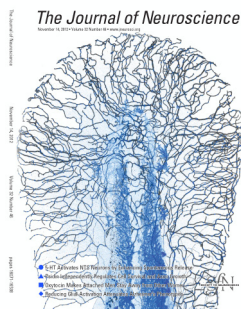


The Journal of Neuroscience

November 14, 2012 • Volume 32 Number 46 • www.jneurosci.org



Cover legend: Confocal image (inverted) of the zebrafish tail showing labeling of sensory axon membranes (black) and mitochondria (cyan). For more information, see the article by Plucińska et al. (pages 16203–16212).

i This Week in The Journal

Journal Club

- 16071 **Proteasomal Inhibition as a Treatment Strategy for Parkinson's Disease: The Impact of α -Synuclein on Nurr1**
Michael J. Devine

Brief Communications

- 16074 **Oxytocin Modulates Social Distance between Males and Females**
Dirk Scheele, Nadine Striepens, Onur Güntürkün, Sandra Deutschländer, Wolfgang Maier, Keith M. Kendrick, and René Hurlemann
- 16496 **Temporal Dynamics of Parvalbumin-Expressing Axo-axonic and Basket Cells in the Rat Medial Prefrontal Cortex *In Vivo***
Lema Massi, Michael Lagler, Katja Hartwich, Zsolt Borhegyi, Peter Somogyi, and Thomas Klausberger
- 16503 **Development and Characterization of a New Parkinson's Disease Model Resulting from Impaired Autophagy**
Ishrat Ahmed, Yideng Liang, Sabitha Schools, Valina L. Dawson, Ted M. Dawson, and Joseph M. Savitt

Articles

CELLULAR/MOLECULAR

- 16120 **Morphine Withdrawal Enhances Constitutive μ -Opioid Receptor Activity in the Ventral Tegmental Area**
Frank J. Meye, Ruud van Zessen, Marten P. Smidt, Roger A.H. Adan, and Geert M. J. Ramakers
- 16285 **IRK-1 Potassium Channels Mediate Peptidergic Inhibition of *Caenorhabditis elegans* Serotonin Neurons via a G_o Signaling Pathway**
Lesley Emtage, Sonya Aziz-Zaman, Olivia Padovan-Merhar, H. Robert Horvitz, Christopher Fang-Yen, and Niels Ringstad
- 16296 **Learning-Related Synaptic Growth Mediated by Internalization of *Aplysia* Cell Adhesion Molecule Is Controlled by Membrane Phosphatidylinositol 4,5-Bisphosphate Synthetic Pathway**
Seung-Hee Lee, Jaehoon Shim, Sun-Lim Choi, Nuribalhae Lee, Chang-Hoon Lee, Craig H. Bailey, Eric R. Kandel, Deok-Jin Jang, and Bong-Kiun Kaang

- 16345 **Ca_v1.3-Driven SK Channel Activation Regulates Pacemaking and Spike Frequency Adaptation in Mouse Chromaffin Cells**
David H. F. Vandael, Annalisa Zuccotti, Joerg Striessnig, and Emilio Carbone
- 16369 **Fluoxetine (Prozac) and Serotonin Act on Excitatory Synaptic Transmission to Suppress Single Layer 2/3 Pyramidal Neuron-Triggered Cell Assemblies in the Human Prefrontal Cortex**
Gergely Komlósi, Gábor Molnár, Márton Rózsa, Szabolcs Oláh, Pál Barzó, and Gábor Tamás
- 16391 **PKC Phosphorylation Regulates mGluR5 Trafficking by Enhancing Binding of Siah-1A**
Suk Jin Ko, Kaname Isozaki, Insook Kim, Jeong Ho Lee, Ho Jin Cho, Sun Young Sohn, So Ra Oh, Steven Park, Dong Goo Kim, Chul Hoon Kim, and Katherine W. Roche
- 16435 **Neural Progenitor Cells Regulate Capillary Blood Flow in the Postnatal Subventricular Zone**
Benjamin Lacar, Peter Herman, Jean-Claude Platel, Cathryn Kubera, Fahmeed Hyder, and Angelique Bordey
- 16530 **Serotonin Activates Catecholamine Neurons in the Solitary Tract Nucleus by Increasing Spontaneous Glutamate Inputs**
Ran Ji Cui, Brandon L. Roberts, Huan Zhao, Mingyan Zhu, and Suzanne M. Appleyard

