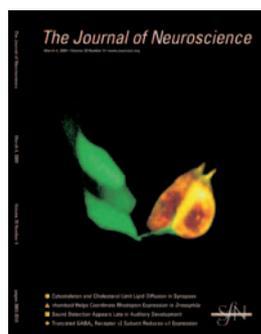


The Journal of Neuroscience

March 4, 2009 • Volume 29 Number 9 • www.jneurosci.org



Cover legend: An *in vivo* image of the inner ear in a transgenic zebrafish embryo expressing green fluorescent protein in VIIIth ganglion neurons. Orange-colored cells are anterior macular hair cells labeled with a fluorescent dye, FM1-43; their basal membranes are contacted by peripheral axons of VIIIth ganglion neurons. For more information, see the article by Tanimoto et al. in this issue (pages 2762–2767).

i This Week in The Journal

Journal Club

- 2663 **Dopamine D₁ and D₂ Receptor Family Contributions to Modafinil-Induced Wakefulness**
Jared W. Young

Brief Communications

- 2742 **Anticipatory Signatures of Voluntary Memory Suppression**
Simon Hanslmayr, Philipp Leibold, Bernhard Pastötter, and Karl-Heinz Bäuml
- 2748 **Identified Ankle Extensor and Flexor Motoneurons Display Different Firing Profiles in the Neonatal Rat**
Florence Cotel, Myriam Antri, Jean-Yves Barthe, and Didier Orsal
- 2762 **Auditory Input to CNS Is Acquired Coincidentally with Development of Inner Ear after Formation of Functional Afferent Pathway in Zebrafish**
Masashi Tanimoto, Yukiko Ota, Kazuki Horikawa, and Yoichi Oda
- 2768 **Reorganization of Visual Processing in Macular Degeneration Is Not Specific to the “Preferred Retinal Locus”**
Daniel D. Dilks, Chris I. Baker, Eli Peli, and Nancy Kanwisher
- 2774 **Mg²⁺ Imparts NMDA Receptor Subtype Selectivity to the Alzheimer’s Drug Memantine**
Shawn E. Kotermanski and Jon W. Johnson
- 2885 **Melatonin Transmits Photoperiodic Signals through the MT1 Melatonin Receptor**
Shinobu Yasuo, Takashi Yoshimura, Shizufumi Ebihara, and Horst-Werner Korf

Articles

CELLULAR/MOLECULAR

- 2824 **Histone Deacetylase Inhibitors Prevent p53-Dependent and p53-Independent Bax-Mediated Neuronal Apoptosis through Two Distinct Mechanisms**
Takuma Uo, Timothy D. Veenstra, and Richard S. Morrison
- 2890 **Synaptically Released Zinc Triggers Metabotropic Signaling via a Zinc-Sensing Receptor in the Hippocampus**
Limor Besser, Ehud Chorin, Israel Sekler, William F. Silverman, Stan Atkin, James T. Russell, and Michal Hershfinkel
- 2926 **Control of the Postsynaptic Membrane Viscosity**
Marianne Renner, Daniel Choquet, and Antoine Triller
- 2938 **Role of Calcineurin Signaling in Membrane Potential-Regulated Maturation of Cerebellar Granule Cells**
Makoto Okazawa, Haruka Abe, Michiko Katsukawa, Kouichirou Iijima, Tatsuto Kiwada, and Shigetada Nakanishi

- 2948 **PSD-95 Uncouples Dopamine–Glutamate Interaction in the D₁/PSD-95/NMDA Receptor Complex**
Jingping Zhang, Tai-Xiang Xu, Penelope J. Hallett, Masahiko Watanabe, Seth G. N. Grant, Ole Isacson, and Wei-Dong Yao

DEVELOPMENT/PLASTICITY/REPAIR

- 2666 ***rhomboid* Mediates Specification of Blue- and Green-Sensitive R8 Photoreceptor Cells in *Drosophila***
Denise A. Birkholz, Wen-Hai Chou, Meridee M. Phistry, and Steven G. Britt
- 2754 **Exercise Reduces GABA Synaptic Input onto Nucleus Tractus Solitarii Baroreceptor Second-Order Neurons via NK1 Receptor Internalization in Spontaneously Hypertensive Rats**
Chao-Yin Chen (陳昭吟), Andrea G. Bechtold, Jocelyn Tabor, and Ann C. Bonham
- 2902 **p27^{KIP1} Regulates Neurogenesis in the Rostral Migratory Stream and Olfactory Bulb of the Postnatal Mouse**
Xuekun Li, Xiaobing Tang, Beata Jablonska, Adan Aguirre, Vittorio Gallo, and Marla B. Luskin

