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Cover video legend: The video shows a 3D Neurolucida reconstruction of a large intercalated (L-ITC) neuron (TJX-31A) recorded in the amygdala of an adult rat *in vivo*. Soma and dendrites (blue lines) are in the intermediate capsule; the axon innervates predominantly the amygdala (LA, orange lines; BLA, red lines), but also projects rostrally to the endopiriform nucleus and caudally to the perirhinal cortex (orange lines). For more information, see the article by Bienvenu et al. (pages 2044–2057).



i This Week in The Journal

Journal Club

- 1817 Suboptimal Dishonesty: Rationality in the Absence of Strategic Behavior in Honesty Experiments
Michele Fioretti and Sean Marden
- 1819 Are Beta Phase-Coupled High-Frequency Oscillations and Beta Phase-Locked Spiking Two Sides of the Same Coin?
Lena Storzer, Steffen Bürgers, and Jan Hirschmann

Brief Communications

- 2112 Disruption of Activity in the Ventral Premotor But Not the Anterior Intraparietal Area Interferes with On-Line Correction to a Haptic Perturbation during Grasping
Luis F. Schettino, Sergei V. Adamovich, Hamid Bagce, Mathew Yarossi, and Eugene Tunik

Articles

CELLULAR/MOLECULAR

- 1821 Activation of BK and SK Channels by Efferent Synapses on Outer Hair Cells in High-Frequency Regions of the Rodent Cochlea
Kevin N. Rohmann, Eric Wersinger, Jeremy P. Braude, Sonja J. Pyott, and Paul Albert Fuchs
- 1880 KChIP-Like Auxiliary Subunits of Kv4 Channels Regulate Excitability of Muscle Cells and Control Male Turning Behavior during Mating in *Caenorhabditis elegans*
Xin Chen, Mei-Yu Ruan, and Shi-Qing Cai
- 1999 A Short Splice Form of Xin-Actin Binding Repeat Containing 2 (XIRP2) Lacking the Xin Repeats Is Required for Maintenance of Stereocilia Morphology and Hearing Function
Shimon P. Francis, Jocelyn F. Krey, Evan S. Krystofiaik, Runjia Cui, Sonali Nanda, Wenhao Xu, Bechara Kachar, Peter G. Barr-Gillespie, and Jung-Bum Shin
- 2033 Impaired Presynaptic Long-Term Potentiation in the Anterior Cingulate Cortex of *Fmr1* Knock-out Mice
Kohei Koga, Ming-Gang Liu, Shuang Qiu, Qian Song, Gerile O'Den, Tao Chen, and Min Zhuo
- 2044 Large Intercalated Neurons of Amygdala Relay Noxious Sensory Information
Thomas C.M. Bienvenu, Daniela Busti, Benjamin R. Micklem, Mahnaz Mansouri, Peter J. Magill, Francesco Ferraguti, and Marco Capogna
- 2083 Ca²⁺ Channel to Synaptic Vesicle Distance Accounts for the Readily Releasable Pool Kinetics at a Functionally Mature Auditory Synapse
Zuxin Chen, Brati Das, Yukihiro Nakamura, David A. DiGregorio, and Samuel M. Young, Jr

- 2200 Regulation of Mechanosensation in *C. elegans* through Ubiquitination of the MEC-4 Mechanotransduction Channel
Xiaoyin Chen (陈筱寅) and Martin Chalfie
- 2246 Neurofascin 140 Is an Embryonic Neuronal Neurofascin Isoform That Promotes the Assembly of the Node of Ranvier
Ao Zhang, Anne Desmazieres, Barbara Zonta, Shona Melrose, Graham Campbell, Don Mahad, Qiushi Li, Diane L. Sherman, Richard Reynolds, and Peter J. Brophy
- 2269 Activity-Dependent Rapid Local RhoA Synthesis Is Required for Hippocampal Synaptic Plasticity
Victor Briz, Guoqi Zhu, Yubin Wang, Yan Liu, Mariam Avetisyan, Xiaoning Bi, and Michel Baudry
- 2283 Axon Initial Segment-Associated Microglia
Kelli Baalman, Miguel A. Marin, Tammy Szu-Yu Ho, Marlesa Godoy, Leela Cherian, Claudia Robertson, and Matthew N. Rasband

