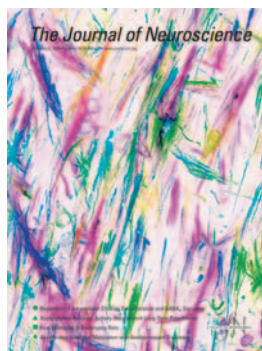


The Journal of Neuroscience

February 6, 2008 • Volume 28 Number 6 www.jneurosci.org



Cover legend: Confocal images of white matter axons and glial cells labeled with the multi-diolistic technique. Beads of various mixtures of DiO, Dil, and DiD were delivered to the preparation using a gene gun. Images were acquired by Selva Baltan and Jamie Grutzendler and pseudocolored by NancyAnn Oberheim. For more information, see the article by Baltan et al. in this issue (pages 1479-1489).

i This Week in The Journal

Brief Communications

- 1398 **Beyond Feeling: Chronic Pain Hurts the Brain, Disrupting the Default-Mode Network Dynamics**
Marwan N. Baliki, Paul Y. Geha, A. Vania Apkarian, and Dante R. Chialvo
- 1404 **Chronic Exposure to Nerve Growth Factor Increases Acetylcholine and Glutamate Release from Cholinergic Neurons of the Rat Medial Septum and Diagonal Band of Broca via Mechanisms Mediated by p75^{NTR}**
Carey Y. L. Huh, Marc Danik, Frédéric Manseau, Louis-Eric Trudeau, and Sylvain Williams
- 1421 **Which GABA_A Receptor Subunits Are Necessary for Tonic Inhibition in the Hippocampus?**
Joseph Glykys, Edward O. Mann, and Istvan Mody
- 1490 **Developing Postmitotic Mammalian Neurons *In Vivo* Lacking Apaf-1 Undergo Programmed Cell Death by a Caspase-Independent, Nonapoptotic Pathway Involving Autophagy**
Ronald W. Oppenheim, Klas Blomgren, Douglas W. Ethell, Masato Koike, Masaaki Komatsu, David Prevette, Kevin A. Roth, Yasuo Uchiyama, Sharon Vinsant, and Changlian Zhu

Articles

CELLULAR/MOLECULAR

- 1291 **Kv3.3 Channels at the Purkinje Cell Soma Are Necessary for Generation of the Classical Complex Spike Waveform**
Edward Zagher, Eric J. Lang, and Bernardo Rudy
- 1301 **Thermodynamic Regulation of NKCC1-Mediated Cl⁻ Cotransport Underlies Plasticity of GABA_A Signaling in Neonatal Neurons**
Audrey C. Brumback and Kevin J. Staley
- 1331 **Light Adaptation in Salamander L-Cone Photoreceptors**
Frederick S. Soo, Peter B. Detwiler, and Fred Rieke
- 1356 **The Clustering of GABA_A Receptor Subtypes at Inhibitory Synapses is Facilitated via the Direct Binding of Receptor $\alpha 2$ Subunits to Gephyrin**
Verena Tretter, Tija C. Jacob, Jayanta Mukherjee, Jean-Marc Fritschy, Menelas N. Pangalos, and Stephen J. Moss
- 1427 **Quantitative Cortical Mapping of Fractional Anisotropy in Developing Rat Brains**
Hao Huang, Akria Yamamoto, Mir Ahamed Hossain, Laurent Younes, and Susumu Mori

- 1444 **Role of Protein Phosphatase 2A in Regulating the Visual Signaling in *Drosophila***
Ning Wang, Hung-Tat Leung, William L. Pak, Yonatan T. Carl,
Brian E. Wadzinski, and Bih-Hwa Shieh
- 1460 **Differential Regulation of Synaptic Plasticity and Cerebellar Motor Learning by the C-Terminal PDZ-Binding Motif of GluR δ 2**
Wataru Kakegawa, Taisuke Miyazaki, Kyoichi Emi, Keiko Matsuda,
Kazuhisa Kohda, Junko Motohashi, Masayoshi Mishina, Shigenori Kawahara,
Masahiko Watanabe, and Michisuke Yuzaki
- 1498 **Acid Sensing Ion Channels in Dorsal Spinal Cord Neurons**
Anne Baron, Nicolas Voilley, Michel Lazdunski, and Eric Lingueglia

DEVELOPMENT/PLASTICITY/REPAIR

- 1469 **Cholinergic-Mediated IP₃-Receptor Activation Induces Long-Lasting Synaptic Enhancement in CA1 Pyramidal Neurons**
David Fernández de Sevilla, Angel Núñez, Michel Borde, Roberto Malinow, and
Washington Buño

