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**Cover picture:** Examples of whole objects: face-like objects (FOs, left) and their corresponding non-face-like objects (NFOs, right) composed of the same set of parts. Over 60,000 unique FOs/NFOs were constructed by combining a variety of facial feature-like parts. The inferior temporal neurons revealed spike correlation that depended on the feature configuration-dependent spike correlation emerged within 300 ms after stimulus onset, which is rapid enough to mediate recognition of the stimulus. For details, see the article by Hirabayashi and Miyashita in this issue (pages 10299 – 10307).

i This Week in The Journal

# Journal Club

**10061** Morphine-Induced μ-Opioid Receptor Internalization: A Paradox Solved in Neurons Jean Martin Beaulieu

# **Brief Communications**

- **10101** Neural Coupling Binds Visual Tokens to Moving Stimuli Michael Rose and Christian Büchel
- **10247** Neuronal L-Type Calcium Channels Open Quickly and Are Inhibited Slowly Thomas D. Helton, Weifeng Xu, and Diane Lipscombe

## Articles

### CELLULAR/MOLECULAR

- 10074 Neuronal Differentiation in the Adult Hippocampus Recapitulates
  Embryonic Development
  M. Soledad Espósito, Verónica C. Piatti, Diego A. Laplagne, Nicolás A. Morgenstern, Carina C. Ferrari, Fernando J. Pitossi, and Alejandro F. Schinder
- 10147 A Drosophila KCNQ Channel Essential for Early Embryonic Development Hua Wen, Thomas M. Weiger, Tanya S. Ferguson, Mohammad Shahidullah, Samae S. Scott, and Irwin B. Levitan
- 10188 N-Terminal Insertion and C-Terminal Ankyrin-Like Repeats of α-Latrotoxin Are Critical for Ca<sup>2+</sup>-Dependent Exocytosis Gang Li, David Lee, Li Wang, Mikhail Khvotchev, Soon Kwang Chiew, Lakshmanan Arunachalam, Tony Collins, Zhong-Ping Feng, and Shuzo Sugita
- 10198 Antidepressants and Antipsychotic Drugs Colocalize with 5-HT<sub>3</sub> Receptors in Raft-Like Domains Brigitte Eisensamer, Manfred Uhr, Sabrina Meyr, Gerald Gimpl, Tobias Deiml, Gerhard Rammes, Jeremy J. Lambert, Walter Zieglgänsberger, Florian Holsboer, and Rainer Rupprecht

#### DEVELOPMENT/PLASTICITY/REPAIR

- 10064 Olig Transcription Factors Are Expressed in Oligodendrocyte and Neuronal Cells in Human Fetal CNS
  - Igor Jakovcevski and Nada Zecevic
- 10105 cAMP Response Element-Binding Protein Regulates Differentiation and Survival of Newborn Neurons in the Olfactory Bulb
   Claudio Giachino, Silvia De Marchis, Costanza Giampietro, Rosanna Parlato, Isabelle Perroteau, Günther Schütz, Aldo Fasolo, and Paolo Peretto

10119	Molecular Control of Spinal Accessory Motor Neuron/Axon Development in the Mouse Spinal Cord Allison K. Dillon, Shinobu C. Fujita, Michael P. Matise, Andrew A. Jarjour, Timothy E. Kennedy, Heike Kollmus, Hans-Henning Arnold, Joshua A. Weiner, Joshua R. Sanes, and Zaven Kaprielian
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10167	<b>Extensive Cortical Rewiring after Brain Injury</b> Numa Dancause, Scott Barbay, Shawn B. Frost, Erik J. Plautz, Daofen Chen, Elena V. Zoubina, Ann M. Stowe, and Randolph J. Nudo
10290	Function of Atypical Protein Kinase C λ in Differentiating Photoreceptors Is Required for Proper Lamination of Mouse Retina Chieko Koike, Akihiro Nishida, Kazunori Akimoto, Masa-aki Nakaya, Tetsuo Noda, Shigeo Ohno, and Takahisa Furukawa
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10138	Declarative Memory, Awareness, and Transitive Inference Christine Smith and Larry R. Squire
10207	Neuronal Computation of Disparity in V1 Limits Temporal Resolution for Detecting Disparity Modulation Hendrikje Nienborg, Holly Bridge, Andrew J. Parker, and Bruce G. Cumming
10230	<b>Control of Spontaneous Firing Patterns by the Selective Coupling of Calcium Currents to Calcium-Activated Potassium Currents in Striatal Cholinergic Interneurons</b> Joshua A. Goldberg and Charles J. Wilson
10239	<b>Functional Specialization in the Human Medial Temporal Lobe</b> Morgan D. Barense, Timothy J. Bussey, Andy C. H. Lee, Timothy T. Rogers, R. Rhys Davies, Lisa M. Saksida, Elisabeth A. Murray, and Kim S. Graham
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10299	Dynamically Modulated Spike Correlation in Monkey Inferior Temporal Cortex Depending on the Feature Configuration within a Whole Object Toshiyuki Hirabayashi and Yasushi Miyashita
10308	<b>Cholinergic Inhibition of Neocortical Pyramidal Neurons</b> Allan T. Gulledge and Greg J. Stuart

## NEUROBIOLOGY OF DISEASE

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10220	Nigrostriatal Dysfunction in Familial Alzheimer's Disease-Linked APPswe/PS1∆E9 Transgenic Mice Sylvia E. Perez, Orly Lazarov, James B. Koprich, Er-Yun Chen, Virginia Rodriguez-Menendez, Jack W. Lipton, Sangram S. Sisodia, and Elliott J. Mufson
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10262	Apoptosis-Inducing Factor Triggered by Poly(ADP-Ribose) Polymerase and Bid Mediates Neuronal Cell Death after Oxygen–Glucose Deprivation and Focal Cerebral Ischemia Carsten Culmsee, Changlian Zhu, Stefan Landshamer, Barbara Becattini, Ernst Wagner, Maurizio Pellechia, Klas Blomgren, and Nikolaus Plesnila
10321	A Small-Molecule-Inducible Nrf2-Mediated Antioxidant Response Provides Effective Prophylaxis against Cerebral Ischemia <i>In Vivo</i> Andy Y. Shih, Ping Li, and Timothy H. Murphy
	<i>Correction:</i> In the article "Kinetics of Exocytosis Is Faster in Cones Than in Rods," by Katalin Rabl, Lucia Cadetti, and Wallace B. Thoreson, which appeared on pages 4633–4640 of the May 4, 2005 issue, the concentration of EGTA given in the fourth paragraph of Materials and Methods is incorrect. The correct concentration is 5 mм.
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