



**Cover legend:** This image shows an embryonic day 12.5 mouse embryo lacking the Plexin-A4 receptor. These mice develop exuberant cutaneous sensory axonal projections, as revealed by anti-Neurofilament staining. For more information, see the article by Danelon et al. (pages 5413–5430).

## 5343 This Week in The Journal

### Journal Club

- 5344 **Adaptive Immune Cells Link Microbial Metabolites to Stroke Recovery**  
Kathleen Miller-Rhodes

### Research Articles

#### CELLULAR/MOLECULAR

- 5347 **A Role of Low-Density Lipoprotein Receptor-Related Protein 4 (LRP4) in Astrocytic A $\beta$  Clearance**  
Hongsheng Zhang, Wenbing Chen, Zhibing Tan, Lei Zhang, Zhaoqi Dong, Wanpeng Cui, Kai Zhao, Hongsheng Wang, Hongyang Jing, Rangjuan Cao, Chae Kim, Jiri G. Safar, Wen-Cheng Xiong, and Lin Mei
- 5362 **RLN3/RXFP3 Signaling in the PVN Inhibits Magnocellular Neurons via M-like Current Activation and Contributes to Binge Eating Behavior**  
Alan Kania, Agata Szlaga, Patryk Sambak, Anna Gugula, Ewa Blasiak, Maria Vittoria Micioni Di Bonaventura, Mohammad Akhter Hossain, Carlo Cifani, Grzegorz Hess, Andrew L. Gundlach, and Anna Blasiak
- 5376 **Kirrel3-Mediated Synapse Formation Is Attenuated by Disease-Associated Missense Variants**  
Matthew R. Taylor, E. Anne Martin, Brooke Sinnen, Rajdeep Trilokekar, Emmanuelle Ranza, Stylianos E. Antonarakis, and Megan E. Williams
- 5389 **VAMP4 Maintains a Ca<sup>2+</sup>-Sensitive Pool of Spontaneously Recycling Synaptic Vesicles**  
Pei-Yi Lin, Natali L. Chanaday, Patricia M. Horvath, Denise M.O. Ramirez, Lisa M. Monteggia, and Ege T. Kavalali

#### DEVELOPMENT/PLASTICITY/REPAIR

- 5402 **Semaphorin-Mediated Corticospinal Axon Elimination Depends on the Activity-Induced Bax/Bak-Caspase Pathway**  
Zirong Gu, Natasha Koppel, John Kalamboglas, Gabriella Alexandrou, Jie Li, Corey Craig, David J. Simon, Marc Tessier-Lavigne, Mark L. Baccei, John H. Martin, and Yutaka Yoshida
- 5413 **Modular and Distinct Plexin-A4/FARP2/Rac1 Signaling Controls Dendrite Morphogenesis**  
Victor Danelon, Ron Goldner, Edward Martinez, Irena Gokhman, Kimberly Wang, Avraham Yaron, and Tracy S. Tran
- 5431 **Early Visual Motion Experience Improves Retinal Encoding of Motion Directions**  
Li Zhang, Qiwen Wu, and Yifeng Zhang

## SYSTEMS/CIRCUITS

**5443 Functional Localization of an Attenuating Filter within Cortex for a Selective Detection Task in Mice**

Krithiga Aruljothi, Krista Marrero, Zhaoran Zhang, Behzad Zareian, and Edward Zagher

## BEHAVIORAL/COGNITIVE

**5455 Physical Salience and Value-Driven Salience Operate through Different Neural Mechanisms to Enhance Attentional Selection Physical Salience versus Value-Driven Salience**

Matthew D. Bachman, Lingling Wang, Marissa L. Gamble, and Marty G. Woldorff

**5465 Predicting Stereopsis in Macular Degeneration**

Preeti Verghese and Saeideh Ghahghaei

**5471 Apparent Motion Induces Activity Suppression in Early Visual Cortex and Impairs Visual Detection**

Lu Shen, Biao Han, and Floris P. de Lange

## NEUROBIOLOGY OF DISEASE

**5480 Enduring Changes in Neuronal Function upon Systemic Inflammation Are NLRP3 Inflammasome Dependent**

Marianna M.S. Beyer, Niklas Lonnemann, Anita Remus, Eicke Latz, Michael T. Heneka, and Martin Korte

**5495 Disruption of Critical Period Plasticity in a Mouse Model of Neurofibromatosis Type 1**

Mariska van Lier, M. Hadi Saiepour, Koen Kole, Juliette E. Cheyne, Nawal Zabouri, Thomas Blok, Yi Qin, Emma Ruimschotel, J. Alexander Heimel, Christian Lohmann, and Christiaan N. Levelt

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