DEVELOPMENT/PLASTICITY/REPAIR

- 1858 Developmental Tightening of Cerebellar Cortical Synaptic Influx-Release Coupling
David Baur, Grit Bornschein, Daniel Althof, Masahiko Watanabe, Akos Kulik, Jens Eilers, and Hartmut Schmidt
- 1979 Linking Cell Surface Receptors to Microtubules: Tubulin Folding Cofactor D Mediates Dscam Functions during Neuronal Morphogenesis
Misako Okumura, Chisako Sakuma, Masayuki Miura, and Takahiro Chihara
- 2233 The Impact of Parent–Child Interaction on Brain Structures: Cross-sectional and Longitudinal Analyses
Hikaru Takeuchi, Yasuyuki Taki, Hiroshi Hashizume, Kohei Asano, Michiko Asano, Yuko Sassa, Susumu Yokota, Yuka Kotozaki, Rui Nouchi, and Ryuta Kawashima

SYSTEMS/CIRCUITS

- 1905 Vasoactive Intestinal Polypeptide (VIP)-Expressing Neurons in the Suprachiasmatic Nucleus Provide Sparse GABAergic Outputs to Local Neurons with Circadian Regulation Occurring Distal to the Opening of Postsynaptic GABA_A Ionotropic Receptors
Junmei Fan, Hongkui Zeng, David P. Olson, Kimberly M. Huber, Jay R. Gibson, and Joseph S. Takahashi
- 1939 Motivation and Affective Judgments Differentially Recruit Neurons in the Primate Dorsolateral Prefrontal and Anterior Cingulate Cortex
Ken-ichi Amemori, Satoko Amemori, and Ann M. Graybiel
- 1965 A Subpopulation of Neurochemically-Identified Ventral Tegmental Area Dopamine Neurons Is Excited by Intravenous Cocaine
Carlos A. Mejias-Aponte, Changquan Ye, Antonello Bonci, Eugene A. Kiyatkin, and Marisela Morales
- 1991 Not GABA But Glycine Mediates Segmental, Propriospinal, and Bulbospinal Postsynaptic Inhibition in Adult Mouse Spinal Forelimb Motor Neurons
Juan Jiang and Bror Alstermark
- 2058 State-Dependent Population Coding in Primary Auditory Cortex
Marius Pachitariu, Dmitry R. Lyamzin, Maneesh Sahani, and Nicholas A. Lesica
- 2161 Individual Differences Reveal Correlates of Hidden Hearing Deficits
Hari M. Bharadwaj, Salwa Masud, Golborg Mehraei, Sarah Verhulst, and Barbara G. Shinn-Cunningham

- 2173 Enhanced Auditory Evoked Activity to Self-Generated Sounds Is Mediated by Primary and Supplementary Motor Cortices
Daniel Reznik, Ori Ossmy, and Roy Mukamel
- 2181 Brown Adipose Tissue Has Sympathetic-Sensory Feedback Circuits
Vitaly Ryu, John T. Garretson, Yang Liu, Cheryl H. Vaughan, and Timothy J. Bartness
- 2191 Antagonism of PACAP or Microglia Function Worsens the Cardiovascular Consequences of Kainic-Acid-Induced Seizures in Rats
Amol M. Bhandare, Suja Mohammed, Paul M. Pilowsky, and Melissa M.J. Farnham
- 2255 Assessment of the Limits of Neural Phase-Locking Using Mass Potentials
Eric Verschooten, Luis Robles, and Philip X. Joris
- 2293 Synaptic Circuit Organization of Motor Corticothalamic Neurons
Naoki Yamawaki and Gordon M.G. Shepherd

