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Cover legend: This image shows parcellation across the entire brain based on structural networks that emerge from the co-variations of grey matter volume and cortical area at the population level. This structurally defined parcellation of more than 200 areas aligns closely with functional networks, demonstrating the close association between structure and function in the brain. For more information, see the article by Smith et al. in this issue. (pages 6136 – 6149).

6031 This Week in The Journal

### **Journal Club**

- 6032 Hunger-Activated AgRP Neurons Inhibit MPOA Neurons Controlling Parenting Morgane Boillot
- 6035 Toward a Multimodal Framework of Brainstem Pain-Modulation Circuits in Migraine Julio A. Yanes

### **Research Articles**

#### CELLULAR/MOLECULAR

- 6038 Inorganic Polyphosphate Regulates AMPA and NMDA Receptors and Protects Against Glutamate Excitotoxicity via Activation of P2Y Receptors Marta Maiolino, Nathanael O'Neill, Vincenzo Lariccia, Salvatore Amoroso, Sergiy Sylantyev, Plamena R. Angelova, and Andrey Y. Abramov
- 6049 Ablation of All Synaptobrevin vSNAREs Blocks Evoked But Not Spontaneous Neurotransmitter Release at Neuromuscular Synapses Yun Liu, Yoshie Sugiura, Thomas C. Südhof, and Weichun Lin
- 6067  $G_{\alpha q}$  Sensitizes TRPM8 to Inhibition by PI(4,5)P<sub>2</sub> Depletion upon Receptor Activation Luyu Liu, Yevgen Yudin, Janhavi Nagwekar, Chifei Kang, Natalia Shirokova, and Tibor Rohacs

### DEVELOPMENT/PLASTICITY/REPAIR

6081 FGF Signaling Directs the Cell Fate Switch from Neurons to Astrocytes in the Developing Mouse Cerebral Cortex

Tung Anh Dinh Duong, Yoshio Hoshiba, Kengo Saito, Kanji Kawasaki, Yoshie Ichikawa, Naoyuki Matsumoto, Yohei Shinmyo, and Hiroshi Kawasaki

### SYSTEMS/CIRCUITS

- Nitric Oxide-Mediated Plasticity of Interconnections Between T-Stellate cells of the Ventral Cochlear Nucleus Generate Positive Feedback and Constitute a Central Gain Control in the Auditory System
  - Xiao-Jie Cao, Lin Lin, Arthur U. Sugden, Barry W. Connors, and Donata Oertel
- 6108 Evoked Response Strength in Primary Auditory Cortex Predicts Performance in a Spectro-Spatial Discrimination Task in Rats Elena Gronskaya and Wolfger von der Behrens
- 6122 Intracortical Dynamics Underlying Repetitive Stimulation Predicts Changes in Network Connectivity
  - Yuhao Huang, Boglárka Hajnal, László Entz, Dániel Fabó, Jose L. Herrero, Ashesh D. Mehta, and Corey J. Keller

# 6136 Structural Variability in the Human Brain Reflects Fine-Grained Functional Architecture at the Population Level

Stephen Smith, Eugene Duff, Adrian Groves, Thomas E. Nichols, Saad Jbabdi, Lars T. Westlye, Christian K. Tamnes, Andreas Engvig, Kristine B. Walhovd, Anders M. Fjell, Heidi Johansen-Berg, and Gwenaëlle Douaud

### BEHAVIORAL/COGNITIVE

# 6150 Neuronal Encoding in a High-Level Auditory Area: From Sequential Order of Elements to Grammatical Structure

Aurore Cazala, Nicolas Giret, Jean-Marc Edeline, and Catherine Del Negro

## **6162** Functional MRI and EEG Index Complementary Attentional Modulations Sirawaj Itthipuripat, Thomas C. Sprague, and John T. Serences

### 6180 Functional Involvement of Human Periaqueductal Gray and Other Midbrain Nuclei in Cognitive Control

Philip A. Kragel, Marta Bianciardi, Ludger Hartley, Gordon Matthewson, Ji-Kyung Choi, Karen S. Quigley, Lawrence L. Wald, Tor D. Wager, Lisa Feldman Barrett, and Ajay B. Satpute

### 6190 Dissociation of the Perirhinal Cortex and Hippocampus During Discriminative Learning of Similar Objects

Haoyu Chen, Wenxi Zhou, and Jiongjiong Yang

### NEUROBIOLOGY OF DISEASE

## 6202 Is Optogenetic Activation of Vglut1-Positive A**β** Low-Threshold Mechanoreceptors Sufficient to Induce Tactile Allodynia in Mice after Nerve Injury?

Alexander Chamessian, Megumi Matsuda, Michael Young, Michelle Wang, Zhi-Jun Zhang, Di Liu, Brielle Tobin, Zhen-Zhong Xu, Thomas Van de Ven, and Ru-Rong Ji

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