



Cover legend: This confocal image shows hippocampal neurons (brown) cultured from Neuroigin-1,2,3 floxed mice overexpressing Neuroigin-1 fused to an HA epitope (green) and stained for Synapsin (pink). Overexpression of Neuroigin-1 on dendrites recruits blossom-like Synapsin clusters. For more information, see the article by Chanda et al. (pages 6816–6836).

i This Week in The Journal

Journal Club

6811 Electrical Stimulation of the Pulvinar Disrupts Control of Spatially Directed Actions
Naomi N. Odean and Natalie A. Steinemann

6814 Relevance of the Proteolytic Processing of Reelin by ADAMTS-3 in Brain Functions
Sighild Lemarchant

Research Articles

CELLULAR/MOLECULAR

6816 Unique versus Redundant Functions of Neuroigin Genes in Shaping Excitatory and Inhibitory Synapse Properties
Soham Chanda, W. Dylan Hale, Bo Zhang, Marius Wernig, and Thomas C. Südhof

DEVELOPMENT/PLASTICITY/REPAIR

6926 Amyloid- β Peptide Is Needed for cGMP-Induced Long-Term Potentiation and Memory
Agostino Palmeri, Roberta Ricciarelli, Walter Gulisano, Daniela Rivera, Claudia Rebosio, Elisa Calcagno, Maria Rosaria Tropea, Silvia Conti, Utpal Das, Subhojit Roy, Maria Adelaide Pronzato, Ottavio Arancio, Ernesto Fedele, and Daniela Puzzo

SYSTEMS/CIRCUITS

6902 Effects of Ventral Striatum Lesions on Stimulus-Based versus Action-Based Reinforcement Learning
Kathryn M. Rothenhoefer, Vincent D. Costa, Ramón Bartolo, Raquel Vicario-Feliciano, Elisabeth A. Murray, and Bruno B. Averbeck

6938 Pharmacological Modulation of Noradrenergic Arousal Circuitry Disrupts Functional Connectivity of the Locus Ceruleus in Humans
Andrew H. Song, Aaron Kucyi, Vitaly Napadow, Emery N. Brown, Marco L. Loggia, and Oluwaseun Akeju

6956 Cold-Induced Thermogenesis and Inflammation-Associated Cold-Seeking Behavior Are Represented by Different Dorsomedial Hypothalamic Sites: A Three-Dimensional Functional Topography Study in Conscious Rats
Samuel P. Wanner, M. Camila Almeida, Yury P. Shimansky, Daniela L. Oliveira, Justin R. Eales, Cândido C. Coimbra, and Andrej A. Romanovsky

- 6995 **Prefrontal Neurons Encode a Solution to the Credit-Assignment Problem**
Wael F. Asaad, Peter M. Lauro, János A. Perge, and Emad N. Eskandar
- 7008 **Representations of Time-Varying Cochlear Implant Stimulation in Auditory Cortex of Awake Marmosets (*Callithrix jacchus*)**
Luke A. Johnson, Charles C. Della Santina, and Xiaoqin Wang
- 7036 **Social Context-Dependent Activity in Marmoset Frontal Cortex Populations during Natural Conversations**
Samuel U. Nummela, Vladimir Jovanovic, Lisa de la Mothe, and Cory T. Miller

BEHAVIORAL/COGNITIVE

- 6869 **Dissecting the Function of Hippocampal Oscillations in a Human Anxiety Model**
Saurabh Khemka, Gareth Barnes, Raymond J. Dolan, and Dominik R. Bach
- 6894 **Differential Aging Trajectories of Modulation of Activation to Cognitive Challenge in APOE ϵ 4 Groups: Reduced Modulation Predicts Poorer Cognitive Performance**
Chris M. Foster, Kristen M. Kennedy, and Karen M. Rodrigue
- 6946 **Reciprocal Interaction of Dendrite Geometry and Nuclear Calcium-VEGFD Signaling Gates Memory Consolidation and Extinction**
Thekla J. Hemstedt, C. Peter Bengtson, Omar Ramírez, Ana M.M. Oliveira, and Hilmar Bading
- 6972 **Neural Mechanisms of Updating under Reducible and Irreducible Uncertainty**
Kenji Kobayashi and Ming Hsu
- 6983 **Alpha-Band Brain Oscillations Shape the Processing of Perceptible as well as Imperceptible Somatosensory Stimuli during Selective Attention**
Norman Forschack, Till Nierhaus, Matthias M. Müller, and Arno Villringer
- 7023 **Contrasting Effects of Medial and Lateral Orbitofrontal Cortex Lesions on Credit Assignment and Decision-Making in Humans**
MaryAnn P. Noonan, Bolton K.H. Chau, Matthew F.S. Rushworth, and Lesley K. Fellows

NEUROBIOLOGY OF DISEASE

- 6837 **Tweety-Homolog 1 Drives Brain Colonization of Gliomas**
Erik Jung, Matthias Osswald, Jonas Blaes, Benedikt Wiestler, Felix Sahn, Torsten Schmenger, Gergely Solecki, Katrin Deumelandt, Felix T. Kurz, Ruifan Xie, Sophie Weil, Oliver Heil, Carina Thomé, Miriam Gömmel, Mustafa Syed, Peter Häring, Peter E. Huber, Sabine Heiland, Michael Platten, Andreas von Deimling, Wolfgang Wick, and Frank Winkler
- 6851 **Amplification of mGlu₅-Endocannabinoid Signaling Rescues Behavioral and Synaptic Deficits in a Mouse Model of Adolescent and Adult Dietary Polyunsaturated Fatty Acid Imbalance**
Antonia Manduca, Anissa Bara, Thomas Larrieu, Olivier Lassalle, Corinne Joffre, Sophie Layé, and Olivier J. Manzoni
- 6877 **Valnoctamide Inhibits Cytomegalovirus Infection in Developing Brain and Attenuates Neurobehavioral Dysfunctions and Brain Abnormalities**
Sara Ornaghi, Lawrence S. Hsieh, Angélique Bordey, Patrizia Vergani, Michael J. Paidas, and Anthony N. van den Pol

6915 **BACE1 Cleavage Site Selection Critical for Amyloidogenesis and Alzheimer's Pathogenesis**

Shuting Zhang, Zhe Wang, Fang Cai, Mingming Zhang, Yili Wu, Jing Zhang, and Weihong Song

Persons interested in becoming members of the Society for Neuroscience should contact the Membership Department, Society for Neuroscience, 1121 14th St., NW, Suite 1010, Washington, DC 20005, phone 202-962-4000.

Instructions for Authors are available at <http://www.jneurosci.org/content/information-authors>. Authors should refer to these Instructions online for recent changes that are made periodically.

Submissions should be submitted online using the following url: <http://jneurosci.msubmit.net>. Please contact the Central Office, via phone, fax, or e-mail with any questions. Our contact information is as follows: phone, 202-962-4000; e-mail, jn@sfn.org.