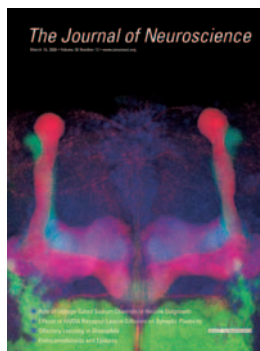


The Journal of Neuroscience

March 19, 2008 • Volume 28 Number 12 www.jneurosci.org



Cover legend: Projected view of a confocal micrograph of the mushroom bodies and antennal lobes from a *Drosophila* brain triple-labeled with c305a;uas-CD8::GFP (green) and anti-FASII (red) anti-TRIO (blue) antibodies. Image courtesy of Benjamin Leung. For more information, see the article by Krashes and Waddell in this issue (pages 3103–3113).

i This Week in The Journal

Toolbox

- 2959 **Serial Section Scanning Electron Microscopy of Adult Brain Tissue Using Focused Ion Beam Milling**
Graham Knott, Herschel Marchman, David Wall, and Ben Lich

Journal Club

- 2965 **Don't Let It Slip: Predictive Control of Grip Force After Changes in Task Goals**
Pratik Mutha and Britne Shabbott
- 2967 **Cocaine Experience Guides Dynamic Changes in AMPA Receptors within the Nucleus Accumbens**
Joshua L. Jones

Brief Communications

- 2970 **A Critical Role of the Adenosine A_{2A} Receptor in Extrastriatal Neurons in Modulating Psychomotor Activity as Revealed by Opposite Phenotypes of Striatum and Forebrain A_{2A} Receptor Knock-Outs**
Hai-Ying Shen, Joana E. Coelho, Nobuhisa Ohtsuka, Paula M. Canas, Yuan-Ji Day, Qing-Yuan Huang Nelson Rebola, Liqun Yu, Detlev Boison, Rodrigo A. Cunha, Joel Linden, Joe Z. Tsien, and Jiang-Fan Chen
- 3071 **Orexin Signaling Mediates the Antidepressant-Like Effect of Calorie Restriction**
Michael Lutter, Vaishnav Krishnan, Scott J. Russo, Saendy Jung, Colleen A. McClung, and Eric J. Nestler
- 3202 **Hypocretin-1 Potentiates NMDA Receptor-Mediated Somatodendritic Secretion from Locus Ceruleus Neurons**
Xiao-Wei Chen, Yu Mu, Hong-Ping Huang, Ning Guo, Bo Zhang, Shuang-Yi Fan, Jia-Xiang Xiong, Shi-Rong Wang, Wei Xiong, Wei Huang, Tao Liu, Liang-Hong Zheng, Claire Xi Zhang, Li-Huan Li, Zheng-Ping Yu, Zhi-An Hu, Zhuan Zhou

Articles

CELLULAR/MOLECULAR

- 3090 **Structural Correlates of Efficient GABAergic Transmission in the Basal Ganglia–Thalamus Pathway**
Ágnes L. Bodor, Kristóf Giber, Zita Rovó, István Ulbert, and László Acsády
- 3150 **Mobility and Turnover of Vesicles at the Synaptic Ribbon**
Lisamarie LoGiudice, Peter Sterling, and Gary Matthews

- 3159 **Deafferentation-Induced Activation of NFAT (Nuclear Factor of Activated T-Cells) in Cochlear Nucleus Neurons during a Developmental Critical Period: A Role for NFATc4-Dependent Apoptosis in the CNS**
Jessie I. Luoma and Lance Zirpel
- 3190 **Phosphorylation of Sodium Channel Na_v1.8 by p38 Mitogen-Activated Protein Kinase Increases Current Density in Dorsal Root Ganglion Neurons**
Andy Hudmon, Jin-Sung Choi, Lynda Tyrrell, Joel A. Black, Anthony M. Rush, Stephen G. Waxman, and Sulayman D. Dib-Hajj
- 3209 **Competition between Calcium-Activated K⁺ Channels Determines Cholinergic Action on Firing Properties of Basolateral Amygdala Projection Neurons**
John M. Power and Pankaj Sah
- 3246 **Voltage-Gated Na⁺ Channel β1 Subunit-Mediated Neurite Outgrowth Requires Fyn Kinase and Contributes to Postnatal CNS Development *In Vivo***
William J. Brackenbury, Tigwa H. Davis, Chunling Chen, Emily A. Slat, Matthew J. Detrow, Travis L. Dickendesher, Barbara Ranscht, and Lori L. Isom

DEVELOPMENT/PLASTICITY/REPAIR

- 3060 **Synaptic Metaplasticity through NMDA Receptor Lateral Diffusion**
Jiang Zhao, Yi Peng, Zhuo Xu, Rong-qing Chen, Qin-hua Gu, Zheng Chen, and Wei Lu
- 3123 **Evidence for Muscle-Dependent Neuromuscular Synaptic Site Determination in Mammals**
Vita M. Vock, Olga N. Ponomareva, and Mendell Rimer

