The Journal of Neuroscience

September 13, 2006 • Volume 26 Number 37 www.jneurosci.org



Cover legend: Confocal immunofluorescence image of a whole-mount containing the bifurcation of rat glossopharyngeal and carotid sinus nerve reveals colocalization (yellow) of P2X4 purinergic subunit (green) in a cluster of neurofilament-positive (red) autonomic neurons that supply efferent inhibitory innervation to the chemosensory carotid body. For more information, see the article by Campanucci et al., this issue (pages 9482–9493).

i This Week in The Journal

Commentary

9349 Will Research Sharing Keep Pace with the Internet?
Richard K. Johnson

Journal Club

9352 Do We Understand the Emergent Dynamics of Grid Cell Activity?

Yoram Burak and Ila Fiete

Brief Communications

9434 DARPP-32 Involvement in the Photic Pathway of the Circadian System Lily Yan, Jessica M. Bobula, Per Svenningsson, Paul Greengard, and Rae Silver

Articles

CELLULAR/MOLECULAR

- 9355 Molecular Physiology of the Neural Circuit for Calcineurin-Dependent Associative Learning in *Caenorhabditis elegans* Atsushi Kuhara and Ikue Mori
- 9413 Receptor and Transmitter Release Properties Set the Time Course of Retinal Inhibition Erika D. Eggers and Peter D. Lukasiewicz
- 9471 The Transcriptional Activator Hypoxia Inducible Factor 2 (HIF-2/EPAS-1) Regulates the Oxygen-Dependent Expression of Erythropoietin in Cortical Astrocytes

 Juan C. Chavez, Oxana Baranova, Janice Lin, and Paola Pichiule
- 9482 Expression of Multiple P2X Receptors by Glossopharyngeal Neurons Projecting to Rat Carotid Body O₂-Chemoreceptors: Role in Nitric Oxide-Mediated Efferent Inhibition Verónica A. Campanucci, Min Zhang, Cathy Vollmer, and Colin A. Nurse
- Dissociable Systems for Gain- and Loss-Related Value Predictions and Errors of Prediction in the Human Brain
 Juliana Yacubian, Jan Gläscher, Katrin Schroeder, Tobias Sommer,
 Dieter F. Braus, and Christian Büchel
- 9579 Regulation of Store-Operated Calcium Entry by Calcium-Independent Phospholipase
 A₂ in Rat Cerebellar Astrocytes
 Karthika Singaravelu, Christian Lohr, and Joachim W. Deitmer

DEVELOPMENT/PLASTICITY/REPAIR

- 9404 Stromal-Derived Factor-1 (CXCL12) Regulates Laminar Position of Cajal-Retzius Cells in Normal and Dysplastic Brains

 Marcades E. Parades Guangnan Li, Oppri Bargar, Scott G. Barghan, and
 - Mercedes F. Paredes, Guangnan Li, Omri Berger, Scott C. Baraban, and Samuel J. Pleasure
- 9439 Estrogen Receptor Protein Interaction with Phosphatidylinositol 3-Kinase Leads to Activation of Phosphorylated Akt and Extracellular Signal-Regulated Kinase 1/2 in the Same Population of Cortical Neurons: A Unified Mechanism of Estrogen Action Paolo Mannella and Roberta Diaz Brinton
- 9462 Activated c-Jun N-Terminal Kinase Is Required for Axon Formation
 Anthony A. Oliva Jr, Coleen M. Atkins, Lily Copenagle, and Gary A. Banker
- 9512 Suppressor of Cytokine Signaling-3 Suppresses the Ability of Activated Signal Transducer and Activator of Transcription-3 to Stimulate Neurite Growth in Rat Primary Sensory Neurons

Tizong Miao, Dongsheng Wu, Yi Zhang, Xuenong Bo, Maria Cristina Subang, Ping Wang, and Peter M. Richardson

- 9548 Odorant Deprivation Reversibly Modulates Transsynaptic Changes in the NR2B-Mediated CREB Pathway in Mouse Piriform Cortex Hyun H. Kim, Adam C. Puche, and Frank L. Margolis
- High Levels of Cre Expression in Neuronal Progenitors Cause Defects in Brain
 Development Leading to Microencephaly and Hydrocephaly
 Paolo E. Forni, Claudio Scuoppo, Itaru Imayoshi, Riccardo Taulli, Walter Dastrù,
 Valentina Sala, Ulrich A. K. Betz, Patrizia Muzzi, Daniela Martinuzzi,
 Alessandro E. Vercelli, Ryoichiro Kageyama, and Carola Ponzetto

