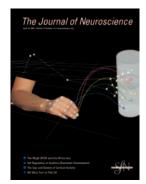
The Journal of Neuroscience

April 18, 2007 • Volume 27 Number 16 www.jneurosci.org



Cover legend: This motion capture image shows a human hand reaching toward and grasping an object. The spheres represent the reflective markers placed on the hand and arm to record movement kinematics. The colored lines leading the hand to the object represent the trajectories of the fingertips during reach. Humans are able to modulate fingertip contact points on an object when its properties can be anticipated. For more information, see the article by Lukos et al. in the April

4, 2007 issue (pages 3894 – 3903).

i This Week in The Journal

Journal Club

4231 Synaptotagmin: Is 2 Better than 1? Katherine Leitzell

Brief Communications

- 4297 Dorsal Radial Glia Generate Olfactory Bulb Interneurons in the Postnatal Murine Brain
 Rachel E. Ventura and James E. Goldman
- 4359 Vagal Regulation of Respiratory Clocks in Mice Hideki Bando, Takeshi Nishio, Gijsbertus T. J. van der Horst, Satoru Masubuchi, Yasuo Hisa, Hitoshi Okamura
- MrgD Activation Inhibits KCNQ/M-Currents and Contributes to Enhanced Neuronal Excitability
 Robert A. Crozier, Seena K. Ajit, Edward J. Kaftan, and Mark H. Pausch

Articles

CELLULAR/MOLECULAR

- 4303 Prostaglandin D₂ Protects Neonatal Mouse Brain from Hypoxic Ischemic Injury Hidetoshi Taniguchi, Ikuko Mohri, Hitomi Okabe-Arahori, Kosuke Aritake, Kazuko Wada, Takahisa Kanekiyo, Shuh Narumiya, Masahiro Nakayama, Keiichi Ozono, Yoshihiro Urade, and Masako Taniike
- 4413 A Calcium- and Calmodulin-Dependent Kinase Iα/ Microtubule Affinity Regulating Kinase 2 Signaling Cascade Mediates Calcium-Dependent Neurite Outgrowth Nataliya V. Uboha, Marc Flajolet, Angus C. Nairn, and Marina R. Picciotto
- 4435 Episodic Stimulation of α 1-Adrenoreceptors Induces Protein Kinase C-Dependent Persistent Changes in Motoneuronal Excitability

 Natalia V. Neverova, Shane A. Saywell, Lisa J. Nashold, Gordon S. Mitchell, and Jack L. Feldman
- 4443 Activation of TRPA1 Channel Facilitates Excitatory Synaptic Transmission in Substantia Gelatinosa Neurons of the Adult Rat Spinal Cord Masafumi Kosugi, Terumasa Nakatsuka, Tsugumi Fujita, Yasuo Kuroda, and Eiichi Kumamoto
- AKAP12 Regulates Human Blood–Retinal Barrier Formation by Downregulation of Hypoxia-Inducible Factor-1α
 Yoon Kyung Choi, Jeong Hun Kim, Woo Jean Kim, Hae Young Lee, Jeong Ae Park, Sae-Won Lee, Dae-Kwan Yoon, Hyun Ho Kim, Hum Chung, Young Suk Yu, and Kyu-Won Kim

DEVELOPMENT/PLASTICITY/REPAIR

4233 The Proneural Gene *Mash1* Specifies an Early Population of Telencephalic Oligodendrocytes

Carlos M. Parras, Charles Hunt, Michiya Sugimori, Masato Nakafuku, David Rowitch, and François Guillemot

4243 Processing of Reelin by Embryonic Neurons Is Important for Function in Tissue But Not in Dissociated Cultured Neurons

Yves Jossin, Lanrun Gui, and André M. Goffinet

4273 Changes in Sef Levels Influence Auditory Brainstem Development and Function
 Victoria E. Abraira, Naomi Hyun, Andrew F. Tucker, Donald E. Coling,
 M. Christian Brown, Cindy Lu, Gregory R. Hoffman, and Lisa V. Goodrich

4313 Shape Change Controls Supporting Cell Proliferation in Lesioned Mammalian Balance Epithelium

Jason R. Meyers and Jeffrey T. Corwin

4342 Netrin-1/DCC Signaling in Commissural Axon Guidance Requires Cell-Autonomous Expression of Heparan Sulfate

Yoshihiro Matsumoto, Fumitoshi Irie, Masaru Inatani, Marc Tessier-Lavigne, and Yu Yamaguchi

4460 Changes in Motoneuron Properties and Synaptic Inputs Related to Step Training after Spinal Cord Transection in Rats

Jeffrey C. Petruska, Ronaldo M. Ichiyama, Devin L. Jindrich, Eric D. Crown, Keith E. Tansey, Roland R. Roy, V. Reggie Edgerton, and Lorne M. Mendell

