

# JNeurosci

THE JOURNAL OF NEUROSCIENCE

February 22, 2017 • Volume 37 Number 8 • www.jneurosci.org



**Cover legend:** This image shows a coronal magnetic resonance image of a pregnant rhesus macaque on the 110th day of a 168 day gestational term. This view provides a sagittal image of the fetus. Overlaid is a lateral view of a surface model of the cerebral cortex, color-coded according to fractional anisotropy (FA) of cerebral cortical water diffusion measured in utero. Orange colors indicate low FA and yellow colors indicate high FA. Wang and co-workers demonstrate how temporal and regional changes in FA relate to morphological development of cells within the cerebral cortex, and in turn, how these changes relate to macroscopic folding and surface area expansion of the fetal primate brain. For more information, see the article by Wang et al. (pages 1971–1983).

## i This Week in The Journal

### Journal Club

- 1965 **Facing a Regular World: How Spatial Object Structure Shapes Visual Processing**  
Daniel Kaiser and Tristan Haselhuhn
- 1968 **Live-Cell Imaging Reveals Tau Isoforms Imbalance Disrupts Traffic of APP Vesicles in Human Neurons**  
Christy Oi Ying Hung

### Research Articles

#### CELLULAR/MOLECULAR

- 2032 **Sexual Dimorphism in a Reciprocal Interaction of Ryanodine and IP<sub>3</sub> Receptors in the Induction of Hyperalgesic Priming**  
Eugen V. Khomula, Luiz F. Ferrari, Dionéia Araldi, and Jon D. Levine
- 2061 **Mitochondria Maintain Distinct Ca<sup>2+</sup> Pools in Cone Photoreceptors**  
Michelle M. Giarmarco, Whitney M. Cleghorn, Stephanie R. Sloat, James B. Hurley, and Susan E. Brockerhoff
- 2125 **O-GlcNAc Transferase Is Essential for Sensory Neuron Survival and Maintenance**  
Cathy Su and Thomas L. Schwarz
- 2216 **A Novel Human CAMK2A Mutation Disrupts Dendritic Morphology and Synaptic Transmission, and Causes ASD-Related Behaviors**  
Jason R. Stephenson, Xiaohan Wang, Tyler L. Perfitt, Walker P. Parrish, Brian C. Shonesy, Christian R. Marks, Douglas P. Mortlock, Terunaga Nakagawa, James S. Sutcliffe, and Roger J. Colbran

#### DEVELOPMENT/PLASTICITY/REPAIR

- 1971 **Folding, But Not Surface Area Expansion, Is Associated with Cellular Morphological Maturation in the Fetal Cerebral Cortex**  
Xiaojie Wang, Colin Studholme, Peta L. Grigsby, Antonio E. Frias, Virginia C. Cuzon Carlson, and Christopher D. Kroenke
- 2073 **Ick Ciliary Kinase Is Essential for Planar Cell Polarity Formation in Inner Ear Hair Cells and Hearing Function**  
Shio Okamoto, Taro Chaya, Yoshihiro Omori, Ryusuke Kuwahara, Shun Kubo, Hirofumi Sakaguchi, and Takahisa Furukawa
- 2203 **Cortactin Is a Regulator of Activity-Dependent Synaptic Plasticity Controlled by Wingless**  
Daniel Alicea, Marizabete Perez, Carolina Maldonado, Carihann Dominicci-Cotto, and Bruno Marie

## SYSTEMS/CIRCUITS

- 1984 **Asymmetries of Dark and Bright Negative Afterimages Are Paralleled by Subcortical ON and OFF Poststimulus Responses**  
Hui Li, Xu Liu, Ian M. Andolina, Xiaohong Li, Yiliang Lu, Lothar Spillmann, and Wei Wang
- 1997 **Climbing Fibers Control Purkinje Cell Representations of Behavior**  
Martha L. Streng, Laurentiu S. Popa, and Timothy J. Ebner
- 2045 **Gap Junction–Mediated Signaling from Motor Neurons Regulates Motor Generation in the Central Circuits of Larval *Drosophila***  
Teruyuki Matsunaga, Hiroshi Kohsaka, and Akinao Nose
- 2086 **Cholinergic Interneurons Underlie Spontaneous Dopamine Release in Nucleus Accumbens**  
Jordan T. Yorgason, Douglas M. Zeppenfeld, and John T. Williams
- 2137 **Social Status–Dependent Shift in Neural Circuit Activation Affects Decision Making**  
Thomas H. Miller, Katie Clements, Sungwoo Ahn, Choongseok Park, Eoon Hye Ji, and Fadi A. Issa
- 2176 **Dynamic Encoding of Acoustic Features in Neural Responses to Continuous Speech**  
Bahar Khalighinejad, Guilherme Cruzatto da Silva, and Nima Mesgarani
- 2186 **Amygdala Contributions to Stimulus–Reward Encoding in the Macaque Medial and Orbital Frontal Cortex during Learning**  
Peter H. Rudebeck, Joshua A. Ripple, Andrew R. Mitz, Bruno B. Averbeck, and Elisabeth A. Murray
- 2234 **Electrical Microstimulation of the Pulvinar Biases Saccade Choices and Reaction Times in a Time-Dependent Manner**  
Adan-Ulises Dominguez-Vargas, Lukas Schneider, Melanie Wilke, and Igor Kagan

## BEHAVIORAL/COGNITIVE

- 2010 **Orbitofrontal Cortex Signals Expected Outcomes with Predictive Codes When Stable Contingencies Promote the Integration of Reward History**  
Justin S. Riceberg and Matthew L. Shapiro
- 2022 **Neural Differentiation of Incorrectly Predicted Memories**  
Ghootae Kim, Kenneth A. Norman, and Nicholas B. Turk-Browne
- 2097 **A Gustatory Neural Circuit of *Caenorhabditis elegans* Generates Memory-Dependent Behaviors in Na<sup>+</sup> Chemotaxis**  
Lifang Wang, Hirofumi Sato, Yohsuke Satoh, Masahiro Tomioka, Hirofumi Kunitomo, and Yuichi Iino
- 2149 **A Deletion Variant of the  $\alpha 2b$ -Adrenoceptor Modulates the Stress-Induced Shift from “Cognitive” to “Habit” Memory**  
Lisa Wirz, Jan Wacker, Andrea Felten, Martin Reuter, and Lars Schwabe

## NEUROBIOLOGY OF DISEASE

- 2112 **Phosphodiesterase-10A Inverse Changes in Striatopallidal and Striatoentopeduncular Pathways of a Transgenic Mouse Model of *DYT1* Dystonia**  
Vincenza D’Angelo, Valentina Castelli, Mauro Giorgi, Silvia Cardarelli, Ilaria Saverioni, Francesca Palumbo, Paola Bonsi, Antonio Pisani, Carmela Giampà, Roberto Sorge, Stefano Biagioni, Francesca R. Fusco, and Giuseppe Sancesario
- 2161 **Zika Virus Targeting in the Developing Brain**  
Anthony N. van den Pol, Guochao Mao, Yang Yang, Sara Ornaghi, and John N. Davis

2258 **An ALS-Associated Mutant SOD1 Rapidly Suppresses KCNT1 (Slack) Na<sup>+</sup>-Activated K<sup>+</sup> Channels in *Aplysia* Neurons**  
Yalan Zhang, Weiming Ni, Arthur L. Horwich, and Leonard K. Kaczmarek

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