

# The Journal of Neuroscience

October 29, 2014 • Volume 34 Number 44 • www.jneurosci.org



**Cover legend:** Live labelling of recombinant mTRPA1 at the plasma membrane of a dorsal root ganglion sensory neuron from an Annexin A2 (AnxA2)-deficient mouse. Absence of AnxA2 increases membrane abundance of TRPA1, which is represented by the punctate labeling on the membrane of the cell body and processes. For more details, see the article by Avenali et al. (pages 14506–14516).

## i This Week in The Journal

### Journal Club

- 14503 **Oxytocin Treatment for Amphetamine-Induced Social Impairments**  
Dean S. Carson

### Brief Communications

- 14644 **Oncogenic Signaling Is Dominant to Cell of Origin and Dictates Astrocytic or Oligodendroglial Tumor Development from Oligodendrocyte Precursor Cells**  
Nanna Lindberg, Yiwen Jiang, Yuan Xie, Hamid Bolouri, Marianne Kastemar, Tommie Olofsson, Eric C. Holland, and Lene Uhrbom
- 14682 **Difference in the Gain in the Phototransduction Cascade Between Rods and Cones in Carp**  
Naoto Kawakami and Satoru Kawamura
- 14777 **Alcohol Binge Drinking during Adolescence or Dependence during Adulthood Reduces Prefrontal Myelin in Male Rats**  
Wanette M. Vargas, Lynn Bengston, Nicholas W. Gilpin, Brian W. Whitcomb, and Heather N. Richardson

### Articles

#### CELLULAR/MOLECULAR

- 14506 **Annexin A2 Regulates TRPA1-Dependent Nociception**  
Luca Avenali, Pratibha Narayanan, Tom Rouwette, Ilaria Cervellini, Michael Sereda, David Gomez-Varela, and Manuela Schmidt
- 14517 **Archaerhodopsin Voltage Imaging: Synaptic Calcium and BK Channels Stabilize Action Potential Repolarization at the *Drosophila* Neuromuscular Junction**  
Kevin J. Ford and Graeme W. Davis
- 14536 **Glutamatergic Signaling at the Vestibular Hair Cell Calyx Synapse**  
Soroush G. Sadeghi, Sonja J. Pyott, Zhou Yu, and Elisabeth Glowatzki
- 14606 **Interaction of the Cell Adhesion Molecule CHL1 with Vitronectin, Integrins, and the Plasminogen Activator Inhibitor-2 Promotes CHL1-Induced Neurite Outgrowth and Neuronal Migration**  
Jelena Katic, Gabriele Loers, Ralf Kleene, Nicole Karl, Carsten Schmidt, Friedrich Buck, Jaroslaw W. Zmijewski, Igor Jakovcevski, Klaus T. Preissner, and Melitta Schachner
- 14633 **Maturational Conversion of Dendritic Early Endosomes and Their Roles in L1-Mediated Axon Growth**  
Zofia M. Lasiecka, Chan Choo Yap, Joshua Katz, and Bettina Winckler

- 14687 **Munc13-3 Superprimes Synaptic Vesicles at Granule Cell-to-Basket Cell Synapses in the Mouse Cerebellum**  
Shimpei Ishiyama, Hartmut Schmidt, Benjamin H. Cooper, Nils Brose, and Jens Eilers
- 14752 **Functional Role of ATP Binding to Synapsin I In Synaptic Vesicle Trafficking and Release Dynamics**  
Marta Orlando, Gabriele Lignani, Luca Maragliano, Anna Fassio, Franco Onofri, Pietro Baldelli, Silvia Giovedì, and Fabio Benfenati
- 14793 **Coassembly and Coupling of SK2 Channels and mGlu<sub>5</sub> Receptors**  
Gloria García-Negredo, David Soto, Javier Llorente, Xavier Morató, Koen M.O. Galenkamp, Maricel Gómez-Soler, Víctor Fernández-Dueñas, Masahiko Watanabe, John P. Adelman, Ryuichi Shigemoto, Yugo Fukazawa, Rafael Luján, and Francisco Ciruela

#### DEVELOPMENT/PLASTICITY/REPAIR

- 14560 **Chronic Stress Impairs  $\alpha_1$ -Adrenoceptor-Induced Endocannabinoid-Dependent Synaptic Plasticity in the Dorsal Raphe Nucleus**  
Samir Haj-Dahmane and Roh-Yu Shen
- 14668 **Schwann Cells and Deleted in Colorectal Carcinoma Direct Regenerating Motor Axons Towards Their Original Path**  
Allison F. Rosenberg, Jesse Isaacman-Beck, Clara Franzini-Armstrong, and Michael Granato
- 14739 **BDNF-Dependent Plasticity Induced by Peripheral Inflammation in the Primary Sensory and the Cingulate Cortex Triggers Cold Allodynia and Reveals a Major Role for Endogenous BDNF As a Tuner of the Affective Aspect of Pain**  
Karine Thibault, Wee Khang Lin, Armelle Rancillac, Marie Fan, Thibaut Snollaerts, Vallier Sordoillet, Michel Hamon, George M. Smith, Zsolt Lenkei, and Sophie Pezet

