The Journal of Neuroscience

April 18, 2012 • Volume 32 Number 16 • www.jneurosci.org



Cover legend: Adult cats retain the ability to learn visually after permanent visual cortical damage, allowing them to recover visual function. However, the generalizability of relearning to untrained visual stimuli appears influenced both by the specific visual areas damaged and the nature of the stimulus used during training. Random dot kinematograms that were used for visual retraining are illustrated within the pupils. Photo and cover art design by Christine Callan, Anasuya Das, Margaret DeMagistris, and Krystel Huxlin. For more information, see the article by Das et al. (pages 5414 – 5425).

i This Week in The Journal

Journal Club

5353 Relative Disparity Processing in the Dorsal Visual Pathway Matthew L. Patten and Aidan P. Murphy

Brief Communications

- 5356 Functional Dissociation within the Entorhinal Cortex for Memory Retrieval of an Association between Temporally Discontiguous Stimuli Mark D. Morrissey, Geith Maal-Bared, Sinead Brady, and Kaori Takehara-Nishiuchi
- Memory Deficits of British Dementia Knock-In Mice Are Prevented by Aβ-Precursor Protein Haploinsufficiency
 Robert Tamayev and Luciano D'Adamio
- 5549 Individual Differences in Nucleus Accumbens Activity to Food and Sexual Images Predict Weight Gain and Sexual Behavior Kathryn E. Demos, Todd F. Heatherton, and William M. Kelley

Articles

CELLULAR/MOLECULAR

- 5385 Attention Deficit/Hyperactivity Disorder-Derived Coding Variation in the Dopamine Transporter Disrupts Microdomain Targeting and Trafficking Regulation
 Dhananjay Sakrikar, Michelle S. Mazei-Robison, Marc A. Mergy,
 Nathan W. Richtand, Qiao Han, Peter J. Hamilton, Erica Bowton, Aurelio Galli,
 Jeremy Veenstra-VanderWeele, Michael Gill, and Randy D. Blakely
- Distinct Subsets of Syt-IV/BDNF Vesicles Are Sorted to Axons versus Dendrites and Recruited to Synapses by Activity

 Camin Dean, Huisheng Liu, Thorsten Staudt, Markus A. Stahlberg, Siv Vingill, Johanna Bückers, Dirk Kamin, Johann Engelhardt, Meyer B. Jackson, Stefan W. Hell, and Edwin R. Chapman
- 5440 G9a/GLP Histone Lysine Dimethyltransferase Complex Activity in the Hippocampus and the Entorhinal Cortex Is Required for Gene Activation and Silencing during Memory Consolidation

Swati Gupta-Agarwal, Aimee V. Franklin, Thomas DeRamus, Muriah Wheelock, Robin L. Davis, Lori L. McMahon, and Farah D. Lubin

- 5472 Desert Hedgehog Links Transcription Factor Sox10 to Perineurial Development Melanie Küspert, Matthias Weider, Jana Müller, Irm Hermans-Borgmeyer, Dies Meijer, and Michael Wegner
- 5486 Regulation of NMDA Receptor Transport: A KIF17-Cargo Binding/Releasing Underlies Synaptic Plasticity and Memory In Vivo Xiling Yin, Xue Feng, Yosuke Takei, and Nobutaka Hirokawa
- 5562 Necdin Controls Foxo1 Acetylation in Hypothalamic Arcuate Neurons to Modulate the Thyroid Axis Koichi Hasegawa, Tomohiro Kawahara, Kazushiro Fujiwara, Mayumi Shimpuku, Tsutomu Sasaki, Tadahiro Kitamura, and Kazuaki Yoshikawa
- 5573 Peroxynitrite Donor SIN-1 Alters High-Affinity Choline Transporter Activity by Modifying Its Intracellular Trafficking Leah K. Cuddy, Alexis C. Gordon, Stefanie A. G. Black, Ewa Jaworski, Stephen S. G. Ferguson, and R. Jane Rylett
- Regulation of Neuronal mRNA Translation by CaM-Kinase I Phosphorylation 5620 of eIF4GII Taasin Srivastava, Dale A. Fortin, Sean Nygaard, Stefanie Kaech, Nahum Sonenberg, Arthur M. Edelman, and Thomas R. Soderling
- An Activity-Regulated microRNA, miR-188, Controls Dendritic Plasticity and Synaptic Transmission by Downregulating Neuropilin-2 Kihwan Lee, Joung-Hun Kim, Oh-Bin Kwon, Kyongman An, Junghwa Ryu, Kwangwook Cho, Yoo-Hun Suh, and Hye-Sun Kim
- IκB Kinase/Nuclear Factor κB-Dependent Insulin-Like Growth Factor 2 (Igf2) Expression Regulates Synapse Formation and Spine Maturation via Igf2 **Receptor Signaling** Michael J. Schmeisser, Bernd Baumann, Svenja Johannsen, Gry F. Vindedal, Vidar Jensen, Øivind C. Hvalby, Rolf Sprengel, Jochen Seither, Ayesha Maqbool, Alexander Magnutzki, Michael Lattke, Franz Oswald, Tobias M. Boeckers,

