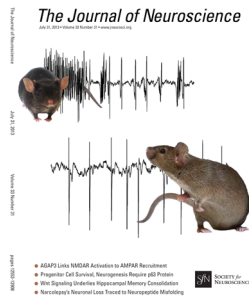


The Journal of Neuroscience

July 31, 2013 • Volume 33 Number 31 • www.jneurosci.org



Cover legend: Representative electroencephalography (EEG) traces from adult mice treated with either a nonbinding scrambled control antisense oligonucleotide (ASO; top) or a tau reducing ASO (bottom) following infusion of the GABA-antagonist Picrotoxin into the left hippocampus. Reducing total tau protein expression in the adult hippocampus substantially reduces the normalized spike frequency in this chemically induced seizure model. For more information, see DeVos et al. (pages 12887–12897).

i This Week in The Journal

Journal Club

- 12553 **Insights from a Nonvocal Learner on Social Communication**
Nancy F. Day and Elizabeth R. Fraley
- 12555 **Subcortical and Neocortical Mechanisms of Visual-Somatosensory Interplay**
Flavia Mancini

Brief Communications

- 12805 **Continuous Modulation of Action Potential Firing by a Unitary GABAergic Connection in the Globus Pallidus *In Vitro***
Jenia Bugaysen, Izhar Bar-Gad, and Alon Korngreen

Articles

CELLULAR/MOLECULAR

- 12586 **AGAP3 and Arf6 Regulate Trafficking of AMPA Receptors and Synaptic Plasticity**
Yuko Oku and Richard L. Huganir
- 12627 **Anandamide, Cannabinoid Type 1 Receptor, and NMDA Receptor Activation Mediate Non-Hebbian Presynaptically Expressed Long-Term Depression at the First Central Synapse for Visceral Afferent Fibers**
Abdessattar Khlaifia, Hanad Farah, Florian Gackiere, and Fabien Tell
- 12638 **Hydrogen Sulfide Selectively Potentiates Central Preganglionic Fast Nicotinic Synaptic Input in Mouse Superior Mesenteric Ganglion**
Lei Sha, David R. Linden, Gianrico Farrugia, and Joseph H. Szurszewski
- 12705 **Neuropeptide Y Gates a Stress-Induced, Long-Lasting Plasticity in the Sympathetic Nervous System**
Qian Wang, Manqi Wang, and Matthew D. Whim
- 12728 **USP47 and C Terminus of Hsp70-Interacting Protein (CHIP) Antagonistically Regulate Katanin-p60-Mediated Axonal Growth**
Seung Wook Yang, Kyu Hee Oh, Esther Park, Hyun Min Chang, Jung Mi Park, Min Woo Seong, Seung Hyeun Ka, Woo Keun Song, Dong Eun Park, Peter W. Baas, Young Joo Jeon, and Chin Ha Chung
- 12739 **Synapse-Associated Protein 97 Regulates the Membrane Properties of Fast-Spiking Parvalbumin Interneurons in the Visual Cortex**
Gulcan Akgul and Lonnie P. Wollmuth

- 12825 **Notch-Inducible Hyperphosphorylated CREB and Its Ultradian Oscillation in Long-Term Memory Formation**
Jiabin Zhang, Christopher J. Little, Daniel M. Tremmel, Jerry C. P. Yin, and Cedric S. Wesley

DEVELOPMENT/PLASTICITY/REPAIR

- 12569 **p63 Regulates Adult Neural Precursor and Newly Born Neuron Survival to Control Hippocampal-Dependent Behavior**
Gonzalo I. Cancino, Adelaide P. Yiu, Michael P. Fatt, Chandrasagar B. Dugani, Elsa R. Flores, Paul W. Frankland, Sheena A. Josselyn, Freda D. Miller, and David R. Kaplan
- 12764 **Independent Pathways Downstream of the Wnd/DLK MAPKKK Regulate Synaptic Structure, Axonal Transport, and Injury Signaling**
Susan Klinedinst, Xin Wang, Xin Xiong, Jill M. Haenfler, and Catherine A. Collins
- 12844 **Short-Term Learning Induces White Matter Plasticity in the Fornix**
Shir Hofstetter, Ido Tavor, Shimrit Tzur Moryosef, and Yaniv Assaf
- 12898 **Selective Effects of Baclofen on Use-Dependent Modulation of GABA_B Inhibition after Tetraplegia**
Melissa D. Barry, Karen L. Bunday, Robert Chen, and Monica A. Perez

SYSTEMS/CIRCUITS

- 12670 **Integrity of mGluR-LTD in the Associative/Commissural Inputs to CA3 Correlates with Successful Aging in Rats**
Sunggu Yang, Andrea Megill, Alvaro O. Ardiles, Sarah Ransom, Trinh Tran, Ming Teng Koh, Hey-Kyoung Lee, Michela Gallagher, and Alfredo Kirkwood
- 12689 **GnRH Neurons Elaborate a Long-Range Projection with Shared Axonal and Dendritic Functions**
Michel K. Herde, Karl J. Iremonger, Stephanie Constantin, and Allan E. Herbison
- 12698 **Systematic Regional Variations of GABA, Glutamine, and Glutamate Concentrations Follow Receptor Fingerprints of Human Cingulate Cortex**
Weiqiang Dou, Nicola Palomero-Gallagher, Marie-José van Tol, Jörn Kaufmann, Kai Zhong, Hans-Gert Bernstein, Hans-Jochen Heinze, Oliver Speck, and Martin Walter
- 12718 **Tyrosine Phosphorylation of GABA_A Receptor γ 2-Subunit Regulates Tonic and Phasic Inhibition in the Thalamus**
Francesca Nani, Damian P. Bright, Raquel Revilla-Sanchez, Verena Tretter, Stephen J. Moss, and Trevor G. Smart
- 12751 **Orientation-selective Responses in the Mouse Lateral Geniculate Nucleus**
Xinyu Zhao, Hui Chen, Xiaorong Liu, and Jianhua Cang
- 12851 **Elevated Correlations in Neuronal Ensembles of Mouse Auditory Cortex Following Parturition**
Gideon Rothschild, Lior Cohen, Adi Mizrahi, and Israel Nelken