DEVELOPMENT/PLASTICITY/REPAIR

- 16080 ***Drosophila* Psidin Regulates Olfactory Neuron Number and Axon Targeting through Two Distinct Molecular Mechanisms**
Daniel Stephan, Natalia Sánchez-Soriano, Laura F. Loschek, Ramona Gerhards, Susanne Gutmann, Zuzana Storchova, Andreas Prokop, and Ilona C. Grunwald Kadow
- 16213 **Aneuploid Cells Are Differentially Susceptible to Caspase-Mediated Death during Embryonic Cerebral Cortical Development**
Suzanne E. Peterson, Amy H. Yang, Diane M. Bushman, Jurjen W. Westra, Yun C. Yung, Serena Barral, Tetsuji Mutoh, Stevens K. Rehen, and Jerold Chun
- 16314 **Posthearing Ca²⁺ Currents and Their Roles in Shaping the Different Modes of Firing of Spiral Ganglion Neurons**
Ping Lv, Choong-Ryool Sihn, Wenying Wang, Haitao Shen, Hyo Jeong Kim, Sonia M. Rocha-Sanchez, and Ebenezer N. Yamoah
- 16424 **Cell Lineage Analysis Reveals Three Different Progenitor Pools for Neurosensory Elements in the Otic Vesicle**
Dora Sapède, Sylvia Dyballa, and Cristina Pujades
- 16510 **Spinal Atypical Protein Kinase C Activity Is Necessary to Stabilize Inactivity-Induced Phrenic Motor Facilitation**
Kristi A. Strey, Nicole L. Nichols, Nathan A. Baertsch, Oleg Broymtman, and Tracy L. Baker-Herman

BEHAVIORAL/SYSTEMS/COGNITIVE

- 16095 ***In Vivo* Functional and Myeloarchitectonic Mapping of Human Primary Auditory Areas**
Frederic Dick, Adam Taylor Tierney, Antoine Lutti, Oliver Josephs, Martin I. Sereno, and Nikolaus Weiskopf
- 16149 **Dual-Pitch Processing Mechanisms in Primate Auditory Cortex**
Daniel Bendor, Michael S. Osmanski, and Xiaoqin Wang

- 16162 Left Dorsal Premotor Cortex and Supramarginal Gyrus Complement Each Other during Rapid Action Reprogramming**
Gesa Hartwigsen, Sven Bestmann, Nick S. Ward, Saskia Woerbel, Claudia Mastroeni, Oliver Granert, and Hartwig R. Siebner
- 16172 Switching Neuronal Inputs by Differential Modulations of Gamma-Band Phase-Coherence**
Iris Grothe, Simon D. Neitzel, Sunita Mandon, and Andreas K. Kreiter
- 16193 Aging Differentially Affects the Re-entrainment Response of Central and Peripheral Circadian Oscillators**
Michael T. Sellix, Jennifer A. Evans, Tanya L. Leise, Oscar Castanon-Cervantes, DiJon D. Hill, Patrick DeLisser, Gene D. Block, Michael Menaker, and Alec J. Davidson
- 16223 Parallel Maturation of Goal-Directed Behavior and Dopaminergic Systems during Adolescence**
Fabien Naneix, Alain R. Marchand, Georges Di Scala, Jean-Rémi Pape, and Etienne Coutureau
- 16256 Efficient Coding of Spatial Information in the Primate Retina**
Eizaburo Doi, Jeffrey L. Gauthier, Greg D. Field, Jonathon Shlens, Alexander Sher, Martin Greschner, Timothy A. Machado, Lauren H. Jepson, Keith Mathieson, Deborah E. Gunning, Alan M. Litke, Liam Paninski, E. J. Chichilnisky, and Eero P. Simoncelli
- 16274 Deficient Use of Visual Information in Estimating Hand Position in Cerebellar Patients**
Efrat Taig, Michael Küper, Nina Theysohn, Dagmar Timmann, and Opher Donchin
- 16331 Reduced Gamma Frequency in the Medial Frontal Cortex of Aged Rats during Behavior and Rest: Implications for Age-Related Behavioral Slowing**
Nathan Insel, Lilian A. Patron, Lan T. Hoang, Saman Nematollahi, Lesley A. Schimanski, Peter Lipa, and Carol A. Barnes
- 16360 Modulation of Top-Down Control of Visual Attention by Cathodal tDCS over Right IPS**
Katharina Moos, Simone Vossel, Ralph Weidner, Roland Sparing, and Gereon R. Fink
- 16379 Attention Selects Informative Neural Populations in Human V1**
Preeti Verghese, Yee-Joon Kim, and Alex R. Wade
- 16402 Reward Stability Determines the Contribution of Orbitofrontal Cortex to Adaptive Behavior**
Justin S. Riceberg and Matthew L. Shapiro
- 16410 Physiological Evidence Consistent with Reduced Neuroplasticity in Human Adolescents Born Preterm**
Julia B. Pitcher, Alysha M. Riley, Sebastian H. Doeltgen, Lisa Kurylowicz, John C. Rothwell, Suzanne M. McAllister, Ashleigh E. Smith, Angela Clow, David J. Kennaway, and Michael C. Ridding
- 16417 Action-Specific Value Signals in Reward-Related Regions of the Human Brain**
Thomas H. B. FitzGerald, Karl J. Friston, and Raymond J. Dolan
- 16449 Anticipatory Remapping of Attentional Priority across the Entire Visual Field**
Koorosh Mirpour and James W. Bisley
- 16466 Broadening of Inhibitory Tuning Underlies Contrast-Dependent Sharpening of Orientation Selectivity in Mouse Visual Cortex**
Ya-tang Li, Wen-pei Ma, Ling-yun Li, Leena A. Ibrahim, Sheng-zhi Wang, and Huizhong Whit Tao