BEHAVIORAL/SYSTEMS/COGNITIVE

- 9376 Neural Dynamics in Monkey Parietal Reach Region Reflect Context-Specific Sensorimotor Transformations
 Alexander Gail and Richard A. Andersen
- 9385 TRPV1 Receptors in the CNS Play a Key Role in Broad-Spectrum Analgesia of TRPV1 Antagonists

M. Cui, P. Honore, C. Zhong, D. Gauvin, J. Mikusa, G. Hernandez, P. Chandran, A. Gomtsyan, B. Brown, E. K. Bayburt, K. Marsh, B. Bianchi, H. McDonald, W. Niforatos, T. R. Neelands, R. B. Moreland, M. W. Decker, C.-H. Lee, J. P. Sullivan, and C. R. Faltynek

- 9426 Homeostatic Regulation of Sleep: A Role for Preoptic Area Neurons Irma Gvilia, Feng Xu, Dennis McGinty, and Ronald Szymusiak
- 9494 α-Band Electroencephalographic Activity over Occipital Cortex Indexes Visuospatial Attention Bias and Predicts Visual Target Detection Gregor Thut, Annika Nietzel, Stephan A. Brandt, and Alvaro Pascual-Leone
- 9503 Context-Dependent Human Extinction Memory Is Mediated by a Ventromedial Prefrontal and Hippocampal Network
 Raffael Kalisch, Elian Korenfeld, Klaas E. Stephan, Nikolaus Weiskopf,
 Ben Seymour, and Raymond J. Dolan
- 9520 Paradoxical Facilitation of Object Recognition Memory after Infusion of Scopolamine into Perirhinal Cortex: Implications for Cholinergic System Function Boyer D. Winters, Lisa M. Saksida, and Timothy J. Bussey
- 9538 Layer-Specific Touch-Dependent Facilitation and Depression in the Somatosensory
 Cortex during Active Whisking
 Dori Derdikman, Chunxiu Yu, Sebastian Haidarliu, Knarik Bagdasarian,
 Amos Arieli, and Ehud Ahissar

- 9560 Postreactivation Glucocorticoids Impair Recall of Established Fear Memory Wen-Hui Cai, Jacqueline Blundell, Jie Han, Robert W. Greene, and Craig M. Powell
- 9567 Macaque V2 Neurons, But Not V1 Neurons, Show Choice-Related Activity Hendrikje Nienborg and Bruce G. Cumming

NEUROBIOLOGY OF DISEASE

9365 Blocking Soluble Tumor Necrosis Factor Signaling with Dominant-Negative Tumor Necrosis Factor Inhibitor Attenuates Loss of Dopaminergic Neurons in Models of Parkinson's Disease

Melissa K. McCoy, Terina N. Martinez, Kelly A. Ruhn, David E. Szymkowski, Christine G. Smith, Barry R. Botterman, Keith E. Tansey, and Malú G. Tansey

9394 Novel Agonist Monoclonal Antibodies Activate TrkB Receptors and Demonstrate Potent Neurotrophic Activities

Ming D. Qian, Jie Zhang, Xiang-Yang Tan, Andrew Wood, Davinder Gill, and Seongeun Cho

9448 Endothelial Proliferation and Increased Blood–Brain Barrier Permeability in the Basal Ganglia in a Rat Model of 3,4-Dihydroxyphenyl-L-Alanine-Induced Dyskinesia Jenny E. Westin, Hanna S. Lindgren, Jonathan Gardi, Jens Randel Nyengaard, Patrik Brundin, Paul Mohapel, and M. Angela Cenci

9603 Erratum

In the article "UNC-13 and UNC-10/Rim Localize Synaptic Vesicles to Specific Membrane Domains," by Robby M. Weimer, Elena O. Gracheva, Olivier Meyrignac, Kenneth G. Miller, Janet E. Richmond, and Jean-Louis Bessereau, which appeared on pages 8040 – 8047 of the August 2, 2006 issue, Figure 2 appeared in black and white, and should have appeared in color. The correct version of the figure and legend are printed in this issue.

9604 Erratum

In the article "Cocaine Enhances NMDA Receptor-Mediated Currents in Ventral Tegmental Area Cells via Dopamine $\rm D_5$ Receptor-Dependent Redistribution of NMDA Receptors," by Björn Schilström, Rami Yaka, Emanuela Argilli, Neesha Suvarna, Johanna Schumann, Billy T. Chen, Melissa Carman, Vineeta Singh, William S. Mailliard, Dorit Ron, and Antonello Bonci, which appeared on pages 8549 – 8558 of the August 16, 2006 issue, the Figure 5 that printed was not the final version of the figure. The corrected Figure 5 and legend are 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.