang Z.J. (2004) Subcellular domain-restricted GABAergic innervation in primary visual cortex in the absence of sensory and thalamic inputs. *Nat Neurosci* 7:1184-1186.

Decosterd I, Allchorne A, Woolf CJ. Differential analgesic sensitivity of two distinct neuropathic pain models. *Anesth Analg.* 2004 Aug;99(2):457-63, table of contents.

Do, K. Q., P. Bovet, et al. (2004). "Glutathione deficit in schizophrenia: A new vulnerability factor for misconnectivity?" *Schizophrenia Research* 67(1): 118-119.

Ezrokhi VL, Korshunov VA, Markevich VA, Voronin LL, Welker E, Zajchenko MI. Stimulation of the lateral hypothalamus provokes the initiation of robust long-term potentiation of the thalamo-cortical input to the barrel field of the adult, freely moving rat. *Neurosci Behav Physiol.* 2004 Nov;34(9):919-27.

Genoud C., Knott G.W., Sakata K., Lu B., Welker E. (2004) Altered synapse formation in the adult somatosensory cortex of brain-derived neurotrophic factor heterozygote mice. *J Neurosci* 24:2394-2400.

Grenningloh, G., S. Soehrman, et al. (2004). "Role of the microtubule destabilizing proteins SCG10 and stathmin in neuronal growth." *Journal of Neurobiology* 58(1): 60-69.

Heinbockel T, Heyward P, Conquet F, Ennis M. Regulation of main olfactory bulb mitral cell excitability by metabotropic glutamate receptor mGluR1. *J Neurophysiol.* 2004 Nov;92(5):3085-96. Epub 2004 Jun 22.

Hornung, J. P. (2004). "Neuronal morphology in serotonergic gene knock-out mice." *European Neuropsychopharmacology* 14: S172-S173.

S. Kasas, C. Cibert, A. Kis, P.De Los Rios, B.M. Riederer, L. Forro, G. Dietler and S. Catsicas. "Oscillation modes of microtubules" *Biology of the Cell.* 96 : 697-700 (2004)

Kasas S. Sample preparation method for observing RNA polymerase activity by atomic force microscopy. *Methods Mol Biol.* 2004;242:341-8.

S. Kasas, Kis A, Riederer BM, Forro L, Dietler G, Catsicas S Mechanical properties of microtubules explored using the finite elements method, *ChemPhysChem* 5 : 252-257 (2004)

R. Kohli, J.-P. Gabriel & P.G.H. Clarke. Mathematical analysis of competition between sensory ganglion cells for neurotrophic factor in the skin. *Math. Biosci.* **191**, 207-225 (2004).

Leuba G, Vernay A, Vu D, Walzer C, Belloir B, Kraftsik R, Bouras C, Savioz A. Differential expression of LMO4 protein in Alzheimer's disease. *Neuropathol Appl Neurobiol.* 2004 Feb;30(1):57-69.

Magistretti, P. J., J. Y. Chatton, et al. (2004). "A mechanism for astrocyte-neuron metabolic coupling: Relevance for functional imaging." *International Journal of Neuropsychopharmacology* 7: S10-S11.

Marzioni, D., L. Tamagnone, et al. (2004). "Restricted innervation of uterus and placenta during pregnancy: Evidence for a role of the repelling signal semaphorin 3A." *Developmental Dynamics* 231(4): 839-848.

Michod ,D., Yang, J.-Y., Chen J., Bonny C. and Widmann, C. (2004). A RasGAP-derived cell permeable peptide potently enhances genotoxin-induced cytotoxicity in tumor cells. *Oncogene* 23, 8971-8978.

Moulin, N. and Widmann, C. (2004). Islet-Brain (IB)/JNK-interacting proteins (JIPs): future targets for the treatment of neurodegenerative diseases? *Current Neurovascular Research* 1, 111-127.

Nano M, Dal Corso H, Ferronato M, Solej M, Hornung JP, Dei Poli M. Ligation of the inferior mesenteric artery in the surgery of rectal cancer: anatomical considerations. *Dig Surg.* 2004;21(2):123-6; discussion 126-7. Epub 2004 Mar 16.

Newman EA & Volterra A Glial control of synaptic function *GLIA*, 47: 207-8, 2004

Regazzi, R., R. Gerona, et al. (2004). "Role of phosphoinositides in the regulation of insulin exocytosis." *Diabetologia* 47: A152-A152.

Riederer, B.M., P. Berbel, and G.M. Innocenti, 2004 "Neurons in the corpus callosum of the cat during postnatal development". *Eur. J. Neurosci.* 19: 2039-2046.

Steiner, P., Kulangara, K., Sarria, J.C.F., Glauser, L., Regazzi, R. and Hirling, H. Reticulon1-c/Neuroendocrine-Specific Protein-C interacts with SNARE proteins. (2004) *J. Neurochem.* 89, 569-580.

Suh, L. H., S. F. Oster, et al. (2004). "L1/laminin modulation of growth cone response to EphB triggers growth pauses and regulates the microtubule destabilizing protein SCG10." *Journal of Neuroscience* 24(8): 1976-1986.

Touri F, Welker E, Riederer BM. Differential distribution of MAP1A isoforms in the adult mouse barrel cortex and comparison with the serotonin 5-HT2A receptor. *J Chem Neuroanat.* 2004 May;27(2):99-108.

Troncoso E, Muller D, Korodi K, Steimer T, Welker E, Kiss JZ. Recovery of evoked potentials, metabolic activity and behavior in a mouse model of somatosensory cortex lesion: role of the neural cell adhesion molecule (NCAM). *Cereb Cortex.* 2004 Mar;14(3):332-41.

VOELKER, C.C.J., GARIN, N., TAYLOR, J., GAHWILER, B., HORNUNG, J.P., MOLNAR, Z. (2004) Selective neurofilament (SMI-32, FNP-7, N200) expression in subpopulations of layer V pyramidal neurons in vivo and in vitro. *Cerebral cortex*, 11:1276-1286.

Volterra A & Steinhaeuser C. Glial modulation of synaptic transmission in the hippocampus *GLIA*, 47: 249-57, 2004

Vyazovskiy VV, Welker E, Fritschy JM, Tobler I. Regional pattern of metabolic activation is reflected in the sleep EEG after sleep deprivation combined with unilateral whisker stimulation in mice. *Eur J Neurosci*. 2004 Sep;20(5):1363-70.

Wiesendanger E, Clarke S, Kraftsik R, Tardif E. Topography of cortico-striatal connections in man: anatomical evidence for parallel organization. *Eur J Neurosci*. 2004 Oct;20(7):1915-22.

Yang, J.-Y., Michod ,D., Walicki, J., Murphy, B.M., Kasibhatla, S., Martin, S.J. and Widmann, C. (2004). Partial cleavage of RasGAP by caspases is required for cell survival in mild stress conditions. *Mol. Cell Biol*. 24, 10425-10436.

Yang, J.-Y., Michod ,D., Walicki J., and Widmann, C. (2004). Surviving the kiss of death. *Biochem. Pharmacol*. 68, 1027-1031.

Zito K., Knott G., Shepherd G.M., Shenolikar S., Svoboda K. (2004) Induction of spine growth and synapse formation by regulation of the spine actin cytoskeleton. *Neuron* 44:321-334.