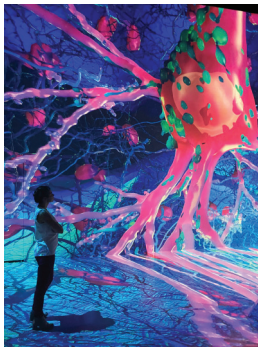


# JNeurosci

THE JOURNAL OF NEUROSCIENCE

November 29, 2023 • Volume 43 Number 48 • www.jneurosci.org



**Cover legend:** In early 2019, a groundbreaking collaboration between Society for Neuroscience (SfN), ARTECHOUSE, and a team of neurobiologists led by John Morrison, PhD, was launched. It culminated in the opening of *Life of a Neuron*, a digital art installation providing an immersive experience of an actual human neuron. Pictured here inside the exhibit is Dani Dumitriu, MD, PhD, the scientist who produced the raw dataset supplied to the artists by performing a single cell microinjection with a fluorescent marker and confocal imaging. See the manuscript by Dumitriu and Morrison (pages 8075–8078) for more information. Cover image: Nikita Dumitriu.

8073 This Week in The Journal

## Editorial

8074 **Introducing Open Peer Review at *JNeurosci***  
Sabine Kastner

## Neuro and Beyond

8075 ***Life of a Neuron: The Mentor–Mentee Backstage Story***  
Dani Dumitriu and John H. Morrison

## Viewpoints

8079 **Pavlovian Fear Conditioning Is More than You Think It Is**  
Michael A. McDannald

## Journal Club

8088 **Amyloid Precursor Protein Can Cause Changes in Neuronal Firing Rates via Axon Initial Segment**  
Debalina Acharyya and Victoria Norman

## Research Articles

### CELLULAR/MOLECULAR

8090 **P2Y<sub>6</sub> Receptor-Dependent Microglial Phagocytosis of Synapses during Development Regulates Synapse Density and Memory**  
Jacob M. Dundee, Mar Puigdel·l·ivol, Richard Butler, and Guy C. Brown

### DEVELOPMENT/PLASTICITY/REPAIR

8104 **miR-218 Promotes Dopaminergic Differentiation and Controls Neuron Excitability and Neurotransmitter Release through the Regulation of a Synaptic-Related Genes Network**  
Salvatore Pulcrano, Roberto De Gregorio, Claudia De Sanctis, Floriana Volpicelli, Rosa Maria Piscitelli, Luisa Speranza, Carla Perrone-Capano, Umberto di Porzio, Massimiliano Caiazzo, Alessandro Martini, Cecilia Giacomet, Diego Medina, Rajeshwar Awatramani, Davide Viggiano, Mauro Federici, Nicola B. Mercuri, Ezia Guatteo, and Gian Carlo Bellenchi

8126 **Motor Activity-Induced White Matter Repair in White Matter Stroke**  
Miguel A. Marin, Amy J. Gleichman, Xiaofei Wei, Daniel S. Whittaker, Istvan Mody, Christopher S. Colwell, and S. Thomas Carmichael

## SYSTEMS/CIRCUITS

**8140 The Structure of Hippocampal CA1 Interactions Optimizes Spatial Coding across Experience**

Michele Nardin, Jozsef Csicsvari, Gašper Tkáčöik, and Cristina Savin

**8157 Cortical Synchrony and Information Flow during Transition from Wakefulness to Light Non-Rapid Eye Movement Sleep**

Joline M. Fan, Kiwamu Kudo, Parul Verma, Kamalini G. Ranasinghe, Hirofumi Morise, Anne M. Findlay, Keith Vossel, Heidi E. Kirsch, Ashish Raj, Andrew D. Krystal, and Srikantan S. Nagarajan

**8172 Hypersensitivity to Distractors in Fragile X Syndrome from Loss of Modulation of Cortical VIP Interneurons**

Noorhan Rahmatullah, Lauren M. Schmitt, Lisa De Stefano, Sam Post, Jessica Robledo, Gunvant Chaudhari, Ernest Pedapati, Craig Erickson, Carlos Portera-Cailliau, and Anubhuti Goel

## BEHAVIORAL/COGNITIVE

**8189 Intonation Units in Spontaneous Speech Evoke a Neural Response**

Maya Inbar, Shir Genzer, Anat Perry, Eitan Grossman, and Ayelet N. Landau

**8201 Distinct ACC Neural Mechanisms Underlie Authentic and Transmitted Anxiety Induced by Maternal Separation in Mice**

Jinxiang Jiang, Shuyi Tan, Xiaoyi Feng, Yigang Peng, Cheng Long, and Li Yang

**8219 The Representation of Observed Actions at the Subordinate, Basic, and Superordinate Level**

Tonghe Zhuang, Zuzanna Kabulska, and Angelika Lingnau

## NEUROBIOLOGY OF DISEASE

**8231 The Role of Retinal Dopamine D1 Receptors in Ocular Growth and Myopia Development in Mice**

Ziheng Shu, Kaijie Chen, Qionsi Wang, Honglin Wu, Yangfeifei Zhu, Ruikang Tian, Wenjun Yan, Qin Huang, Chunlan Zhang, Weiwei Xiong, Jia Qu, Xiangtian Zhou, and Furong Huang

**8243 Hyperexcitability in the Olfactory Bulb and Impaired Fine Odor Discrimination in the *Fmr1* KO Mouse Model of Fragile X Syndrome**

Praveen Kuruppath, Lin Xue, Frederic Pouille, Shelly T. Jones, and Nathan E. Schoppa

**8259 Extracellular ATP Neurotransmission and Nicotine Sex-Specifically Modulate Habenular Neuronal Activity in Adolescence**

Yen-Chu Chen, Daniel Jun Rindner, James P. Fowler, Valeria Lallai, Allison Mogul, Angelo Demuro, Gyorgy Lur, and Christie D. Fowler

---

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.