# The Journal of Neuroscience

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Cover legend: A biocytin-labeled pyramidal cell in layer 2-3 of cat V1 cortex along with an intracellular recording of its activity. Overlaid, examples of receptive field subunits obtained by principal component analysis of visual responses to ternary dense noise. For more information, see the article by Fournier et al. (pages 5515-5528).

This Week in The Journal

### **Iournal Club**

In Sync: Metaphor, Mechanism or Marker of Mutual Understanding? Arjen Stolk

### **Articles**

#### CELLULAR/MOLECULAR

- Leptin Modulates the Intrinsic Excitability of AgRP/NPY Neurons in the Arcuate Nucleus of the Hypothalamus
  - Scott B. Baver, Kevin Hope, Shannon Guyot, Christian Bjørbaek, Catherine Kaczorowski, and Kristen M. S. O'Connell
- Transduction without Tip Links in Cochlear Hair Cells Is Mediated by Ion Channels with Permeation Properties Distinct from Those of the Mechano-Electrical **Transducer Channel** 
  - Walter Marcotti, Laura F. Corns, Terri Desmonds, Nerissa K. Kirkwood, Guy P. Richardson, and Corné J. Kros
- Myocilin Is Involved in NgR1/Lingo-1-Mediated Oligodendrocyte Differentiation and Myelination of the Optic Nerve Heung Sun Kwon, Naoki Nakaya, Mones Abu-Asab, Hong Sug Kim,

## and Stanislav I. Tomarev DEVELOPMENT/PLASTICITY/REPAIR

- Tbr2 Is Required to Generate a Neural Circuit Mediating the Pupillary Light Reflex Neal T. Sweeney, Hannah Tierney, and David A. Feldheim
- 5613 Neuroanatomical Profiles of Deafness in the Context of Native Language Experience Olumide A. Olulade, Daniel S. Koo, Carol J. LaSasso, and Guinevere F. Eden
- 5717 Robo1 Modulates Proliferation and Neurogenesis in the Developing Neocortex Mason L. Yeh, Yuko Gonda, Mathilda T. M. Mommersteeg, Melissa Barber, Athena R. Ypsilanti, Carina Hanashima, John G. Parnavelas, and William D. Andrews

### SYSTEMS/CIRCUITS

- **Environmental Acoustic Enrichment Promotes Recovery from Developmentally Degraded Auditory Cortical Processing** Xiaoqing Zhu, Fang Wang, Huifang Hu, Xinde Sun, Michael P. Kilgard,
- Michael M. Merzenich, and Xiaoming Zhou 5416 Netrin and Frazzled Regulate Presynaptic Gap Junctions at a Drosophila Giant
- - Brian O. Orr, Melissa A. Borgen, Phyllis M. Caruccio, and Rodney K. Murphey

## 5431 Interaction of Egocentric and World-Centered Reference Frames in the Rat Posterior Parietal Cortex

Aaron A. Wilber, Benjamin J. Clark, Tyler C. Forster, Masami Tatsuno, and Bruce L. McNaughton

## 5454 Long-Term Recordings Improve the Detection of Weak Excitatory–Excitatory Connections in Rat Prefrontal Cortex

C. Daniela Schwindel, Karim Ali, Bruce L. McNaughton, and Masami Tatsuno

## 5477 Rapid Developmental Emergence of Stable Depolarization during Wakefulness by Inhibitory Balancing of Cortical Network Excitability

Matthew T. Colonnese

### 5515 Hidden Complexity of Synaptic Receptive Fields in Cat V1

Julien Fournier, Cyril Monier, Manuel Levy, Olivier Marre, Katalin Sári, Zoltán F. Kisvárday, and Yves Frégnac

### 5552 Bridging the Gap between the Human and Macaque Connectome: A Quantitative Comparison of Global Interspecies Structure-Function Relationships and Network Topology

Oscar Miranda-Dominguez, Brian D. Mills, David Grayson, Andrew Woodall, Kathleen A. Grant, Christopher D. Kroenke, and Damien A. Fair

## 5583 A Neural Code for Looming and Receding Motion Is Distributed over a Population of Electrosensory ON and OFF Contrast Cells

