

The Journal of Neuroscience

December 8, 2010 • Volume 30 Number 49 • www.jneurosci.org



Cover legend: Multiple rows of sharp teeth cover a tongue-like structure, the radula, of the herbivore sea slug *Aplysia californica*. During grazing, the radula's movements are controlled by a neuronal network that incorporates a feedforward compensatory mechanism. For more information, see the article by Jing et al. in this issue (pages 16545–16558).

i This Week in The Journal

Toolbox

- 16409 Quantifying Translational Mobility in Neurons: Comparison between Current Optical Techniques**
Sally A. Kim, Hugo Sanabria, Michelle A. Digman, Enrico Gratton, Petra Schwille, Warren R. Zipfel, and M. Neal Waxham

Journal Club

- 16417 Decoding Modality-Independent Emotion Perception in Medial Prefrontal and Superior Temporal Cortex**
Philipp Kanske and Anna S. Hasting

Brief Communications

- 16453 Mesolimbic Dopamine Neurons in the Brain Reward Circuit Mediate Susceptibility to Social Defeat and Antidepressant Action**
Jun-Li Cao, Herbert E. Covington III, Allyson K. Friedman, Matthew B. Wilkinson, Jessica J. Walsh, Donald C. Cooper, Eric J. Nestler, and Ming-Hu Han
- 16509 Transgenic Targeting of Recombinant Rabies Virus Reveals Monosynaptic Connectivity of Specific Neurons**
Aldis P. Weible, Leslie Schwarcz, Ian R. Wickersham, Leah DeBlander, Haiyan Wu, Edward M. Callaway, H. Sebastian Seung, and Clifford G. Kentros

Articles

CELLULAR/MOLECULAR

- 16485 Neuronal Early Endosomes Require EHD1 for L1/NgCAM Trafficking**
Zofia M. Lasiecka, Chan Choo Yap, Steven Caplan, and Bettina Winckler
- 16514 The Interaction between Tropomyosin-Related Kinase B Receptors and Presynaptic Muscarinic Receptors Modulates Transmitter Release in Adult Rodent Motor Nerve Terminals**
Neus Garcia, Marta Tomàs, Manel M. Santafé, Nuria Besalduch, Maria A. Lanuza, and Josep Tomàs
- 16536 Involvement of TRPV2 Activation in Intestinal Movement through Nitric Oxide Production in Mice**
Hiroshi Mihara, Ammar Boudaka, Koji Shibasaki, Akihiro Yamanaka, Toshiro Sugiyama, and Makoto Tominaga

- 16651 **A Novel Auxiliary Subunit Critical to BK Channel Function in *Caenorhabditis elegans***
Bojun Chen, Qian Ge, Xiao-Ming Xia, Ping Liu, Sijie J. Wang, Haiying Zhan, Betty A. Eipper, and Zhao-Wen Wang
- 16679 **A Novel Form of Presynaptic Plasticity Based on the Fast Reactivation of Release Sites Switched Off during Low-Frequency Depression**
Frédéric Doussau, Yann Humeau, Fabio Benfenati, and Bernard Poulain
- 16699 **A Late-Phase, Long-Term Memory Trace Forms in the γ Neurons of *Drosophila* Mushroom Bodies after Olfactory Classical Conditioning**
David-Benjamin G. Akalal, Dinghui Yu, and Ronald L. Davis
- 16718 **Activity-Dependent Ubiquitination of GluA1 Mediates a Distinct AMPA Receptor Endocytosis and Sorting Pathway**
Lindsay A. Schwarz, Benjamin J. Hall, and Gentry N. Patrick

