

Cover legend: This fluorescent image depicts a primary cultured motor neuron transfected with a fluorescent protein (shown in cyan) and stained with the F-actin binding protein phalloidin (shown in purple) and DNA dye DAPI (shown in green) highlighting the complex dendritic arbor and long axon in this high degree of morphological polarization. The spinal muscular atrophy (SMA) disease protein SMN facilitates the subcellular localization and local translation of mRNAs such as *GAP43* along the long axonal processes. For more information, see the article by Fallini, Donlin-Asp et al. (pages 3811–3820).

i This Week in The Journal

Journal Club

- 3633 **Cognitive Processing Involves Dynamic Reorganization of the Whole-Brain Network's Functional Community Structure**
Michał Bola and Viola Borchardt

Brief Communications

- 3691 **Insulin-Independent GABA_A Receptor-Mediated Response in the Barrel Cortex of Mice with Impaired Met Activity**
Fu-Sun Lo, Reha S. Erzurumlu, and Elizabeth M. Powell

Articles

CELLULAR/MOLECULAR

- 3735 **Passive Synaptic Normalization and Input Synchrony-Dependent Amplification of Cortical Feedback in Thalamocortical Neuron Dendrites**
William M. Connelly, Vincenzo Crunelli, and Adam C. Errington
- 3860 **The *Drosophila* Receptor Protein Tyrosine Phosphatase LAR Is Required for Development of Circadian Pacemaker Neuron Processes That Support Rhythmic Activity in Constant Darkness But Not during Light/Dark Cycles**
Parul Agrawal and Paul E. Hardin

DEVELOPMENT/PLASTICITY/REPAIR

- 3722 **Homeostatic Activity-Dependent Tuning of Recurrent Networks for Robust Propagation of Activity**
Julijana Gjorgjieva, Jan Felix Evers, and Stephen J. Eglén
- 3871 **Retinal Wave Patterns Are Governed by Mutual Excitation among Starburst Amacrine Cells and Drive the Refinement and Maintenance of Visual Circuits**
Hong-Ping Xu, Timothy J. Burbridge, Meijun Ye, Minggang Chen, Xinxin Ge, Z. Jimmy Zhou, and Michael C. Crair

SYSTEMS/CIRCUITS

- 3636 **Multiplexed Population Coding of Stimulus Properties by Leech Mechanosensory Cells**
Friederice Pirschel and Jutta Kretzberg

- 3676 **Thalamic and Entorhinal Network Activity Differently Modulates the Functional Development of Prefrontal–Hippocampal Interactions**
Henrike Hartung, Marco D. Brockmann, Beatrice Pöschel, Vito De Feo, and Ileana L. Hanganu-Opatz
- 3709 **An Adenosine-Mediated Glial-Neuronal Circuit for Homeostatic Sleep**
Theresa E. Bjorness, Nicholas Dale, Gabriel Mettlach, Alex Sonneborn, Bogachan Sahin, Allen A. Fienberg, Masashi Yanagisawa, James A. Bibb, and Robert W. Greene
- 3755 **Auditory Brainstem Response Latency in Noise as a Marker of Cochlear Synaptopathy**
Golbarg Mehraei, Ann E. Hickox, Hari M. Bharadwaj, Hannah Goldberg, Sarah Verhulst, M. Charles Liberman, and Barbara G. Shinn-Cunningham

BEHAVIORAL/COGNITIVE

- 3660 **Complementary Functional Organization of Neuronal Activity Patterns in the Perirhinal, Lateral Entorhinal, and Medial Entorhinal Cortices**
Christopher S. Keene, John Bladon, Sam McKenzie, Cindy D. Liu, Joseph O’Keefe, and Howard Eichenbaum
- 3698 **Reversal of Alcohol-Induced Dysregulation in Dopamine Network Dynamics May Rescue Maladaptive Decision-making**
Abigail G. Schindler, Marta E. Soden, Larry S. Zweifel, and Jeremy J. Clark
- 3765 **Transient Pupil Dilation after Subsaccadic Microstimulation of Primate Frontal Eye Fields**
Sebastian J. Lehmann and Brian D. Corneil
- 3789 **Evidence for a Causal Contribution of Macaque Vestibular, But Not Intraparietal, Cortex to Heading Perception**
Aihua Chen, Yong Gu, Sheng Liu, Gregory C. DeAngelis, and Dora E. Angelaki
- 3799 **Sleep Spindle Density Predicts the Effect of Prior Knowledge on Memory Consolidation**
Nora Hennies, Matthew A. Lambon Ralph, Marleen Kempkes, James N. Cousins, and Penelope A. Lewis
- 3821 **Effective Connectivity from Early Visual Cortex to Posterior Occipitotemporal Face Areas Supports Face Selectivity and Predicts Developmental Prosopagnosia**
Michael Lohse, Lucia Garrido, Jon Driver, Raymond J. Dolan, Bradley C. Duchaine, and Nicholas Furl
- 3829 **Causal Evidence for a Mechanism of Semantic Integration in the Angular Gyrus as Revealed by High-Definition Transcranial Direct Current Stimulation**
Amy Rose Price, Jonathan E. Peelle, Michael F. Bonner, Murray Grossman, and Roy H. Hamilton
- 3839 **Eliminating Direction Specificity in Visuomotor Learning**
Cong Yin, Yuqing Bi, Cong Yu, and Kunlin Wei

NEUROBIOLOGY OF DISEASE

- 3648 **Overexpression of *Dyrk1A*, a Down Syndrome Candidate, Decreases Excitability and Impairs Gamma Oscillations in the Prefrontal Cortex**
Marcel Ruiz-Mejias, Maria Martinez de Lagran, Maurizio Mattia, Patricia Castano-Prat, Lorena Perez-Mendez, Laura Ciria-Suarez, Thomas Gener, Belen Sancristobal, Jordi García-Ojalvo, Agnès Gruart, José M. Delgado-García, Maria V. Sanchez-Vives, and Mara Dierssen

- 3777 **The Chemokine CCL2 Mediates the Seizure-enhancing Effects of Systemic Inflammation**
Chiara Cerri, Sacha Genovesi, Manuela Allegra, Francesco Pistillo, Ursula Püntener, Angelo Guglielmotti, V. Hugh Perry, Yuri Bozzi, and Matteo Caleo
- 3811 **Deficiency of the Survival of Motor Neuron Protein Impairs mRNA Localization and Local Translation in the Growth Cone of Motor Neurons**
Claudia Fallini, Paul G. Donlin-Asp, Jeremy P. Rouanet, Gary J. Bassell, and Wilfried Rossoll
- 3848 **ABCA7 Deficiency Accelerates Amyloid- β Generation and Alzheimer's Neuronal Pathology**
Nobutaka Sakae, Chia-Chen Liu, Mitsuru Shinohara, Jessica Frisch-Daiello, Li Ma, Yu Yamazaki, Masaya Tachibana, Linda Younkin, Aishe Kurti, Minerva M. Carrasquillo, Fanggeng Zou, Daniel Sevlever, Gina Bisceglia, Ming Gan, Romain Fol, Patrick Knight, Miao Wang, Xianlin Han, John D. Fryer, Michael L. Fitzgerald, Yasumasa Ohyagi, Steven G. Younkin, Guojun Bu, and Takahisa Kanekiyo
-

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.

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.