16478 **Mechanistic Basis and Functional Roles of Long-Term Plasticity in Auditory Neurons Induced by a Brain-Generated Estrogen**
Liisa A. Tremere, Ryan F. Kovaleski, Kaiping Burrows, Jin Kwon Jeong, and Raphael Pinaud

16521 **How Glitter Relates to Gold: Similarity-Dependent Reward Prediction Errors in the Human Striatum**
Thorsten Kahnt, Soyoung Q Park, Christopher J. Burke, and Philippe N. Tobler

NEUROBIOLOGY OF DISEASE

16106 **Nociceptin/Orphanin FQ Receptor Agonists Attenuate L-DOPA-Induced Dyskinesias**
Matteo Marti, Donata Rodi, Qin Li, Remo Guerrini, Stefania Fasano, Ilaria Morella, Alessandro Tozzi, Riccardo Brambilla, Paolo Calabresi, Michele Simonato, Erwan Bezard, and Michele Morari

16129 **Targeting Astrocytes Ameliorates Neurologic Changes in a Mouse Model of Alzheimer's Disease**
Jennifer L. Furman, Diana M. Sama, John C. Gant, Tina L. Beckett, M. Paul Murphy, Adam D. Bachstetter, Linda J. Van Eldik, and Christopher M. Norris

16141 **Diminished Cortical Inhibition in an Aging Mouse Model of Chronic Tinnitus**
Daniel A. Llano, Jeremy Turner, and Donald M. Caspary

16181 **β -Secretase Cleavage of the Fly Amyloid Precursor Protein Is Required for Glial Survival**
Bonnie J. Bolkan, Tilman Triphan, and Doris Kretzschmar

16203 ***In Vivo* Imaging of Disease-Related Mitochondrial Dynamics in a Vertebrate Model System**
Gabriela Plucińska, Dominik Paquet, Alexander Hruscha, Leanne Godinho, Christian Haass, Bettina Schmid, and Thomas Misgeld

16233 **Cognitive Profile of Amyloid Burden and White Matter Hyperintensities in Cognitively Normal Older Adults**
Trey Hedden, Elizabeth C. Mormino, Rebecca E. Amariglio, Alayna P. Younger, Aaron P. Schultz, J. Alex Becker, Randy L. Buckner, Keith A. Johnson, Reisa A. Sperling, and Dorene M. Rentz

16243 **The β -Secretase-Derived C-Terminal Fragment of β A_{PP}, C₉₉, But Not A β , Is a Key Contributor to Early Intraneuronal Lesions in Triple-Transgenic Mouse Hippocampus**
Inger Lauritzen, Raphaëlle Pardossi-Piquard, Charlotte Bauer, Elizabeth Brigham, Jean-Daniel Abraham, Sébastien Ranaldi, Paul Fraser, Peter St-George-Hyslop, Ophelia Le Thuc, Vanessa Espin, Linda Chami, Julie Dunys, and Frédéric Checler

16265 **Region-Specific Hierarchy between Atrophy, Hypometabolism, and β -Amyloid (A β) Load in Alzheimer's Disease Dementia**
Renaud La Joie, Audrey Perrotin, Louisa Barré, Caroline Hommet, Florence Mézenge, Méziane Ibazizene, Vincent Camus, Ahmed Abbas, Brigitte Landeau, Denis Guilloteau, Vincent de La Sayette, Francis Eustache, Béatrice Desgranges, and Gaël Chételat

16306 **Human Immunodeficiency Virus Type 1 (HIV-1) Transactivator of Transcription through Its Intact Core and Cysteine-Rich Domains Inhibits Wnt/ β -Catenin Signaling in Astrocytes: Relevance to HIV Neuropathogenesis**
Lisa J. Henderson, Amit Sharma, Maria Chiara G. Monaco, Eugene O. Major, and Lena Al-Harhi

16458 **LRP1 in Brain Vascular Smooth Muscle Cells Mediates Local Clearance of Alzheimer's Amyloid- β**
Takahisa Kanekiyo, Chia-Chen Liu, Mitsuru Shinohara, Jie Li, and Guojun Bu

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.