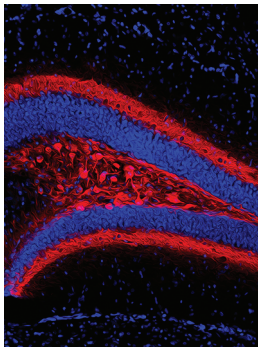


JNeurosci

THE JOURNAL OF NEUROSCIENCE

March 17, 2021 • Volume 41 Number 11 • www.jneurosci.org



Cover legend: A confocal image, rendered as an oil painting, shows the hippocampal dentate gyrus, with the primary excitatory cell type, the dentate granule cells, in blue. Hilar mossy cells and their axons were labelled using a viral method shown in red. New work shows that activating versus inhibiting mossy cells often produces opposing effects on cognitive and anxiety-like behaviors. See Botterill et al. for details. (pages 2475–2495). Cover image: Justin Botterill.

2313 This Week in The Journal

Commentary

2314 Black In Neuro, Beyond One Week

De-Shaine Murray, Lietsel Richardson, Rackeb Tesfaye, Danielle Nadin, Clíona Kelly, and Paige Greenwood

TechSights

2318 The Property-Based Practical Applications and Solutions of Genetically Encoded Acetylcholine and Monoamine Sensors

Jun Chen, Katriel E. Cho, Daria Skwarzynska, Shaylyn Clancy, Nicholas J. Conley, Sarah M. Clinton, Xiaokun Li, Li Lin, and J. Julius Zhu

Research Articles

CELLULAR/MOLECULAR

2329 PSD-95 in CA1 Area Regulates Spatial Choice Depending on Age

Anna Cały, Małgorzata A. Śliwińska, Magdalena Ziółkowska, Kacper Łukasiewicz, Roberto Pagano, Jakub M. Dzik, Katarzyna Kalita, Tytus Bernaś, Michael G. Stewart, K. Peter Giese, and Kasia Radwanska

2344 Pathogenic *GRM7* Mutations Associated with Neurodevelopmental Disorders Impair Axon Outgrowth and Presynaptic Terminal Development

Jae-man Song, Minji Kang, Da-ha Park, Sunha Park, Sanghyeon Lee, and Young Ho Suh

2360 Insulin Bidirectionally Alters NAc Glutamatergic Transmission: Interactions between Insulin Receptor Activation, Endogenous Opioids, and Glutamate Release

Tracy L. Fetterly, Max F. Oginsky, Allison M. Nieto, Yanaira Alonso-Caraballo, Zuleirys Santana-Rodriguez, and Carrie R. Ferrario

2373 *Caenorhabditis elegans* F-Box Protein Promotes Axon Regeneration by Inducing Degradation of the Mad Transcription Factor

Tatsuhiko Shimizu, Strahil I. Pastuhov, Hiroshi Hanafusa, Yoshiki Sakai, Yasuko Todoroki, Naoki Hisamoto, and Kunihiro Matsumoto

SYSTEMS/CIRCUITS

2382 Representation of Contralateral Visual Space in the Human Hippocampus

Edward H. Silson, Peter Zeidman, Tomas Knapen, and Chris I. Baker

2393 Direct Structural Connections between Auditory and Visual Motion-Selective Regions in Humans

Ane Gurtubay-Antolin, Ceren Battal, Chiara Maffei, Mohamed Rezk, Stefania Mattioni, Jorge Jovicich, and Olivier Collignon

- 2406 Coordinated Prefrontal State Transition Leads Extinction of Reward-Seeking Behaviors Prefrontal Transitions Lead Extinction Learning**
Eleonora Russo, Tianyang Ma, Rainer Spanagel, Daniel Durstewitz, Hazem Toutounji, and Georg Köhr
- 2420 Population Receptive Field Shapes in Early Visual Cortex Are Nearly Circular**
Garikoitz Lerma-Usabiaga, Jonathan Winawer, and Brian A. Wandell
- 2428 Chronic Stress Prevents Cortico-Accumbens Cue Encoding and Alters Conditioned Approach**
Mitchell G. Spring, Aaron Caccamise, Elizabeth A. Panther, Bethany M. Windsor, Karan R. Soni, Jayme R. McReynolds, Daniel S. Wheeler, John R. Mantsch, and Robert A. Wheeler

BEHAVIORAL/COGNITIVE

- 2437 Intact Behavioral Expression of Contextual Fear, Context Discrimination, and Object Discrimination Memories Acquired in the Absence of the Hippocampus**
Darryl C. Gidyk, Robert J. McDonald, and Robert J. Sutherland
- 2447 Surprise: Unexpected Action Execution and Unexpected Inhibition Recruit the Same Fronto-Basal-Ganglia Network**
Alexandra Sebastian, Anne Maria Konken, Michael Schaum, Klaus Lieb, Oliver Tüscher, and Patrick Jung
- 2457 TRPM3 Channels Play Roles in Heat Hypersensitivity and Spontaneous Pain after Nerve Injury**
Songxue Su, Yevgen Yudin, Nawoo Kim, Yuan-Xiang Tao, and Tibor Rohacs
- 2475 Bidirectional Regulation of Cognitive and Anxiety-like Behaviors by Dentate Gyrus Mossy Cells in Male and Female Mice**
Justin J. Botterill, K. Yaragudri Vinod, Kathleen J. Gerencer, Cátia M. Teixeira, John J. LaFrancois, and Helen E. Scharfman
- 2496 Musical Expertise Shapes Functional and Structural Brain Networks Independent of Absolute Pitch Ability**
Simon Leipold, Carina Klein, and Lutz Jäncke
- 2512 Attenuated Directed Exploration during Reinforcement Learning in Gambling Disorder**
A. Wiehler, K. Chakroun, and J. Peters

NEUROBIOLOGY OF DISEASE

- 2523 Neuronal Nitric Oxide Synthase in Nucleus Accumbens Specifically Mediates Susceptibility to Social Defeat Stress through Cyclin-Dependent Kinase 5**
Chun-Yu Yin, Shu-Ying Huang, Ling Gao, Yu-Hui Lin, Lei Chang, Hai-Yin Wu, Dong-Ya Zhu, and Chun-Xia Luo

Persons interested in becoming members of the Society for Neuroscience should contact the Membership Department at 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 or 202-962-4000.