



**Cover legend:** This maximum intensity projection confocal image shows a neurobiotin-filled neuron (yellow) in a coronal brain slice containing the dorsal raphe nucleus from an adult mouse. Unlike the surrounding neurons, the neurobiotin-filled neuron does not express tryptophan hydroxylase (a marker of serotonin neurons, blue). For more information, see the article by Khamma et al. (pages 968–979). Cover image: J. Khamma and S. Gantz.

## 939 This Week in The Journal

### Research Articles

#### CELLULAR/MOLECULAR

- 940 Complexes of Ghrelin GHS-R1a, GHS-R1b, and Dopamine D<sub>1</sub> Receptors Localized in the Ventral Tegmental Area as Main Mediators of the Dopaminergic Effects of Ghrelin**  
Gemma Navarro, William Rea, César Quiroz, Estefanía Moreno, Devan Gomez, Cody J. Wenthur, Vicent Casadó, Lorenzo Leggio, Matthew C. Hearing, and Sergi Ferré
- 954 Presynaptic Mitochondrial Volume and Packing Density Scale with Presynaptic Power Demand**  
Karlis A. Justs, Zhongmin Lu, Amit K. Chouhan, Jolanta A. Borycz, Zhiyuan Lu, Ian A. Meinertzhagen, and Gregory T. Macleod
- 968 Spatiotemporal Control of Noradrenaline-Dependent Synaptic Transmission in Mouse Dorsal Raphe Serotonin Neurons**  
Jacqueline K. Khamma, Daniel S. Copeland, Holly S. Hake, and Stephanie C. Gantz
- 980 Synaptic Integration of Subquantal Neurotransmission by Colocalized G Protein-Coupled Receptors in Presynaptic Terminals**  
Emily Church, Edaeni Hamid, Zack Zurawski, Mariana Potcoava, Eden Flores-Barrera, Adriana Caballero, Kuei Y. Tseng, and Simon Alford
- 1001 Stochastic Properties of Spontaneous Synaptic Transmission at Individual Active Zones**  
Herson Astacio, Alexander Vasin, and Maria Bykhovskaia

#### DEVELOPMENT/PLASTICITY/REPAIR

- 1020 Late-Onset, Short-Term Intermittent Fasting Reverses Age-Related Changes in Calcium Buffering and Inhibitory Synaptic Transmission in Mouse Basal Forebrain Neurons**  
Eunyoung Bang, Annette S. Fincher, Sophie Nader, David A. Murchison, and William H. Griffith

#### SYSTEMS/CIRCUITS

- 1035 Effects of Altered Excitation-Inhibition Balance on Decision Making in a Cortical Circuit Model**  
Norman H. Lam, Thiago Borduqui, Jaime Hallak, Antonio Roque, Alan Anticevic, John H. Krystal, Xiao-Jing Wang, and John D. Murray
- 1054 Biased Orientation and Color Tuning of the Human Visual Gamma Rhythm**  
Ye Li, William Bosking, Michael S. Beauchamp, Sameer A. Sheth, Daniel Yoshor, Eleonora Bartoli, and Brett L. Foster

**1068 Pathways for Memory, Cognition and Emotional Context: Hippocampal, Subgenual Area 25, and Amygdalar Axons Show Unique Interactions in the Primate Thalamic Reuniens Nucleus**

Mary Kate P. Joyce, Laura G. Marshall, Shimrani L. Banik, Jingyi Wang, Danqing Xiao, Jamie G. Bunce, and Helen Barbas

**1090 Differential Activity-Dependent Increase in Synaptic Inhibition and Parvalbumin Interneuron Recruitment in Dentate Granule Cells and Semilunar Granule Cells**

Milad Afrasiabi, Akshay Gupta, Huaying Xu, Bogumila Swietek, and Vijayalakshmi Santhakumar

#### BEHAVIORAL/COGNITIVE

**1104 Lateral Entorhinal Cortex Suppresses Drift in Cortical Memory Representations**  
Maryna Pilkiw, Justin Jarovi, and Kaori Takehara-Nishiuchi

**1119 Task-Related Modulation of Sensorimotor GABA+ Levels in Association with Brain Activity and Motor Performance: A Multimodal MRS-fMRI Study in Young and Older Adults**

Celine Maes, Koen Cuypers, Ronald Peeters, Stefan Sunaert, Richard A. E. Edden, Jolien Gooijers, and Stephan P. Swinnen

**1131 Sensory-Tactile Functional Mapping and Use-Associated Structural Variation of the Human Female Genital Representation Field**

Andrea J. J. Knop, Stephanie Spengler, Carsten Bogler, Carina Forster, Michael Brecht, John-Dylan Haynes, and Christine Heim

**1141 The Representational Dynamics of Sequential Perceptual Averaging**

Jongrok Do (도종록), Kang Yong Eo (어강용), Oliver James, Joonyeol Lee (이준열), and Yee-Joon Kim (김이준)

#### NEUROBIOLOGY OF DISEASE

**1154 Sex-Specific Regulation of  $\beta$ -Secretase: A Novel Estrogen Response Element (ERE)-Dependent Mechanism in Alzheimer's Disease**

Jie Cui, Ghania Ait-Ghezala, Kumar Sambamurti, Feng Gao, Yong Shen, and Rena Li

**1166 *Erratum:*** The article "Dorsal Root Ganglia Macrophages Maintain Osteoarthritis Pain," by Ramin Raof, Christian Martin Gil, Floris P.J.G. Lafeber, Huub de Visser, Judith Prado, Sabine Versteeg, Mirte N. Pascha, Anne L.P. Heinemans, Youri Adolfs, Jeroen Pasterkamp, John N. Wood, Simon C. Mastbergen, and Niels Eijkelkamp appeared on pages 8249–8261 of the September 29, 2021 issue. An erratum for this article appears on page 1166.

**1167 *Erratum:*** The article, "Modality-Specific Impairment of Hippocampal CA1 Neurons of Alzheimer's Disease Model Mice," by Risa Takamura, Kotaro Mizuta, Yukiko Sekine, Tanvir Islam, Takashi Saito, Masaaki Sato, Masamichi Ohkura, Junichi Nakai, Toshio Ohshima, Takaomi C. Saïdo, and Yasunori Hayashi, appeared on pages 5315–5329 of the June 16, 2021 issue. An erratum for this article appears on page 1167.

---

Persons interested in becoming members of the Society for Neuroscience should contact the Membership Department at [membership@sfn.org](mailto:membership@sfn.org) or 202-962-4911.

For current submission policies and manuscript preparation guidelines, authors should refer to our Information for Authors at <https://www.jneurosci.org/content/information-authors>.

Manuscripts should be submitted online at <https://jneurosci.msubmit.net>. Please contact the Central Office with any questions at [jn@sfn.org](mailto:jn@sfn.org) or 202-962-4000.