DEVELOPMENT/PLASTICITY/REPAIR

- 16437 **Calcium Binding to PICK1 Is Essential for the Intracellular Retention of AMPA Receptors Underlying Long-Term Depression**
Ami Citri, Samarjit Bhattacharyya, Cong Ma, Wade Morishita, Scarlett Fang, Josep Rizo, and Robert C. Malenka
- 16498 **Hyperpolarization-Activated Cyclic Nucleotide-Gated Channels in Olfactory Sensory Neurons Regulate Axon Extension and Glomerular Formation**
Arie S. Mobley, Alexandra M. Miller, Ricardo C. Araneda, Lydia R. Maurer, Frank Müller, and Charles A. Greer
- 16621 **DeltaA/DeltaD Regulate Multiple and Temporally Distinct Phases of Notch Signaling during Dopaminergic Neurogenesis in Zebrafish**
Julia Mahler, Alida Filippi, and Wolfgang Driever
- 16636 **A Refractory Period for Rejuvenating GABAergic Synaptic Transmission and Ocular Dominance Plasticity with Dark Exposure**
Shiyong Huang, Yu Gu, Elizabeth M. Quinlan, and Alfredo Kirkwood
- 16730 **Dependence of Serotonergic and Other Nonadrenergic Enteric Neurons on Norepinephrine Transporter Expression**
Zhishan Li, Marc G. Caron, Randy D. Blakely, Kara G. Margolis, and Michael D. Gershon

BEHAVIORAL/SYSTEMS/COGNITIVE

- 16429 **Myopic Discounting of Future Rewards after Medial Orbitofrontal Damage in Humans**
Manuela Sellitto, Elisa Ciaramelli, and Giuseppe di Pellegrino
- 16459 **Ligand-Directed Trafficking of the δ -Opioid Receptor *In Vivo*: Two Paths Toward Analgesic Tolerance**
Aminah A. Pradhan, Wendy Walwyn, Chihiro Nozaki, Dominique Filliol, Eric Erbs, Audrey Matifas, Christopher Evans, and Brigitte L. Kieffer
- 16475 **Stimulus-Specific Adaptation in Auditory Cortex Is an NMDA-Independent Process Distinct from the Sensory Novelty Encoded by the Mismatch Negativity**
Brandon J. Farley, Michael C. Quirk, James J. Doherty, and Edward P. Christian
- 16545 **Feedforward Compensation Mediated by the Central and Peripheral Actions of a Single Neuropeptide Discovered Using Representational Difference Analysis**
Jian Jing, Jonathan V. Sweedler, Elizabeth C. Cropper, Vera Alexeeva, Ji-Ho Park, Elena V. Romanova, Fang Xie, Nikolai C. Dembrow, Bjoern C. Ludwar, Klaudiusz R. Weiss, and Ferdinand S. Vilm

- 16567 **Dopamine D₁ Receptors and Nonlinear Probability Weighting in Risky Choice**
Hidehiko Takahashi, Hiroshi Matsui, Colin Camerer, Harumasa Takano, Fumitoshi Kodaka, Takashi Ideno, Shigetaka Okubo, Kazuhisa Takemura, Ryosuke Arakawa, Yoko Eguchi, Toshiya Murai, Yoshiro Okubo, Motoichiro Kato, Hiroshi Ito, and Tetsuya Suhara
- 16573 **Visual Receptive Field Properties of Neurons in the Superficial Superior Colliculus of the Mouse**
Lupeng Wang, Rashmi Sarnaik, Krsna Rangarajan, Xiaorong Liu, and Jianhua Cang
- 16585 **The Flexible Approach Hypothesis: Unification of Effort and Cue-Responding Hypotheses for the Role of Nucleus Accumbens Dopamine in the Activation of Reward-Seeking Behavior**
Saleem M. Nicola
- 16601 **Expectation and Surprise Determine Neural Population Responses in the Ventral Visual Stream**
Tobias Egner, Jim M. Monti, and Christopher Summerfield
- 16609 **Specific Brainstem Neurons Switch Each Other into Pacemaker Mode to Drive Movement by Activating NMDA Receptors**
Wen-Chang Li, Alan Roberts, and Stephen R. Soffe
- 16643 **Single-Trial Speech Suppression of Auditory Cortex Activity in Humans**
Adeen Flinker, Edward F. Chang, Heidi E. Kirsch, Nicholas M. Barbaro, Nathan E. Crone, and Robert T. Knight
- 16662 **Diverse Patterns of Odor Representation by Neurons in the Anterior Piriform Cortex of Awake Mice**
Cheng Zhan and Minmin Luo
- 16673 **Amygdala Reactivity in Healthy Adults Is Correlated with Prefrontal Cortical Thickness**
Lara C. Foland-Ross, Lori L. Altshuler, Susan Y. Bookheimer, Matthew D. Lieberman, Jennifer Townsend, Conor Penfold, Teena Moody, Kyle Ahlf, Jim K. Shen, Sarah K. Madsen, Paul E. Rasser, Arthur W. Toga, and Paul M. Thompson
- 16692 **Cortical Dynamics Underlying Face Completion in Human Visual System**
Juan Chen, Tiangang Zhou, Hua Yang, and Fang Fang
- 16709 **Effects of Parametrical and Trial-to-Trial Variation in Prior Probability Processing Revealed by Simultaneous Electroencephalogram/Functional Magnetic Resonance Imaging**
Christina Scheibe, Markus Ullsperger, Werner Sommer, and Hauke R. Heekeren
- 16741 **Cortical Processing of Dynamic Sound Envelope Transitions**
Yi Zhou and Xiaoqin Wang

