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Cover legend: Immunofluorescence staining for otoferlin expression in whole mounts of mouse organ of Corti and crista ampullaris. Both cochlear and vestibular sensory hair cells exhibit an intense otoferlin staining. A defect in otoferlin expression silences the auditory hair cell ribbon synapse. For more information, see the article by Beurg et al. in this issue (pages 1798-1803).

i This Week in The Journal

## **Journal Club**

1787 The Influences of Associative Cortices on Cross-Modal Integration in the Superior Colliculus

Etienne Vachon-Presseau and Luke Henry

## **Brief Communications**

- 1798 Calcium- and Otoferlin-Dependent Exocytosis by Immature Outer Hair Cells
  Maryline Beurg, Saaid Safieddine, Isabelle Roux, Yohan Bouleau, Christine Petit,
  and Didier Dulon
- 1943 Microstructural Correlates of Infant Functional Development: Example of the Visual Pathways
   Jessica Dubois, Ghislaine Dehaene-Lambertz, Catherine Soarès, Yann Cointepas, Denis Le Bihan, and Lucie Hertz-Pannier
- 1970 cAMP Response Element-Binding Protein 1 Feedback Loop Is Necessary for Consolidation of Long-Term Synaptic Facilitation in Aplysia
   Rong-Yu Liu, Diasinou Fioravante, Shreyansh Shah, and John H. Byrne
- The Good, the Bad, and the Cell Type-Specific Roles of Hypoxia Inducible Factor-1α in Neurons and Astrocytes
   Grace Vangeison, Dan Carr, Howard J. Federoff, and David A. Rempe

### Articles

## CELLULAR/MOLECULAR

- Noradrenergic Modulation of Electrical Coupling in GABAergic Networks of the Hippocampus
   Veronika Zsiros and Gianmaria Maccaferri
- 1824 Complementary Modulation of Somatic Inhibition by Opioids and Cannabinoids Lindsey L. Glickfeld, Bassam V. Atallah, and Massimo Scanziani
- 1865 Ca<sup>2+</sup>/CaM Controls Ca<sup>2+</sup>-Dependent Inactivation of NMDA Receptors by Dimerizing the NR1 C Termini
   Chaojian Wang, Hong-Gang Wang, Hui Xie, and Geoffrey S. Pitt
- 1894 Release of the Styryl Dyes from Single Synaptic Vesicles in Hippocampal Neurons Xi Chen, Sebastian Barg, and Wolfhard Almers

## 1949 Vesicle Priming and Recruitment by ubMunc13-2 Are Differentially Regulated by Calcium and Calmodulin

Dragoslav Zikich, Aviv Mezer, Frederique Varoqueaux, Anton Sheinin, Harald J. Junge, Esther Nachliel, Rely Melamed, Nils Brose, Menachem Gutman, and Uri Ashery

#### DEVELOPMENT/PLASTICITY/REPAIR

1854 Ethanol Consumption during Early Pregnancy Alters the Disposition of Tangentially Migrating GABAergic Interneurons in the Fetal Cortex

Verginia C. Cuzon, Pamela W. L. Yeh, Yuchio Yanagawa, Kunihiko Obata, and Hermes H. Yeh

1961 TGFβ-Smad2 Signaling Regulates the Cdh1-APC/SnoN Pathway of Axonal Morphogenesis

Judith Stegmüller, Mai Anh Huynh, Zengqiang Yuan, Yoshiyuki Konishi, and Azad Bonni

## BEHAVIORAL/SYSTEMS/COGNITIVE

1789 Inhibitory Gating of Vibrissal Inputs in the Brainstem

Takahiro Furuta, Elena Timofeeva, Kouichi Nakamura, Keiko Okamoto-Furuta, Masaya Togo, Takeshi Kaneko, and Martin Deschênes

1816 Prestimulus Oscillatory Activity in the Alpha Band Predicts Visual Discrimination Ability

Hanneke van Dijk, Jan-Mathijs Schoffelen, Robert Oostenveld, and Ole Jensen

1841 Activation of the Medial Septum Reverses Age-Related Hippocampal Encoding Deficits: A Place Field Analysis

Simona Sava and Etan I. Markus

1871 Recurrent Synaptic Input and the Timing of Gamma-Frequency-Modulated Firing of Pyramidal Cells during Neocortical "UP" States

Kenji Morita, Rita Kalra, Kazuyuki Aihara, and Hugh P. C. Robinson

1916 An Input-Representing Interneuron Regulates Spike Timing and Thereby Phase Switching in a Motor Network

Kosei Sasaki, Jian Jing, Michael R. Due, and Klaudiusz R. Weiss

1929 Nonlinearities and Contextual Influences in Auditory Cortical Responses Modeled with Multilinear Spectrotemporal Methods

Misha B. Ahrens, Jennifer F. Linden, and Maneesh Sahani

1977 Activation of Muscarinic Receptors in Rat Bladder Sensory Pathways Alters Reflex Bladder Activity

F. Aura Kullmann, Debra E. Artim, Lori A. Birder, and William C. de Groat

## NEUROBIOLOGY OF DISEASE

1833 An Aggregate-Inducing Peripherin Isoform Generated through Intron Retention Is
Upregulated in Amyotrophic Lateral Sclerosis and Associated with Disease Pathology
Shangxi Xiao, Sonja Tjostheim, Teresa Sanelli, Jesse R. McLean, Patrick Horne,
Yuxin Fan, John Ravits, Michael J. Strong, and Janice Robertson

1882 Systemic Vesicular Stomatitis Virus Selectively Destroys Multifocal Glioma and Metastatic Carcinoma in Brain

Koray Özduman, Guido Wollmann, Joseph M. Piepmeier, and Anthony N. van den Pol

# Locomotor Deficiencies and Aberrant Development of Subtype-Specific GABAergic Interneurons Caused by an Unliganded Thyroid Hormone Receptor α1 Karin Wallis, Maria Sjögren, Max van Hogerlinden, Gilad Silberberg, André Fisahn, Kristina Nordström, Lars Larsson, Håkan Westerblad, Gabriela Morreale de Escobar, Oleg Shupliakov, and Björn Vennström

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