BEHAVIORAL/SYSTEMS/COGNITIVE

- 2991 **Saccade Target Selection in the Superior Colliculus: A Signal Detection Theory Approach**
Byoungsoon Kim and Michele A. Basso
- 3008 **Patterns of Bidirectional Communication between Cortex and Basal Ganglia during Movement in Patients with Parkinson Disease**
Elodie Lalo, Stéphane Thobois, Andrew Sharott, Gustavo Polo, Patrick Mertens, Alek Pogosyan, and Peter Brown
- 3017 **Bounded Integration in Parietal Cortex Underlies Decisions Even When Viewing Duration Is Dictated by the Environment**
Roosbeh Kiani, Timothy D. Hanks, and Michael N. Shadlen
- 3030 **Neural Underpinnings of Gesture Discrimination in Patients with Limb Apraxia**
Mariella Pazzaglia, Nicola Smania, Elisabetta Corato, and Salvatore Maria Aglioti
- 3076 **Differential Columnar Processing in Local Circuits of Barrel and Insular Cortices**
Hajime Sato, Yasushi Shimanuki, Mitsuru Saito, Hiroki Toyoda, Takashi Nokubi, Yoshinobu Maeda, Takashi Yamamoto, and Youngnam Kang
- 3103 **Rapid Consolidation to a *radish* and Protein Synthesis-Dependent Long-Term Memory after Single-Session Appetitive Olfactory Conditioning in *Drosophila***
Michael J. Krashes and Scott Waddell
- 3131 **Nonlinear Integration of Binocular Optic Flow by DNOVS2, A Descending Neuron of the Fly**
Adrian Wertz, Alexander Borst, and Juergen Haag
- 3170 **Glutamate Release in the Nucleus Accumbens Core Is Necessary for Heroin Seeking**
Ryan T. LaLumiere and Peter W. Kalivas
- 3178 **Design of a Neuronal Array**
Bart G. Borghuis, Charles P. Ratliff, Robert G. Smith, Peter Sterling, and Vijay Balasubramanian
- 3227 **Callosal Contributions to Simultaneous Bimanual Finger Movements**
Laura Bonzano, Andrea Tacchino, Luca Roccatagliata, Giovanni Abbruzzese, Giovanni Luigi Mancardi, and Marco Bove

NEUROBIOLOGY OF DISEASE

- 2976 **Downregulation of the CB₁ Cannabinoid Receptor and Related Molecular Elements of the Endocannabinoid System in Epileptic Human Hippocampus**
Anikó Ludányi, Loránd Erőss, Sándor Czirják, János Vajda, Péter Halász, Masahiko Watanabe, Miklós Palkovits, Zsófia Maglóczky, Tamás F. Freund, and István Katona
- 3042 **Postmortem Brain Tissue of Depressed Suicides Reveals Increased Gs α Localization in Lipid Raft Domains Where It Is Less Likely to Activate Adenylyl Cyclase**
Robert J. Donati, Yogesh Dwivedi, Rosalinda C. Roberts, Robert R. Conley, Ghanshyam N. Pandey, and Mark M. Rasenick
- 3051 **Lack of Pathology in a Triple Transgenic Mouse Model of Alzheimer's Disease after Overexpression of the Anti-Apoptotic Protein Bcl-2**
Troy T. Rohn, Veera Vyas, Tatiana Hernandez-Estrada, Kathryn E. Nichol, Lori-Ann Christie, and Elizabeth Head
- 3114 **Zinc and 4-Hydroxy-2-Nonenal Mediate Lysosomal Membrane Permeabilization Induced by H₂O₂ in Cultured Hippocampal Neurons**
Jung Jin Hwang, Sook-Jeong Lee, Tae-Youn Kim, Jae-Hyung Cho, and Jae-Young Koh
- 3141 **Methylprednisolone Protects Oligodendrocytes But Not Neurons after Spinal Cord Injury**
Jin-Moo Lee, Ping Yan, Qingli Xiao, Shawei Chen, Kuang-Yung Lee, Chung Y. Hsu, and Jan Xu
- 3221 **Mutational Analysis Establishes a Critical Role for the N Terminus of Fragile X Mental Retardation Protein FMRP**
Simon P. Reeve, Xinda Lin, Bahar H. Sahin, Fangfang Jiang, Aiyu Yao, Zhihua Liu, Hui Zhi, Kendal Broadie, Wei Li, Angela Giangrande, Bassem A. Hassan, and Yong Q. Zhang
- 3234 **Enhanced Tau Phosphorylation in the Hippocampus of Mice Treated with 3,4-Methylenedioxymethamphetamine ("Ecstasy")**
Carla L. Busceti, Francesca Biagioni, Barbara Rizzo, Giuseppe Battaglia, Marianna Storto, Carlo Cinque, Gemma Molinaro, Roberto Gradini, Andrea Caricasole, Anna Maria Canudas, Valeria Bruno, Ferdinando Nicoletti, and Francesco Fornai
- 3257 **Erratum:** In the article "Synapse-Specific Expression of Functional Presynaptic NMDA Receptors in Rat Somatosensory Cortex" by Daniel J. Brasier and Daniel E. Feldman, which appeared on pages 2199–2211 of the February 27, 2008 issue, there was a labeling error in Figure 5D. The labels "L4-L2/3" and "L2/3-L2/3" were reversed. The corrected Figure 5 is printed in this issue.

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.