NEUROBIOLOGY OF DISEASE

- 16419 **Phospholipase D2 Ablation Ameliorates Alzheimer's Disease-Linked Synaptic Dysfunction and Cognitive Deficits**
Tiago Gil Oliveira, Robin B. Chan, Huasong Tian, Mikael Laredo, Guanghou Shui, Agnieszka Staniszewski, Hong Zhang, Lili Wang, Tae-Wan Kim, Karen E. Duff, Markus R. Wenk, Ottavio Arancio, and Gilbert Di Paolo
- 16469 **An Engineered Zinc Finger Protein Activator of the Endogenous Glial Cell Line-Derived Neurotrophic Factor Gene Provides Functional Neuroprotection in a Rat Model of Parkinson's Disease**
Josee Laganieri, Adrian P. Kells, Jeffrey T. Lai, Dmitry Guschin, David E. Paschon, Xiangdong Meng, Lauren K. Fong, Qi Yu, Edward J. Rebar, Philip D. Gregory, Krystof S. Bankiewicz, John Forsayeth, and H. Steve Zhang

16523 Involvement of the Thalamic Parafascicular Nucleus in Mesial Temporal Lobe Epilepsy

Mélanie Langlois, Pierre-Olivier Polack, H el ene Bernard, Olivier David, St ephane Charpier, Antoine Depaulis, and Colin Deransart

16559 Immunotherapy Targeting Pathological Tau Prevents Cognitive Decline in a New Tangle Mouse Model

Allal Boutajangout, David Quartermain, and Einar M. Sigurdsson

Correction: In the article “Advances in Color Science: From Retina to Behavior” by Bevil R. Conway, Soumya Chatterjee, Greg D. Field, Gregory D. Horwitz, Elizabeth N. Johnson, Kowa Koida, and Katherine Mancuso, which appeared on pages 14955–14963 of the November 10, 2010 issue, there was an error in the Figure 3 legend. The second section in the last sentence of the legend should have read “How are the cone signals transformed by V1?” instead of “How are the cone cells transformed by V1?”

Correction: In the article “Estrogen Receptor β Activity Modulates Synaptic Signaling and Structure” by Deepak P. Srivastava, Kevin M. Woolfrey, Feng Liu, Nicholas J. Brandon, and Peter Penzes, which appeared on pages 13454–13460 of the October 6, 2010 issue, Nicholas J. Brandon’s affiliation was incorrectly listed as the Department of Psychiatry and Behavioral Sciences, Northwestern University Feinberg School of Medicine, Chicago, Illinois 60611. It should have been Neuroscience Research Unit, Pfizer Global Research and Development, Groton, Connecticut 06340.

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.