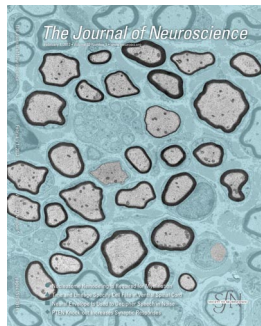


# The Journal of Neuroscience

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**Cover legend:** A cross section through the quadriceps nerve of mutant mice showing thin myelin when the signaling molecule mTOR has been ablated in Schwann cells. For more information, see the article by Sherman et al. in this issue (pages 1817–1825).

## i This Week in The Journal

### Journal Club

- 1515 **Using Interocular Suppression and EEG to Study Semantic Processing**  
Tom Heyman and Pieter Moors

### Brief Communications

- 1653 **Dynamic Correlation between Whisking and Breathing Rhythms in Mice**  
Ying Cao (曹莹), Snigdha Roy, Robert N. S. Sachdev, and Detlef H. Heck
- 1867 **Independent Vesicle Pools Underlie Different Modes of Release during Neuronal Development**  
Laura C. Andreae, Naila Ben Fredj, and Juan Burrone

### Articles

#### CELLULAR/MOLECULAR

- 1517 **The Nucleosome Remodeling and Deacetylase Chromatin Remodeling (NuRD) Complex Is Required for Peripheral Nerve Myelination**  
Holly Hung, Rebecca Kohnken, and John Svaren
- 1528 **Neuronal Glutamate Transporters Regulate Glial Excitatory Transmission**  
Ming-Chi Tsai, Kohichi Tanaka, Linda Overstreet-Wadiche, and Jacques I. Wadiche
- 1612 **Organization of Vomeronasal Sensory Coding Revealed by Fast Volumetric Calcium Imaging**  
Diwakar Turaga and Timothy E. Holy
- 1687 **Astrocytes Control the Development of the Migration-Promoting Vasculature Scaffold in the Postnatal Brain via VEGF Signaling**  
Lusine Bozoyan, Jivan Khlgatyan, and Armen Saghatelyan
- 1714 **Novel  $G\alpha_s$ -Protein Signaling Associated with Membrane-Tethered Amyloid Precursor Protein Intracellular Domain**  
Carole Deyts, Kulandaivelu S. Vetrivel, Shibandri Das, Yumiko M. Shepherd, Denis J. Dupré, Gopal Thinakaran, and Angèle T. Parent
- 1817 **Arrest of Myelination and Reduced Axon Growth When Schwann Cells Lack mTOR**  
Diane L. Sherman, Michiel Krols, Lai-Man N. Wu, Matthew Grove, Klaus-Armin Nave, Yann-Gaël Gangloff, and Peter J. Brophy

- 1826 **JNK1 Inhibits GluR1 Expression and GluR1-Mediated Calcium Influx through Phosphorylation and Stabilization of Hes-1**  
Cheng H. Lin and Eminy H. Y. Lee
- 1847 **Calpains Are Downstream Effectors of *bax*-Dependent Excitotoxic Apoptosis**  
Beatrice D'Orsi, Helena Bonner, Liam P. Tuffy, Heiko Düssmann, Ina Woods, Michael J. Courtney, Manus W. Ward, and Jochen H. M. Prehn

#### DEVELOPMENT/PLASTICITY/REPAIR

- 1589 **Changing Microcircuits in the Subplate of the Developing Cortex**  
Sarada Viswanathan, Sharba Bandyopadhyay, Joseph P. Y. Kao, and Patrick O. Kanold
- 1660 **Noise Overexposure Alters Long-Term Somatosensory-Auditory Processing in the Dorsal Cochlear Nucleus—Possible Basis for Tinnitus-Related Hyperactivity?**  
Susanne Dehmel, Shashwati Pradhan, Seth Koehler, Sanford Bledsoe, and Susan Shore
- 1757 **The Loop Diuretic Bumetanide Blocks Posttraumatic p75<sup>NTR</sup> Upregulation and Rescues Injured Neurons**  
Anastasia Shulga, Ana Cathia Magalhães, Henri Autio, Stefan Plantman, Antonio di Lieto, Anders Nykjær, Thomas Carlstedt, Mårten Risling, Urmas Arumäe, Eero Castrén, and Claudio Rivera
- 1771 **Generation of Multiple Classes of V0 Neurons in Zebrafish Spinal Cord: Progenitor Heterogeneity and Temporal Control of Neuronal Diversity**  
Chie Satou, Yukiko Kimura, and Shin-ichi Higashijima
- 1811 **Increased Excitability of Somatosensory Cortex in Aged Humans is Associated with Impaired Tactile Acuity**  
Melanie Lenz, Martin Tegenthoff, Karsten Kohlhaas, Philipp Stude, Oliver Höffken, Mario A. Gatica Tossi, Tobias Kalisch, and Hubert R. Dinse

