

July 6, 2016 • Volume 36 Number 27 • www.jneurosci.org



Cover legend: This image shows an astrocyte (green mitochondria; gfap-driven red plasma membrane) intercalated throughout the apical dendrites of a CA1 pyramidal neuron (green mitochondria) at its branch point in stratum radiatum of a rat hippocampal slice.

After 30 min oxygen/glucose deprivation, mitochondria in these astrocytes undergo delayed, glutamate-dependent fragmentation and autophagic degradation, resulting in drastically altered calcium signaling. For more information, see the article by 0'Donnell et al. (pages 7109 –7127).

i This Week in The Journal

#### **Editor Column**

7075 SfN Journals: Two Paths, One Goal: Sharing Strong Science

# **Journal Club**

7076 Are Movement Preparation and Movement Initiation Truly Independent?

Isobel Weinberg

## **Articles**

#### CELLULAR/MOLECULAR

- 7184 M1 ipRGCs Influence Visual Function through Retrograde Signaling in the Retina Cameron L. Prigge, Po-Ting Yeh, Nan-Fu Liou, Chi-Chan Lee, Shih-Feng You, Lei-Lei Liu, David S. McNeill, Kylie S. Chew, Samer Hattar, Shih-Kuo Chen, and Dao-Qi Zhang
- 7234 Differential Somatic Ca<sup>2+</sup> Channel Profile in Midbrain Dopaminergic Neurons
  Fabian Philippart, Geoffrey Destreel, Paulina Merino-Sepúlveda, Pablo Henny,
  Dominique Engel, and Vincent Seutin
- 7298 Rab35 Functions in Axon Elongation Are Regulated by P53-Related Protein
  Kinase in a Mechanism That Involves Rab35 Protein Degradation and the
  Microtubule-Associated Protein 1B
  David Villarroel-Campos, Daniel R. Henríquez, Felipe J. Bodaleo, Mai E. Oguchi,
  Francisca C. Bronfman, Mitsunori Fukuda, and Christian Gonzalez-Billault
- 7325 Fragile X Mental Retardation Protein Is Required to Maintain Visual
  Conditioning-Induced Behavioral Plasticity by Limiting Local Protein Synthesis
  Han-Hsuan Liu and Hollis T. Cline

## DEVELOPMENT/PLASTICITY/REPAIR

- 7079 Selective Deletion of Astroglial FMRP Dysregulates Glutamate Transporter GLT1 and Contributes to Fragile X Syndrome Phenotypes In Vivo Haruki Higashimori, Christina S. Schin, Ming Sum R. Chiang, Lydie Morel, Temitope A. Shoneye, David L. Nelson, and Yongjie Yang
- 7095 Chronic Cognitive Dysfunction after Traumatic Brain Injury Is Improved with a Phosphodiesterase 4B Inhibitor
  David J. Titus, Nicole M. Wilson, Julie E. Freund, Melissa M. Carballosa, Kevin E. Sikah, Concepcion Furones, W. Dalton Dietrich, Mark E. Gurney, and Coleen M. Atkins

7128 Altered Development of Synapse Structure and Function in Striatum Caused by Parkinson's Disease-Linked LRRK2–G2019S Mutation

Bridget A. Matikainen-Ankney, Nebojsa Kezunovic, Roxana E. Mesias, Yuan Tian, Frances M. Williams, George W. Huntley, and Deanna L. Benson

7268 Spontaneous Release Regulates Synaptic Scaling in the Embryonic Spinal Network *In Vivo* 

Miguel Angel Garcia-Bereguiain, Carlos Gonzalez-Islas, Casie Lindsly, and Peter Wenner

7283 Expression of an Activated Integrin Promotes Long-Distance Sensory Axon Regeneration in the Spinal Cord

Menghon Cheah, Melissa R. Andrews, Daniel J. Chew, Elizabeth B. Moloney, Joost Verhaagen, Reinhard Fässler, and James W. Fawcett

#### SYSTEMS/CIRCUITS

7142 Deletion of Suppressor of Cytokine Signaling 3 from Forebrain Neurons Delays Infertility and Onset of Hypothalamic Leptin Resistance in Response to a High Caloric Diet

Hayden J. L. McEwen, Megan A. Inglis, Janette H. Quennell, David R. Grattan, and Greg M. Anderson

7223 Functional Interactions between Mammalian Respiratory Rhythmogenic and Premotor Circuitry

Hanbing Song, John A. Hayes, Nikolas C. Vann, Xueying Wang, M. Drew LaMar, and Christopher A. Del Negro

7246 Lack of Intrinsic GABAergic Connections in the Thalamic Reticular Nucleus of the Mouse

Guoqiang Hou, Alison G. Smith, and Zhong-Wei Zhang

7314 Global Motion Processing in Human Visual Cortical Areas V2 and V3
Michele Furlan and Andrew T. Smith

### BEHAVIORAL/COGNITIVE

7154 When Synchronizing to Rhythms Is Not a Good Thing: Modulations of Preparatory and Post-Target Neural Activity When Shifting Attention Away from On-Beat Times of a Distracting Rhythm

Assaf Breska and Leon Y. Deouell

7167 Temporal Dynamics of Sensorimotor Networks in Effort-Based Cost-Benefit Valuation: Early Emergence and Late Net Value Integration Alison Harris and Seung-Lark Lim

7198 Selective Attention to Visual Stimuli Using Auditory Distractors Is Altered in Alpha-9 Nicotinic Receptor Subunit Knock-Out Mice

Gonzalo Terreros, Pascal Jorratt, Cristian Aedo, Ana Belén Elgoyhen, and Paul H. Delano

7210 Aging-Resilient Associations between the Arcuate Fasciculus and Vocabulary Knowledge: Microstructure or Morphology?

Susan Teubner-Rhodes, Kenneth I. Vaden Jr., Stephanie L. Cute, Jason D. Yeatman, Robert F. Dougherty, and Mark A. Eckert

#### NEUROBIOLOGY OF DISEASE

7109 Transient Oxygen/Glucose Deprivation Causes a Delayed Loss of Mitochondria and Increases Spontaneous Calcium Signaling in Astrocytic Processes
John C. O'Donnell, Joshua G. Jackson, and Michael B. Robinson

# 253 Hippocampal MicroRNA-124 Enhances Chronic Stress Resilience in Mice

Fumihiro Higuchi, Shusaku Uchida, Hirotaka Yamagata, Naoko Abe-Higuchi, Teruyuki Hobara, Kumiko Hara, Ayumi Kobayashi, Tatsushi Shintaku, Yukihiro Itoh, Takayoshi Suzuki, and Yoshifumi Watanabe

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; e-mail, jn@sfn.org.