Cover legend: Artistic rendition of αβγ-synuclein knockout synapses, showing a deficit in cholera toxin-HRP positive vesicles (black vesicles). This experiment in synuclein-null neurons supports a physiological role for α-synuclein in synaptic vesicle endocytosis. For more information, see the article by Vargas et al. (pages 9364–9376).

This Week in The Journal

Journal Club

9179  Sirtuin 3: A Molecular Pathway Linking Sleep Deprivation to Neurological Diseases
Karim Fifel

Brief Communications

9196  The Acquisition of Goal-Directed Actions Generates Opposing Plasticity in Direct and Indirect Pathways in Dorsomedial Striatum
Qiang Shan, Miao Ge, MacDonald J. Christie, and Bernard W. Balleine

9305  Synaptic Plasticity Associated with a Memory Engram in the Basolateral Amygdala
Ayako Nonaka, Takeshi Toyoda, Yuki Miura, Natsuko Hitotra-Imamura, Masamitsu Naka, Megumi Eguchi, Shun Yamaguchi, Yuji Ikegaya, Norio Matsuki, and Hiroshi Nomura

9332  Statistical Learning of Serial Visual Transitions by Neurons in Monkey Inferotemporal Cortex
Travis Meyer, Suchitra Ramachandran, and Carl R. Olson

Articles

CELLULAR/MOLECULAR

9182  Inhibition of A-Type Potassium Current by the Peptide Toxin SNX-482
Tilia Kimm and Bruce P. Bean

9281  Soluble Adenylyl Cyclase Is Necessary and Sufficient to Overcome the Block of Axonal Growth by Myelin-Associated Factors
Jennifer Martinez, Alexander M. Stessin, Aline Campana, Jianwei Hou, Elena Nikulina, Jochen Buck, Lonny R. Levin, and Marie T. Filbin

9310  Aging Decreases L-Type Calcium Channel Currents and Pacemaker Firing Fidelity in Substantia Nigra Dopamine Neurons
Sarah Y. Branch, Ramaswamy Sharma, and Michael J. Beckstead

9338  Mitochondrial Dysfunction Induces Sarml1-Dependent Cell Death in Sensory Neurons
Daniel W. Summers, Aaron DiAntonio, and Jeffrey Milbrandt

9364  Synucleins Regulate the Kinetics of Synaptic Vesicle Endocytosis
Karina J. Vargas, Sachin Makani, Taylor Davis, Christopher H. Westphal, Pablo E. Castillo, and Sreeganga S. Chandra

9389  Dissecting the Signaling Mechanisms Underlying Recognition and Preference of Food Odors
Gareth Harris, Yu Shen, Heonick Ha, Alessandra Donato, Samuel Wallis, Xiaodong Zhang, and Yun Zhang
9418 Differential GABAergic and Glycinergic Inputs of Inhibitory Interneurons and Purkinje Cells to Principal Cells of the Cerebellar Nuclei
Zoe Husson, Charly V. Rousseau, Ilja Broll, Hanns Ulrich Zeilhofer, and Stéphane Dieudonné

9432 Presynaptic Inhibition by α2 Receptor/Adenylate Cyclase/PDE4 Complex at Retinal Rod Bipolar Synapse
Cun-Jian Dong, Yuanxing Guo, Yilin Ye, and William A. Hare

DEVELOPMENT/PLASTICITY/REPAIR

9213 GluN3A Promotes Dendritic Spine Pruning and Destabilization during Postnatal Development
Laura A. Kehoe, Camilla Bellone, Mathias De Roo, Aitor Zandueta, Partha Narayan Dey, Isabel Pérez-Otaño, and Dominique Muller

9235 Calsyntenin-1 Regulates Axon Branching and Endosomal Trafficking during Sensory Neuron Development In Vivo
Olga Y. Ponomareva, Ian C. Holmen, Aiden J. Sperry, Kevin W. Eliceiri, and Mary C. Halloran

9404 Characterization of Long Descending Premotor Propriospinal Neurons in the Spinal Cord
Yingchun Ni, Homaira Nawabi, Xuefeng Liu, Liu Yang, Kazunari Miyamichi, Andrea Tedeschi, Bengang Xu, Nicholas R. Wall, Edward M. Callaway, and Zhigang He

SYSTEMS/CIRCUITS

9190 Tonic Pain Experienced during Locomotor Training Impairs Retention Despite Normal Performance during Acquisition
Jason Bouchard, Laurent J. Bouyer, Jean-Sébastien Roy, and Catherine Mercier

9290 Orientation-Tuned Surround Suppression in Mouse Visual Cortex

9319 α1,2-Adrenergic Receptors Filter Parabrachial Inputs to the Bed Nucleus of the Stria Terminalis
Stephanie A. Flavin, Robert T. Matthews, Qin Wang, E. Chris Muly, and Danny G. Winder

9351 Parallel Functional Reorganizations of Somatosensory Areas 3b and 1, and S2 following Spinal Cord Injury in Squirrel Monkeys
Pai-Feng Yang, Hui-Xin Qi, Jon H. Kaas, and Li Min Chen

9377 Distinct Neuronal Interactions in Anterior Inferotemporal Areas of Macaque Monkeys during Retrieval of Object Association Memory
Toshiyuki Hirabayashi, Keita Tamura, Daigo Takeuchi, Masaki Takeda, Kenji W. Koyano, and Yasushi Miyashita

BEHAVIORAL/COGNITIVE

9202 Functional Network Mirrored in the Prefrontal Cortex, Caudate Nucleus, and Thalamus: High-Resolution Functional Imaging and Structural Connectivity
Hyeon-Ae Jeon, Alfred Anwander, and Angela D. Friederici

9249 The Role of the Hypothalamic Paraventricular Nucleus and the Organum Vasculosum Lateralis in the Control of Sodium Appetite in Male Rats
Laura A. Grafe, Anne E. Takacs, Daniel K. Yee, and Loretta M. Flanagan-Cato
9222 Specific Calpain Inhibition by Calpastatin Prevents Tauopathy and Neurodegeneration and Restores Normal Lifespan in Tau P301L Mice
Mala V. Rao, Mary Kate McBrayer, Jabbar Campbell, Asok Kumar, Audrey Hashim, Henry Sershen, Philip H. Stavrides, Masuo Ohno, Michael Hutton, and Ralph A. Nixon

9261 Vagal Nerve Stimulation Reverses Aberrant Dopamine System Function in the Methylazoxymethanol Acetate Rodent Model of Schizophrenia
Stephanie M. Perez, Flavia R. Carreno, Alan Frazer, and Daniel J. Lodge

9268 The Role of Pak-Interacting Exchange Factor-β Phosphorylation at Serines 340 and 583 by PKCγ in Dopamine Release

9441 Reducing C-Terminal-Truncated Alpha-Synuclein by Immunotherapy Attenuates Neurodegeneration and Propagation in Parkinson’s Disease-Like Models
Dora Games, Elvira Valera, Brian Spencer, Edward Rockenstein, Michael Mante, Anthony Adame, Christina Patrick, Kiren Ubhi, Silke Nuher, Patricia Sacayon, Wagner Zago, Peter Seubert, Robin Barbour, Dale Schenk, and Eliezer Masliah

9455 Huntingtin Is Required for Normal Excitatory Synapse Development in Cortical and Striatal Circuits

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/misc/itoa.shtml. Authors should refer to these Instructions online for recent changes that are made periodically.

Brief Communications Instructions for Authors are available via Internet (http://www.jneurosci.org/misc/ifac_bc.shtml).

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; fax, 202-962-4945; e-mail, jn@sfn.org.