BEHAVIORAL/SYSTEMS/COGNITIVE

- 1271 **Multidigit Movement Synergies of the Human Hand in an Unconstrained Haptic Exploration Task**
Pramodsingh H. Thakur, Amy J. Bastian, and Steven S. Hsiao
- 1282 **The Effect of Temporary Amygdala Inactivation on Extinction and Reextinction of Fear in the Developing Rat: Unlearning as a Potential Mechanism for Extinction Early in Development**
Jee Hyun Kim and Rick Richardson
- 1313 **Mapping White Matter Integrity and Neurobehavioral Correlates in Children with Fetal Alcohol Spectrum Disorders**
Elizabeth R. Sowell, Arianne Johnson, Eric Kan, Lisa H. Lu,
John Darrell Van Horn, Arthur W. Toga, Mary J. O'Connor, and
Susan Y. Bookheimer
- 1320 **Cysteine-Rich Protein 2, a Novel Downstream Effector of cGMP/cGMP-Dependent Protein Kinase I-Mediated Persistent Inflammatory Pain**
Achim Schmidtke, Wei Gao, Matthias Sausbier, Inga Rauhmeier, Ulrike Sausbier,
Ellen Niederberger, Klaus Scholich, Andrea Huber, Winfried Neuhuber,
Hans-Dieter Allescher, Franz Hofmann, Irmgard Tegeder, Peter Ruth, and
Gerd Geisslinger
- 1343 **The Effect of Middle Temporal Spike Phase on Sensory Encoding and Correlates with Behavior during a Motion Detection Task**
Nicolas Y. Masse and Erik P. Cook
- 1366 **Neural Control of Motion-to-Force Transitions with the Fingertip**
Madhusudhan Venkadesan and Francisco J. Valero-Cuevas
- 1385 **Endocannabinoid Signaling Mediates Cocaine-Induced Inhibitory Synaptic Plasticity in Midbrain Dopamine Neurons**
Bin Pan, Cecilia J. Hillard, and Qing-song Liu
- 1434 **Cue-Elicited Reward-Seeking Requires Extracellular Signal-Regulated Kinase Activation in the Nucleus Accumbens**
Michael W. Shiflett, Ross P. Martini, Jocelyn C. Mauna, Rebecca L. Foster,
Eloise Peet, and Edda Thiels
- 1509 **A Synaptic Basis for Auditory-Vocal Integration in the Songbird**
Eric E. Bauer, Melissa J. Coleman, Todd F. Roberts, Arani Roy,
Jonathan F. Prather, and Richard Mooney
- 1523 **Stimulus-Specific Adaptations in the Gaze Control System of the Barn Owl**
Amit Reches and Yoram Gutfreund

NEUROBIOLOGY OF DISEASE

- 1374 Chronic Fluoxetine Stimulates Maturation and Synaptic Plasticity of Adult-Born Hippocampal Granule Cells**
Jing-Wen Wang, Denis J. David, James E. Monckton, Fortunato Battaglia, and René Hen
- 1410 A Systems Level Analysis of Transcriptional Changes in Alzheimer's Disease and Normal Aging**
Jeremy A. Miller, Michael C. Oldham, and Daniel H. Geschwind
- 1452 Intron-3 Retention/Splicing Controls Neuronal Expression of Apolipoprotein E in the CNS**
Qin Xu, David Walker, Aubrey Bernardo, Jens Brodbeck, Maureen E. Balestra, and Yadong Huang
- 1479 White Matter Vulnerability to Ischemic Injury Increases with Age Because of Enhanced Excitotoxicity**
Selva Baltan, Elaine F. Besancon, Brianna Mbow, ZuCheng Ye, Margaret A. Hamner, and Bruce R. Ransom

Corrections: In the article "Generation of Distinct Types of Periglomerular Olfactory Bulb Interneurons during Development and in Adult Mice: Implication for Intrinsic Properties of the Subventricular Zone Progenitor Population" by Silvia De Marchis, Serena Bovetti, Barbara Carletti, Yi-Chun Hsieh, Donatella Garzotto, Paolo Peretto, Aldo Fasolo, Adam C. Puche, and Ferdinando Rossi, which appeared on pages 657–664 of the January 17, 2007 issue, panels *D* and *F* in Figure 4 were erroneously labeled; they should have been labeled TH and CB, respectively. Also, in legend of the figure, the statement "*D–N*, Representative images of EGFP-positive cells double stained for CB (*D, G, L*), CR (*E, H, M*), and TH (*F, I, N*)" should read "*D–N*, Representative images of EGFP-positive cells double stained for TH (*D, G, L*), CR (*E, H, M*), and CB (*F, I, N*)."

In the article "Regulation of Spine Development by Semaphorin3A through Cyclin-Dependent Kinase 5 Phosphorylation of Collapsin Response Mediator Protein 1" by Naoya Yamashita, Asa Morita, Yutaka Uchida, Fumio Nakamura, Hiroshi Usui, Toshio Ohshima, Masahiko Taniguchi, Jérôme Honnorat, Nicole Thomasset, Kohtaro Takei, Takuya Takahashi, Pappachan Kolattukudy, and Yoshio Goshima, which appeared on pages 12546–12554 of the November 14, 2007 issue, Figure 1 contained photomicrographs that were previously published in Figure 7 of the article "Regulation of Dendritic Branching and Spine Maturation by Semaphorin3A-Fyn Signaling" by Asa Morita, Naoya Yamashita, Yukio Sasaki, Yutaka Uchida, Oumi Nakajima, Fumio Nakamura, Takeshi Yagi, Masahiko Taniguchi, Hiroshi Usui, Ritsuko Katoh-Semba, Kohtaro Takei, and Yoshio Goshima, which appeared on pages 2971–2980 of the March 15, 2006 issue. The authors acknowledge that portions of this figure were duplicated without copyright permission or proper acknowledgement required by the Guidelines for Responsible Conduct Regarding Scientific Communication of the Society for Neuroscience.

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.