Stephen E. Clarke, André Longtin, and Leonard Maler

## 5603 TMS-EEG Signatures of GABAergic Neurotransmission in the Human Cortex

Isabella Premoli, Nazareth Castellanos, Davide Rivolta, Paolo Belardinelli, Ricardo Bajo, Carl Zipser, Svenja Espenhahn, Tonio Heidegger, Florian Müller-Dahlhaus, and Ulf Ziemann

## 5621 Different Neuronal Computations of Spatial Working Memory for Multiple Locations within versus across Visual Hemifields

Ayano Matsushima and Masaki Tanaka

## 5627 Mechanisms of Coordination in Distributed Neural Circuits: Encoding Coordinating Information

Carmen Smarandache-Wellmann and Swantje Grätsch

### 5640 Predictive Saccade Target Selection in Superior Colliculus during Visual Search Kelly Shen and Martin Paré

## 5678 Dynamic Neural Correlates of Motor Error Monitoring and Adaptation during Trial-to-Trial Learning

Huiling Tan, Ned Jenkinson, and Peter Brown

### 5689 The Impact of Cortical Deafferentation on the Neocortical Slow Oscillation

Maxime Lemieux, Jen-Yung Chen, Peter Lonjers, Maxim Bazhenov, and Igor Timofeev

### 5704 Limb and Trunk Mechanisms for Balance Control during Locomotion in Quadrupeds

Pavel E. Musienko, Tatiana G. Deliagina, Yury P. Gerasimenko, Grigori N. Orlovsky, and Pavel V. Zelenin

#### BEHAVIORAL/COGNITIVE

## 5399 Seeing Scenes: Topographic Visual Hallucinations Evoked by Direct Electrical Stimulation of the Parahippocampal Place Area

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## $5468 \qquad \text{Ovarian Cycle Effects on Immediate Reward Selection Bias in Humans: A Role for Estradiol}$

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- 5497 No Perisaccadic Mislocalization with Abruptly Cancelled Saccades
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- 5564 Vocal Generalization Depends on Gesture Identity and Sequence Lukas A. Hoffmann and Samuel J. Sober
- 5595 Neural Mechanisms of Gain–Loss Asymmetry in Temporal Discounting Saori C. Tanaka, Katsunori Yamada, Hiroyasu Yoneda, and Fumio Ohtake
- 5658 Suppression of Salient Objects Prevents Distraction in Visual Search John M. Gaspar and John J. McDonald
- 5667 Mapping the Perceptual Grain of the Human Retina Wolf M. Harmening, William S. Tuten, Austin Roorda, and Lawrence C. Sincich

#### NEUROBIOLOGY OF DISEASE

- 5529 Cannabis Use Is Quantitatively Associated with Nucleus Accumbens and Amygdala Abnormalities in Young Adult Recreational Users
  Jodi M. Gilman, John K. Kuster, Sang Lee, Myung Joo Lee, Byoung Woo Kim,
  Nikos Makris, Andre van der Kouwe, Anne J. Blood, and Hans C. Breiter
- 5575 Biphasic Mechanisms of Amphetamine Action at the Dopamine Terminal Cody A. Siciliano, Erin S. Calipari, Mark J. Ferris, and Sara R. Jones
- Synaptic Glutamate Spillover Due to Impaired Glutamate Uptake Mediates Heroin Relapse
   Hao-wei Shen, Michael D. Scofield, Heather Boger, Megan Hensley, and Peter W. Kalivas
- 5732 *Correction:* The article "Loss of Otx2 in the Adult Retina Disrupts Retinal Pigment Epithelium Function, Causing Photoreceptor Degeneration" by Michael Housset, Alexander Samuel, Mohamed Ettaiche, Alexis Bemelmans, Francis Béby, Nathalie Billon, and Thomas Lamonerie appeared on pages 9890 9904 of the June 12, 2013 issue. A correction for that article appears on page 5732.
- 5733 *Retraction:* The article "Elevation of Brain Magnesium Prevents and Reverses Cognitive Deficits and Synaptic Loss in Alzheimer's Disease Mouse Model" by Wei Li, Jia Yu, Yong Liu, Xiaojie Huang, Nashat Abumaria, Ying Zhu, Xian Huang, Wenxiang Xiong, Chi Ren, Xian-Guo Liu, Dehua Chui, and Guosong Liu appeared on pages 8423–8441 of the May 8, 2013 issue. A retraction for that article appears on page 5733.

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