BEHAVIORAL/COGNITIVE

- 12599 **Synaptic Transmission and Plasticity at Inputs to Murine Cerebellar Purkinje Cells Are Largely Dispensable for Standard Nonmotor Tasks**
Elisa Galliano, Jan-Willem Potters, Ype Elgersma, William Wisden, Steven A. Kushner, Chris I. De Zeeuw, and Freek E. Hoebeek
- 12619 **Canonical Wnt Signaling is Necessary for Object Recognition Memory Consolidation**
Ashley M. Fortress, Sarah L. Schram, Jennifer J. Tuscher, and Karyn M. Frick

- 12679 **Anterobasal Temporal Lobe Lesions Alter Recurrent Functional Connectivity within the Ventral Pathway during Naming**
Pablo Campo, Claudia Poch, Rafael Toledano, José Manuel Igoa, Mercedes Belinchón, Irene García-Morales, and Antonio Gil-Nagel
- 12779 **Structural and Functional Changes across the Visual Cortex of a Patient with Visual Form Agnosia**
Holly Bridge, Owen M. Thomas, Loredana Minini, Cristiana Cavina-Pratesi, A. David Milner, and Andrew J. Parker
- 12792 **Knockdown of Prodynorphin Gene Prevents Cognitive Decline, Reduces Anxiety, and Rescues Loss of Group 1 Metabotropic Glutamate Receptor Function in Aging**
Caroline Ménard, Yiu Chung Tse, Chelsea Cavanagh, Jean-Guy Chabot, Herbert Herzog, Christoph Schwarzer, Tak Pan Wong, and Rémi Quirion
- 12835 **Decoding the Neuroanatomical Basis of Reading Ability: A Multivoxel Morphometric Study**
Qinghua He, Gui Xue, Chunhui Chen, Chuansheng Chen, Zhong-Lin Lu, and Qi Dong
- 12862 **Reversal of Long-Term Potentiation-Like Plasticity Processes after Motor Learning Disrupts Skill Retention**
Gabriela Cantarero, Ashley Lloyd, and Pablo Celnik

NEUROBIOLOGY OF DISEASE

- 12557 **Nitric Oxide Mediates Selective Degeneration of Hypothalamic Orexin Neurons through Dysfunction of Protein Disulfide Isomerase**
Kanae Obukuro, Mizuki Nobunaga, Moeko Takigawa, Hiroshi Morioka, Akinori Hisatsune, Yoichiro Isohama, Hiroaki Shimokawa, Masato Tsutsui, and Hiroshi Katsuki
- 12647 **The LIM Domain Only 4 Protein Is a Metabolic Responsive Inhibitor of Protein Tyrosine Phosphatase 1B That Controls Hypothalamic Leptin Signaling**
Nihar R. Pandey, Xun Zhou, Zhaohong Qin, Tariq Zaman, Mariana Gomez-Smith, Kianoosh Keyhanian, Hymie Anisman, Jean Michel Brunel, Alexandre F. R. Stewart, and Hsiao-Huei Chen
- 12656 **CHP1-Mediated NHE1 Biosynthetic Maturation Is Required for Purkinje Cell Axon Homeostasis**
Ye Liu, Hans C. Zaun, John Orłowski, and Susan L. Ackerman
- 12810 **Functional Analysis of a Migraine-Associated TRESK K⁺ Channel Mutation**
Ping Liu, Zheman Xiao, Fei Ren, Zhaohua Guo, Ziwei Chen, Hucheng Zhao, and Yu-Qing Cao
- 12870 **Glial Scar Borders Are Formed by Newly Proliferated, Elongated Astrocytes That Interact to Corral Inflammatory and Fibrotic Cells via STAT3-Dependent Mechanisms after Spinal Cord Injury**
Ina B. Wanner, Mark A. Anderson, Bingbing Song, Jaclynn Levine, Ana Fernandez, Zachary Gray-Thompson, Yan Ao, and Michael V. Sofroniew
- 12887 **Antisense Reduction of Tau in Adult Mice Protects against Seizures**
Sarah L. DeVos, Dustin K. Goncharoff, Guo Chen, Carey S. Kebedeaux, Kaoru Yamada, Floy R. Stewart, Dorothy R. Schuler, Susan E. Maloney, David F. Wozniak, Frank Rigo, C. Frank Bennett, John R. Cirrito, David M. Holtzman, and Timothy M. Miller

12908 *Correction:* The article “The Disruption of Celf6, a Gene Identified by Translational Profiling of Serotonergic Neurons, Results in Autism-Related Behaviors” by Joseph D. Dougherty, Susan E. Maloney, David F. Wozniak, Michael A. Rieger, Lisa Sonnenblick, Giovanni Coppola, Nathaniel G. Mahieu, Juliet Zhang, Jinlu Cai, Gary J. Patti, Brett S. Abrahams, Daniel H. Geschwind, and Nathaniel Heintz appeared on pages 2732–2753 of the February 13, 2013 issue. A correction for that article appears on page 12908.

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.