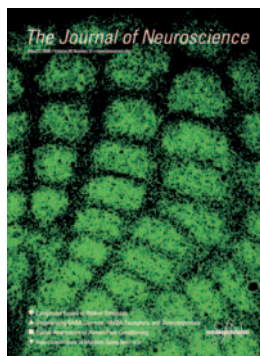


The Journal of Neuroscience

May 21, 2008 • Volume 28 Number 21 www.jneurosci.org



Cover legend: Whisker-related patterning of glutamate transporter GLT1 in the mouse somatosensory cortex at postnatal day 7. Sensory maps in the cortex are modified in an activity-dependent manner, especially when inputs from the periphery are altered during early postnatal life. As soon as barrels are structured in the neonatal period, GLT1 on astrocytes also establish barrel-like expression. This transporter was found to promote shrinkage of barrels corresponding to lesioned whiskers and the expansion of adjacent intact barrels. For more information, see the article by Takasaki et al. in the May 7, 2008 issue (pages 4995–5006).

i This Week in The Journal

Journal Club

- 5401 **The Relationship between Visual Awareness, Attention, and Report**
Simon van Gaal and Johannes J. Fahrenfort

Brief Communications

- 5460 **Aquaporin-4-Deficient Mice Have Increased Extracellular Space without Tortuosity Change**
Xiaoming Yao, Sabina Hrabětová, Charles Nicholson, and Geoffrey T. Manley

Articles

CELLULAR/MOLECULAR

- 5403 **Evidence That Vesicles Undergo Compound Fusion on the Synaptic Ribbon**
Gary Matthews and Peter Sterling
- 5450 **Excitatory Actions of GABA in the Suprachiasmatic Nucleus**
Hee Joo Choi, C. Justin Lee, Analyne Schroeder, Yoon Sik Kim, Seung Hoon Jung, Jeong Sook Kim, Do Young Kim, Eun Ju Son, Hee Chul Han, Seung Kil Hong, Christopher S. Colwell, and Yang In Kim
- 5473 **P2X₁ and P2X₅ Subunits Form the Functional P2X Receptor in Mouse Cortical Astrocytes**
Ulyana Lalo, Yuri Pankratov, Sven P. Wichert, Moritz J. Rossner, R. Alan North, Frank Kirchhoff, and Alexei Verkhratsky
- 5570 **Ablation of Kv3.1 and Kv3.3 Potassium Channels Disrupts Thalamocortical Oscillations *In Vitro* and *In Vivo***
Felipe Espinosa, Miguel A. Torres-Vega, Gerald A. Marks, and Rolf H. Joho
- 5582 **Rational Optimization and Imaging *In Vivo* of a Genetically Encoded Optical Voltage Reporter**
Lucas Sjulson and Gero Miesenböck
- 5594 **CAPS Facilitates Filling of the Rapidly Releasable Pool of Large Dense-Core Vesicles**
Yuan Yuan Liu, Claudia Schirra, David R. Stevens, Ulf Matti, Dina Speidel, Detlef Hof, Dieter Bruns, Nils Brose, and Jens Rettig

DEVELOPMENT/PLASTICITY/REPAIR

- 5547 **GABA Regulates Excitatory Synapse Formation in the Neocortex via NMDA Receptor Activation**
Doris D. Wang and Arnold R. Kriegstein

- 5611 **Postsynaptic Action of Brain-Derived Neurotrophic Factor Attenuates $\alpha 7$ Nicotinic Acetylcholine Receptor-Mediated Responses in Hippocampal Interneurons**
Catarina C. Fernandes, António Pinto-Duarte, Joaquim Alexandre Ribeiro, and Ana M. Sebastião