#### BEHAVIORAL/SYSTEMS/COGNITIVE

- 1560 **Natural versus Synthetic Stimuli for Estimating Receptive Field Models: A Comparison of Predictive Robustness**  
Vargha Talebi and Curtis L. Baker Jr
- 1622 **5-HT<sub>1A</sub> Receptor-Responsive Pedunculopontine Tegmental Neurons Suppress REM Sleep and Respiratory Motor Activity**  
Kevin P. Grace, Hattie Liu, and Richard L. Horner
- 1634 **Bimodal Optomotor Response to Plaids in Blowflies: Mechanisms of Component Selectivity and Evidence for Pattern Selectivity**  
Aman B. Saleem, Kit D. Longden, Daniel A. Schwyn, Holger G. Krapp, and Simon R. Schultz
- 1672 **Neuronal Responses in the Nucleus Accumbens Shell during Sexual Behavior in Male Rats**  
Jumpei Matsumoto, Susumu Urakawa, Etsuro Hori, Mariana F. P. de Araujo, Yasuo Sakuma, Taketoshi Ono, and Hisao Nishijo
- 1730 **Differentiated Participation of Thalamocortical Subnetworks in Slow/Spindle Waves and Desynchronization**  
Mika Ushimaru, Yoshifumi Ueta, and Yasuo Kawaguchi
- 1747 **Psychophysiological Analyses Demonstrate the Importance of Neural Envelope Coding for Speech Perception in Noise**  
Jayaganesh Swaminathan and Michael G. Heinz

- 1784 **Neural Correlates of Humor Detection and Appreciation in Children**  
Michelle N. Neely, Elizabeth Walter, Jessica M. Black, and Allan L. Reiss
- 1791 **Internalized Timing of Isochronous Sounds Is Represented in Neuromagnetic Beta Oscillations**  
Takako Fujioka, Laurel J. Trainor, Edward W. Large, and Bernhard Ross
- 1859 **Electrical Brain Stimulation Improves Cognitive Performance by Modulating Functional Connectivity and Task-Specific Activation**  
Marcus Meinzer, Daria Antonenko, Robert Lindenberg, Stefan Hetzer, Lena Ulm, Keren Avirame, Tobias Flaisch, and Agnes Flöel
- 1875  **$\mu$ - and  $\delta$ -Opioid-Related Processes in the Accumbens Core and Shell Differentially Mediate the Influence of Reward-Guided and Stimulus-Guided Decisions on Choice**  
Vincent Laurent, Beatrice Leung, Nigel Maidment, and Bernard W. Balleine
- 1898 **Specialized Cortical Subnetworks Differentially Connect Frontal Cortex to Parahippocampal Areas**  
Yasuharu Hirai, Mieko Morishima, Fuyuki Karube, and Yasuo Kawaguchi

#### NEUROBIOLOGY OF DISEASE

- 1536 **Mimicking Phosphorylation at Serine 87 Inhibits the Aggregation of Human  $\alpha$ -Synuclein and Protects against Its Toxicity in a Rat Model of Parkinson's Disease**  
Abid Oueslati, Katerina E. Paleologou, Bernard L. Schneider, Patrick Aebischer, and Hilal A. Lashuel
- 1545 **Inflammatory Effects of Highly Pathogenic H5N1 Influenza Virus Infection in the CNS of Mice**  
Haeman Jang, David Boltz, Jennifer McClaren, Amar K. Pani, Michelle Smeyne, Ane Korff, Robert Webster, and Richard Jay Smeyne
- 1577 **Differential DNA Methylation Patterns Define Status Epilepticus and Epileptic Tolerance**  
Suzanne F. C. Miller-Delaney, Sudipto Das, Takanori Sano, Eva M. Jimenez-Mateos, Kenneth Bryan, Patrick G. Buckley, Raymond L. Stallings, and David C. Henshall
- 1602 **LRRK2 Inhibition Attenuates Microglial Inflammatory Responses**  
Mark S. Moehle, Philip J. Webber, Tonia Tse, Nour Sukar, David G. Standaert, Tara M. DeSilva, Rita M. Cowell, and Andrew B. West
- 1643 **PTEN Regulation of Local and Long-Range Connections in Mouse Auditory Cortex**  
Qiaojie Xiong, Hysell V. Oviedo, Lloyd C. Trotman, and Anthony M. Zador
- 1705 **Contrast-Enhanced Magnetic Resonance Microangiography Reveals Remodeling of the Cerebral Microvasculature in Transgenic ArcA $\beta$  Mice**  
Jan Klohs, Christof Baltes, Felicitas Prinz-Kranz, David Ratering, Roger M. Nitsch, Irene Knuesel, and Markus Rudin
- 1803 **A TrkB Small Molecule Partial Agonist Rescues TrkB Phosphorylation Deficits and Improves Respiratory Function in a Mouse Model of Rett Syndrome**  
Danielle A. Schmid, Tao Yang, Michael Ogier, Ian Adams, Yatin Mirakhur, Qifang Wang, Stephen M. Massa, Frank M. Longo, and David M. Katz
- 1884 **Gene Coexpression Networks in Human Brain Identify Epigenetic Modifications in Alcohol Dependence**  
Igor Ponomarev, Shi Wang, Lingling Zhang, R. Adron Harris, and R. Dayne Mayfield

**1914** **Correction:** The article “Activation of Glycogen Synthase Kinase-3 $\beta$  Is Required for Hyperdopamine and D<sub>2</sub> Receptor-Mediated Inhibition of Synaptic NMDA Receptor Function in the Rat Prefrontal Cortex” by Yan-Chun Li, Dong Xi, Joy Roman, Yue-Qiao Huang, and Wen-Jun Gao originally appeared on pages 15551–15563 of the December 9, 2009 issue. A correction to that article appears on page 1914.

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