BEHAVIORAL/SYSTEMS/COGNITIVE

- 2676 **Vasopressin 1b Receptor Knock-Out Impairs Memory for Temporal Order**
Loren M. DeVito, Rachael Konigsberg, Christine Lykken, Magdalena Sauvage, W. Scott Young III, and Howard Eichenbaum
- 2684 **Roles of the Insular Cortex in the Modulation of Pain: Insights from Brain Lesions**
Christopher J. Starr, Lumy Sawaki, George F. Wittenberg, Jonathan H. Burdette, Yoshitetsu Oshiro, Alexandre S. Quevedo, and Robert C. Coghill
- 2695 **GABAergic/Glutamatergic–Glial/Neuronal Interaction Contributes to Rapid Adaptation in Pacinian Corpuscles**
Lorraine Pawson, Laura T. Prestia, Greer K. Mahoney, Burak Güçlü, Philip J. Cox, and Adam K. Pack
- 2706 **Physiology and Morphology of Color-Opponent Ganglion Cells in a Retina Expressing a Dual Gradient of S and M Opsins**
Lu Yin, Robert G. Smith, Peter Sterling, and David H. Brainard
- 2725 **To See or Not to See: Prestimulus α Phase Predicts Visual Awareness**
Kyle E. Mathewson, Gabriele Gratton, Monica Fabiani, Diane M. Beck, and Tony Ro
- 2780 **Functional Groups in the Avian Auditory System**
Sarah M. N. Woolley, Patrick R. Gill, Thane Fremouw, and Frédéric E. Theunissen
- 2794 **Selective Aspiration or Neurotoxic Lesions of Orbital Frontal Areas 11 and 13 Spared Monkeys' Performance on the Object Discrimination Reversal Task**
Andy Kazama and Jocelyne Bachevalier
- 2857 **Differential Corticosteroid Modulation of Inhibitory Synaptic Currents in the Dorsal and Ventral Hippocampus**
Nicola Maggio and Menahem Segal
- 2867 **Identifying Heritable Brain Phenotypes in an Extended Pedigree of Vervet Monkeys**
Scott C. Fears, William P. Melega, Susan K. Service, Chris Lee, Kelly Chen, Zhuowen Tu, Matthew J. Jorgensen, Lynn A. Fairbanks, Rita M. Cantor, Nelson B. Freimer, and Roger P. Woods
- 2876 **Altered Dendritic Spine Plasticity in Cocaine-Withdrawn Rats**
Hao-wei Shen, Shigenobu Toda, Khaled Moussawi, Ashley Bouknight, Daniel S. Zahm, and Peter W. Kalivas

- 2915 **Activity of Neurochemically Heterogeneous Dopaminergic Neurons in the Substantia Nigra during Spontaneous and Driven Changes in Brain State**
Matthew T. C. Brown, Pablo Henny, J. Paul Bolam, and Peter J. Magill
- 2961 **Multiple Parietal Reach Regions in Humans: Cortical Representations for Visual and Proprioceptive Feedback during On-Line Reaching**
Flavia Filimon, Jonathan D. Nelson, Ruey-Song Huang, and Martin I. Sereno
- 2972 **Sensory Feedback Induced by Front-Leg Stepping Entrain the Activity of Central Pattern Generators in Caudal Segments of the Stick Insect Walking System**
Anke Borgmann, Scott L. Hooper, and Ansgar Büschges
- 2984 **DSCAM Deficiency Causes Loss of Pre-Inspiratory Neuron Synchronicity and Perinatal Death**
Kenji Amano, Morimitsu Fujii, Satoru Arata, Takuro Tojima, Masaharu Ogawa, Noriyuki Morita, Atsushi Shimohata, Teiichi Furuichi, Shigeyoshi Itohara, Hiroyuki Kamiguchi, Julie R. Korenberg, Akiko Arata, and Kazuhiro Yamakawa

NEUROBIOLOGY OF DISEASE

- 2733 **The *ataxia3* Mutation in the N-Terminal Cytoplasmic Domain of Sodium Channel Na_v1.6 Disrupts Intracellular Trafficking**
Lisa M. Sharkey, Xiaoyang Cheng, Valerie Drews, David A. Buchner, Julie M. Jones, Monica J. Justice, Stephen G. Waxman, Sulayman D. Dib-Hajj, and Miriam H. Meisler
- 2805 **Axial Diffusivity Is the Primary Correlate of Axonal Injury in the Experimental Autoimmune Encephalomyelitis Spinal Cord: A Quantitative Pixelwise Analysis**
Matthew D. Budde, Mingqiang Xie, Anne H. Cross, and Sheng-Kwei Song
- 2814 **Spatiotemporal Dynamics of Perfusion and Oximetry during Ictal Discharges in the Rat Neocortex**
Mingrui Zhao, Hongtao Ma, Minah Suh, and Theodore H. Schwartz
- 2833 **Two Molecular Pathways (NMD and ERAD) Contribute to a Genetic Epilepsy Associated with the GABA_A Receptor GABRA1 PTC Mutation, 975delC, S326fs328X**
Jing-Qiong Kang, Wangzhen Shen, and Robert L. Macdonald
- 2845 **The GABRG2 Mutation, Q351X, Associated with Generalized Epilepsy with Febrile Seizures Plus, Has Both Loss of Function and Dominant-Negative Suppression**
Jing-Qiong Kang, Wangzhen Shen, and Robert L. Macdonald
- 2997 **Regulation of Glucose Transporter 3 Surface Expression by the AMP-Activated Protein Kinase Mediates Tolerance to Glutamate Excitation in Neurons**
Petronela Weisová, Caoimhín G. Concannon, Marc Devocelle, Jochen H. M. Prehn, and Manus W. Ward
- 3009 **Erratum:** A new Figure 3 appears in this issue for the article "Cell Type-Specific Tuning of Hippocampal Interneuron Firing during Gamma Oscillations *In Vivo*" by John J. Tukker, Pablo Fuentealba, Katja Hartwich, Peter Somogyi, and Thomas Klausberger, which appeared on pages 8184 – 8189 of the August 1, 2007.

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://jneurosci.msubmit.net>. 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.