BEHAVIORAL/SYSTEMS/COGNITIVE

4261 Thalamocortical Up States: Differential Effects of Intrinsic and Extrinsic Cortical Inputs on Persistent Activity

Pavlos Rigas and Manuel A. Castro-Alamancos

4283 Differential Intrinsic Response Dynamics Determine Synaptic Signal Processing in Frog Vestibular Neurons

Mathieu Beraneck, Sandra Pfanzelt, Isabelle Vassias, Martin Rohregger, Nicolas Vibert, Pierre-Paul Vidal, Lee E. Moore, and Hans Straka

4334 How Do Primates Anticipate Uncertain Future Events?

Coralie de Hemptinne, Sylvie Nozaradan, Quentin Duvivier, Philippe Lefèvre, and Marcus Missal

4351 Entrainment to Feeding but Not to Light: Circadian Phenotype of VPAC₂ Receptor-Null Mice

W. John Sheward, Elizabeth S. Maywood, Karen L. French, Jacqueline M. Horn, Michael H. Hastings, Jonathan R. Seckl, Megan C. Holmes, and Anthony J. Harmar

4366 Independent Effects of Emotion and Working Memory Load on Visual Activation in the Lateral Occipital Complex

Jan Gläscher, Michael Rose, and Christian Büchel

4374 Novel and Distinct Operational Principles of Intralaminar Thalamic Neurons and Their Striatal Projections

Carolyn J. Lacey, J. Paul Bolam, and Peter J. Magill

4396 Receptor-Like Tyrosine Phosphatase PTP10D Is Required for Long-Term Memory in Drosophila

Meng Qian, Guohui Pan, Lu Sun, Chunhua Feng, Zuoping Xie, Tim Tully, and Yi Zhong

- Suppressed Neuronal Activity and Concurrent Arteriolar Vasoconstriction May Explain Negative Blood Oxygenation Level-Dependent Signal
 Anna Devor, Peifang Tian, Nozomi Nishimura, Ivan C. Teng,
 Elizabeth M. C. Hillman, S. N. Narayanan, Istvan Ulbert, David A. Boas,
 David Kleinfeld, and Anders M. Dale
- 4482 Glucocorticoids Enhance the Excitability of Principal Basolateral Amygdala Neurons Sevil Duvarci and Denis Paré

NEUROBIOLOGY OF DISEASE

- 4253 Selective Dysfunction of Hippocampal CA1 Astrocytes Contributes to Delayed Neuronal Damage after Transient Forebrain Ischemia Yi-Bing Ouyang, Ludmila A. Voloboueva, Li-Jun Xu, and Rona G. Giffard
- 4326 An Orally Active Catalytic Metalloporphyrin Protects against 1-Methyl-4-Phenyl-1,2,3,6-Tetrahydropyridine Neurotoxicity *In Vivo*Li-Ping Liang, Jie Huang, Ruth Fulton, Brian J. Day, and Manisha Patel
- 4385 Dietary Docosahexaenoic Acid and Docosapentaenoic Acid Ameliorate Amyloid-β and Tau Pathology via a Mechanism Involving Presenilin 1 Levels Kim N. Green, Hilda Martinez-Coria, Hasan Khashwji, Eileen B. Hall, Karin A. Yurko-Mauro, Lorie Ellis, and Frank M. LaFerla
- 4403 Systemic Inflammatory Stimulus Potentiates the Acute Phase and CXC Chemokine Responses to Experimental Stroke and Exacerbates Brain Damage via Interleukin-1-and Neutrophil-Dependent Mechanisms

 Barry W. McColl, Nancy J. Rothwell, and Stuart M. Allan
- 4424 Brain-Derived Neurotrophic Factor Restores Synaptic Plasticity in a Knock-In Mouse Model of Huntington's Disease

Gary Lynch, Eniko A. Kramar, Christopher S. Rex, Yousheng Jia, Danielle Chappas, Christine M. Gall, and Danielle A. Simmons

Correction: In the article "The Molecular Gatekeeper Dexras 1 Sculpts the Photic Responsiveness of the Mammalian Circadian Clock" by Hai-Ying M. Cheng, Heather Dziema, Joseph Papp, Daniel P. Mathur, Margaret Koletar, Margaret Koletar, Martin R. Ralph, Josef M. Penninger, and Karl Obrietan, which appeared on pages 12984–12995 of the December 13, 2006 issue, the acknowledgments that read "This work was supported by National Institutes of Health Grants MH62335 and NS47176 (K.O.)," should have read "This work was supported by National Institutes of Health Grants MH62335 and NS47176 (K.O.) and by Ohio State Neuroscience Center Core Grant 5P30NS045758."

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.