#### SYSTEMS/CIRCUITS

- 14589 **Stimulus Dependence of Local Field Potential Spectra: Experiment versus Theory**  
Francesca Barbieri, Alberto Mazzoni, Nikos K. Logothetis, Stefano Panzeri, and Nicolas Brunel
- 14697 **Sleep Restriction Impairs Blood–Brain Barrier Function**  
Junyun He, Hung Hsuchou, Yi He, Abba J. Kastin, Yuping Wang, and Weihong Pan
- 14707 **Direct Bidirectional  $\mu$ -Opioid Control of Midbrain Dopamine Neurons**  
Elyssa B. Margolis, Gregory O. Hjelmstad, Wakako Fujita, and Howard L. Fields

#### BEHAVIORAL/COGNITIVE

- 14526 **Relative Valuation of Pain in Human Orbitofrontal Cortex**  
Joel S. Winston, Ivo Vlaev, Ben Seymour, Nick Chater, and Raymond J. Dolan
- 14571 **Apnea-Induced Rapid Eye Movement Sleep Disruption Impairs Human Spatial Navigational Memory**  
Andrew W. Varga, Akifumi Kishi, Janna Mantua, Jason Lim, Viachaslau Koushyk, David P. Leibert, Ricardo S. Osorio, David M. Rapoport, and Indu Ayappa
- 14578 **Eye Choice for Acquisition of Targets in Alternating Strabismus**  
John R. Economides, Daniel L. Adams, and Jonathan C. Horton
- 14624 **Genetic or Pharmacological Reduction of PERK Enhances Cortical-Dependent Taste Learning**  
Hadile Ounallah-Saad, Vijendra Sharma, Efrat Edry, and Kobi Rosenblum

- 14652 **Dissociable Roles of Right Inferior Frontal Cortex and Anterior Insula in Inhibitory Control: Evidence from Intrinsic and Task-Related Functional Parcellation, Connectivity, and Response Profile Analyses across Multiple Datasets**  
Weidong Cai, Srikanth Ryali, Tianwen Chen, Chiang-Shan R. Li, and Vinod Menon
- 14733 **Taking Action in the Face of Threat: Neural Synchronization Predicts Adaptive Coping**  
Katherine A. Collins, Avi Mendelsohn, Christopher K. Cain, and Daniela Schiller
- 14769 **Acute and Sustained Effects of Methylphenidate on Cognition and Presynaptic Dopamine Metabolism: An [<sup>18</sup>F]FDOPA PET Study**  
Ina Schabram, Karsten Henkel, Siamak Mohammadkhani Shali, Claudia Dietrich, Jörn Schmaljohann, Oliver Winz, Susanne Prinz, Lena Rademacher, Bernd Neumaier, Marc Felzen, Yoshitaka Kumakura, Paul Cumming, Felix M. Mottaghy, Gerhard Gründer, and Ingo Vernaleken
- 14783 **Distinct Roles for Alpha- and Beta-Band Oscillations during Mental Simulation of Goal-Directed Actions**  
Loek Brinkman, Arjen Stolk, H. Chris Dijkerman, Floris P. de Lange, and Ivan Toni
- 14803 **Transcranial Magnetic Stimulation of the Prefrontal Cortex in Awake Nonhuman Primates Evokes a Polysynaptic Neck Muscle Response That Reflects Oculomotor Activity at the Time of Stimulation**  
Chao Gu (顾超) and Brian D. Corneil

#### NEUROBIOLOGY OF DISEASE

- 14551 **Alpha-Band Hypersynchronization in Progressive Mild Cognitive Impairment: A Magnetoencephalography Study**  
María Eugenia López, Ricardo Bruña, Sara Aurtenetxe, José Ángel Pineda-Pardo, Alberto Marcos, Juan Arrazola, Ana Isabel Reinoso, Pedro Montejo, Ricardo Bajo, and Fernando Maestú
- 14717 **Unique Function of Kinesin Kif5A in Localization of Mitochondria in Axons**  
Philip D. Campbell, Kimberle Shen, Matthew R. Sapio, Thomas D. Glenn, William S. Talbot, and Florence L. Marlow

---

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](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](mailto:jn@sfn.org).