BEHAVIORAL/COGNITIVE

- 1831 A Central Neural Pathway Controlling Odor Tracking in *Drosophila*
Gemma Slater, Peter Levy, K.L. Andrew Chan, and Camilla Larsen
- 1849 Action Perception Is Intact in Autism Spectrum Disorder
James P. Cusack, Justin H.G. Williams, and Peter Neri
- 1872 Impaired Neural Response to Negative Prediction Errors in Cocaine Addiction
Muhammad A. Parvaz, Anna B. Konova, Greg H. Proudfoot, Jonathan P. Dunning, Pias Malaker, Scott J. Moeller, Tom Maloney, Nelly Alia-Klein, and Rita Z. Goldstein
- 1954 Selective Perceptual Phase Entrainment to Speech Rhythm in the Absence of Spectral Energy Fluctuations
Benedikt Zoefel and Rufin VanRullen
- 2015 Feedforward and Feedback Motor Control Abnormalities Implicate Cerebellar Dysfunctions in Autism Spectrum Disorder
Matthew W. Mosconi, Suman Mohanty, Rachel K. Greene, Edwin H. Cook, David E. Vaillancourt, and John A. Sweeney
- 2026 Interhemispheric Interactions of the Human Thalamic Reticular Nucleus
Joseph D. Viviano and Keith A. Schneider
- 2074 Attention Drives Synchronization of Alpha and Beta Rhythms between Right Inferior Frontal and Primary Sensory Neocortex
Matthew D. Sacchet, Roan A. LaPlante, Qian Wan, Dominique L. Pritchett, Adrian K.C. Lee, Matti Hämäläinen, Christopher I. Moore, Catherine E. Kerr, and Stephanie R. Jones
- 2118 Caspase-3 Deficiency Results in Disrupted Synaptic Homeostasis and Impaired Attention Control
Shih-Ching Lo, Yuanyuan Wang, Martin Weber, Jessica L. Larson, Kimberly Scearce-Levie, and Morgan Sheng
- 2213 Learning to Integrate versus Inhibiting Information Is Modulated by Age
Marinella Cappelletti, Helen Pikkat, Emily Upstill, Maarten Speekenbrink, and Vincent Walsh
- 2226 Brightness–Color Interactions in Human Early Visual Cortex
Dajun Xing, Ahmed Ouni, Stephanie Chen, Hinde Sahmoud, James Gordon, and Robert Shapley
- 2308 Neural Mechanisms Underlying Contextual Dependency of Subjective Values: Converging Evidence from Monkeys and Humans
Raphaëlle Abitbol, Maël Lebreton, Guillaume Hollard, Barry J. Richmond, Sébastien Bouret, and Mathias Pessiglione

NEUROBIOLOGY OF DISEASE

- 1892 **S-SCAM, A Rare Copy Number Variation Gene, Induces Schizophrenia-Related Endophenotypes in Transgenic Mouse Model**
Nanyan Zhang, Peng Zhong, Seung Min Shin, Jacob Metallo, Eric Danielson, Christopher M. Olsen, Qing-song Liu, and Sang H. Lee
- 1921 **HIV-1 Tat Alters Neuronal Autophagy by Modulating Autophagosome Fusion to the Lysosome: Implications for HIV-Associated Neurocognitive Disorders**
Jerel Fields, Wilmar Dumaop, Simona Eleuteri, Sofia Campos, Elisabeth Serger, Margarita Trejo, Kori Kosberg, Anthony Adame, Brian Spencer, Edward Rockenstein, Johnny J. He, and Eliezer Masliah
- 2101 **Augmentation of M-Type (KCNQ) Potassium Channels as a Novel Strategy to Reduce Stroke-Induced Brain Injury**
Sonya M. Bierbower, Frank S. Choveau, James D. Lechleiter, and Mark S. Shapiro
- 2133 **B-Lymphocyte-Mediated Delayed Cognitive Impairment following Stroke**
Kristian P. Doyle, Lisa N. Quach, Montse Solé, Robert C. Axtell, Thuy-Vi V. Nguyen, Gilberto J. Soler-Llavina, Sandra Jurado, Jullet Han, Lawrence Steinman, Frank M. Longo, Julie A. Schneider, Robert C. Malenka, and Marion S. Buckwalter
- 2146 **The Role of Brain-Derived Neurotrophic Factor (BDNF) in the Development of Neurogenic Detrusor Overactivity (NDO)**
Bárbara Frias, João Santos, Marlene Morgado, Mónica Mendes Sousa, Susannah M.Y. Gray, Karen D. McCloskey, Shelley Allen, Francisco Cruz, and Célia Duarte Cruz
- 2321 **Correction:** The article “Coordinated Regulation of Dendrite Arborization by Epigenetic Factors CDYL and EZH2”, by Cai Qi, Shumeng Liu, Rui Qin, Yu Zhang, Guoqiang Wang, Yongfeng Shang, Yun Wang, and Jing Liang, appeared on pages 4494–4508 of the March 26, 2014 issue. A correction for this article appears on page 2321.
Correction: The article “Ear2 Deletion Causes Early Memory and Learning Deficits in APP/PS1 Mice”, by Markus P. Kummer, Thea Hammerschmidt, Ana Martinez, Dick Terwel, Gregor Eichele, Anika Witten, Stefanie Figura, Monika Stoll, Stephanie Schwartz, Hans-Christian Pape, Joachim L. Schultz, David Weinshenker, and Michael T. Heneka, appeared on pages 8845–8854 of the June 25, 2014 issue. A correction for that article appears on page 2321.

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