DEVELOPMENT/PLASTICITY/REPAIR

and Thomas Wirth

5688

- c-Maf Is Required for the Development of Dorsal Horn Laminae III/IV Neurons and Mechanoreceptive DRG Axon Projections Jia Hu, Tianwen Huang, Tingting Li, Zhen Guo, and Leping Cheng
- 5374 Ferritin Stimulates Oligodendrocyte Genesis in the Adult Spinal Cord and Can Be Transferred from Macrophages to NG2 Cells In Vivo David L. Schonberg, Evan Z. Goldstein, Fatma Rezan Sahinkaya, Ping Wei, Phillip G. Popovich, and Dana M. McTigue
- 5426 Spontaneous Activity Promotes Synapse Formation in a Cell-Type-Dependent Manner in the Developing Retina Florentina Soto, Xiaofeng Ma, Jacob L. Cecil, Bradly Q. Vo, Susan M. Culican, and Daniel Kerschensteiner
- 5654 Neurogenic Subventricular Zone Stem/Progenitor Cells Are Notch1-Dependent in Their Active But Not Quiescent State Onur Basak, Claudio Giachino, Emma Fiorini, H. Robson MacDonald, and Verdon Taylor

BEHAVIORAL/SYSTEMS/COGNITIVE

- 5414 Different Properties of Visual Relearning after Damage to Early Versus Higher-Level Visual Cortical Areas
 - Anasuya Das, Margaret DeMagistris, and Krystel R. Huxlin
- 5454 Columnar Interactions Determine Horizontal Propagation of Recurrent Network Activity in Neocortex
 - Jason C. Wester and Diego Contreras
- 5510 Parallel Coding of First- and Second-Order Stimulus Attributes by Midbrain Electrosensory Neurons
 - Patrick McGillivray, Katrin Vonderschen, Eric S. Fortune, and Maurice J. Chacron
- 5534 Mechanisms of Action Selection and Timing in Substantia Nigra Neurons David Fan, Mark A. Rossi, and Henry H. Yin
- 5553 Social-Cognitive Deficits in Normal Aging Joseph M. Moran, Eshin Jolly, and Jason P. Mitchell
- 5598 Neural Correlates of Long-Term Object Memory in the Mouse Anterior Cingulate Cortex
 - Aldis P. Weible, David C. Rowland, Caitlin K. Monaghan, Nicholas T. Wolfgang, and Clifford G. Kentros
- Spatial Profile of Excitatory and Inhibitory Synaptic Connectivity in Mouse Primary Auditory Cortex
 Robert B. Levy and Alex D. Reyes
- 5631 Controlling Human Striatal Cognitive Function via the Frontal Cortex Martine R. van Schouwenburg, Jacinta O'Shea, Rogier B. Mars, Matthew F. S. Rushworth, and Roshan Cools
- 5638 Neural Circuit Reconfiguration by Social Status
 Fadi A. Issa, Joanne Drummond, Daniel Cattaert, and Donald H. Edwards
- 5646 Scene Construction in Amnesia: An fMRI Study Sinéad L. Mullally, Demis Hassabis, and Eleanor A. Maguire
- Spatiotemporal Dynamics of Bimanual Integration in Human Somatosensory Cortex and Their Relevance to Bimanual Object Manipulation
 Patrick Jung, Johannes C. Klein, Michael Wibral, Karsten Hoechstetter,
 Barbara Bliem, Ming-Kuei Lu, Mathias Wahl, and Ulf Ziemann

NEUROBIOLOGY OF DISEASE

- 5500 Motor Deficits Are Triggered by Reperfusion-Reoxygenation Injury as Diagnosed by MRI and by a Mechanism Involving Oxidants
 - Alexander Drobyshevsky, Kehuan Luo, Matthew Derrick, Lei Yu, Hongyan Du, P. V. Prasad, Jeannette Vasquez-Vivar, Ines Batinic-Haberle, and Sidhartha Tan
- 5525 Willingness to Wait and Altered Encoding of Time-Discounted Reward in the Orbitofrontal Cortex with Normal Aging Matthew R. Roesch, Daniel W. Bryden, Domenic H. Cerri, Zachary R. Haney, and Geoffrey Schoenbaum
- 5585 Preclinical Retinal Neurodegeneration in a Model of Multiple Sclerosis
 Richard Fairless, Sarah K. Williams, Dorit B. Hoffmann, Aleksandar Stojic,
 Sonja Hochmeister, Frank Schmitz, Maria K. Storch, and Ricarda Diem

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/ifa_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.