BEHAVIORAL/SYSTEMS/COGNITIVE

- 5412 **Dynamic Spectrotemporal Feature Selectivity in the Auditory Midbrain**
Nicholas A. Lesica and Benedikt Grothe
- 5433 **Agouti-Related Peptide and MC3/4 Receptor Agonists Both Inhibit Excitatory Hypothalamic Ventromedial Nucleus Neurons**
Li-Ying Fu and Anthony N. van den Pol
- 5465 **Blockade of Endogenous Opioid Neurotransmission Enhances Acquisition of Conditioned Fear in Humans**
Falk Eippert, Ulrike Bingel, Eszter Schoell, Juliana Yacubian, and Christian Büchel
- 5481 **Midbrain Auditory Neurons Integrate Excitation and Inhibition to Generate Duration Selectivity: An *In Vivo* Whole-Cell Patch Study in Anurans**
Christopher J. Leary, Christofer J. Edwards, and Gary J. Rose
- 5494 **Action-Based Body Maps in the Spinal Cord Emerge from a Transitory Floating Organization**
Marcus Granmo, Per Petersson, and Jens Schouenborg
- 5513 **Visual-Procedural Memory Consolidation during Sleep Blocked by Glutamatergic Receptor Antagonists**
Steffen Gais, Björn Rasch, Ullrich Wagner, and Jan Born
- 5519 **Lapsing during Sleep Deprivation Is Associated with Distributed Changes in Brain Activation**
Michael W. L. Chee, Jiat Chow Tan, Hui Zheng, Sarayu Parimal, Daniel H. Weissman, Vitali Zagorodnov, and David F. Dinges
- 5529 **Prefrontal-Inferotemporal Interaction Is Not Always Necessary for Reversal Learning**
Charles R. E. Wilson and David Gaffan
- 5539 **Increased Dopamine Level Enhances Male-Male Courtship in *Drosophila***
Tong Liu, Laurence Dartevielle, Chunyan Yuan, Hongping Wei, Ying Wang, Jean-François Ferveur, and Aike Guo
- 5602 **Stress Impairs Reconsolidation of Drug Memory via Glucocorticoid Receptors in the Basolateral Amygdala**
Xiao-Yi Wang, Mei Zhao, Udi E. Ghitza, Yan-Qin Li, and Lin Lu

NEUROBIOLOGY OF DISEASE

- 5422 **Response of a Neuronal Model of Tuberous Sclerosis to Mammalian Target of Rapamycin (mTOR) Inhibitors: Effects on mTORC1 and Akt Signaling Lead to Improved Survival and Function**
Lynsey Meikle, Kristen Pollizzi, Anna Egnor, Ioannis Kramvis, Heidi Lane, Mustafa Sahin, and David J. Kwiatkowski
- 5504 **Recurrent Collateral Connections of Striatal Medium Spiny Neurons Are Disrupted in Models of Parkinson's Disease**
Stefano Taverna, Ema Ilijic, and D. James Surmeier
- 5559 **CITED2 Signals through Peroxisome Proliferator-Activated Receptor- γ to Regulate Death of Cortical Neurons after DNA Damage**
Yasmilde Rodriguez Gonzalez, Yi Zhang, Doreh Behzadpoor, Sean Cregan, Simon Bamforth, Ruth S. Slack, and David S. Park

5619 **Erratum:** In the article “Low-Serotonin Levels Increase Delayed Reward Discounting in Humans” by Nicolas Schweighofer, Mathieu Bertin, Kazuhiro Shishida, Yasumasa Okamoto, Saori C. Tanaka, Shigeto Yamawaki, and Kenji Doya, which appeared on pages 4528 – 4532 of the April 23, 2008 issue, the color legend in Figure 2 did not match the conditions of the experiment. In the bar graphs, the left bars (gray) should represent the depletion condition, the middle bars (black) should represent the control condition, and the right bars (white) should represent the loading condition. The correct Figure 2 is printed in this issue.

Correction: In the article “Involvement of the Basal Ganglia and Cerebellar Motor Pathways in the Preparation of Self-Initiated and Externally Triggered Movements in Humans” by Jamie Purzner, Guillermo O. Paradiso, Danny Cunic, Jean A. Saint-Cyr, Tasnuva Hoque, Andres M. Lozano, Anthony E. Lang, Elena Moro, Mojgan Hodaie, Filomena Mazzella, and Robert Chen, which appeared on pages 6029 – 6036 of the May 30, 2007 issue, although the authors described the results as confirming their results from previous studies in a different cohort of patients, one of the patients described in the article (patient 11) was also included in the earlier cohort [patient 5 in Paradiso G, Cunic D, Saint-Cyr JA, Hoque T, Lozano AM, Lang AE, Chen R (2004) Involvement of human thalamus in the preparation of self-paced movement. *Brain* 127:2717–2731].

Persons interested in becoming members of the Society for Neuroscience should contact the Membership Department, Society for Neuroscience, 1121 14th St., NW, Suite 1010, Washington, DC 20005, phone 202-962-4000.

Instructions for Authors are available at <http://www.jneurosci.org/misc/itoa.shtml>. Authors should refer to these Instructions online for recent changes that are made periodically.

Brief Communications Instructions for Authors are available via Internet (http://www.jneurosci.org/misc/ifa_bc.shtml).

Submissions should be submitted online using the following url: <http://sfn.manuscriptcentral.com>. Please contact the Central Office, via phone, fax, or e-mail with any questions. Our contact information is as follows: phone, 202-962-4000; fax, 202-962-4945; e-mail, jn@sfn.org.