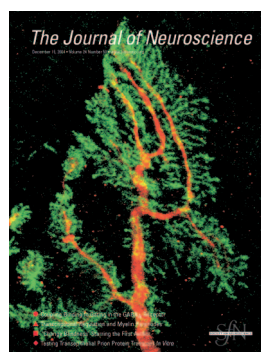


The Journal of Neuroscience

December 15, 2004 • Volume 24 Number 50 www.jneurosci.org



Cover picture: Neuromuscular junction of a mouse lacking both α - and β_2 -syntrophin. The nerve was labeled for neurofilament protein (red), and the acetylcholine receptors were labeled with fluorescent α -bungarotoxin (green). In these mice, the acetylcholine receptors are not localized immediately adjacent to the nerve but rather appear as fingers radiating away from the nerve. For details, see the article by Adams et al. in the November 17, 2004 issue (pages 10302–10309).

i This Week in The Journal

Brief Communications

- 11302 **Visually Guided Movements Suppress Subthalamic Oscillations in Parkinson's Disease Patients**
Ramin Amirnovin, Ziv M. Williams, G. Rees Cosgrove, and Emad N. Eskandar
- 11416 **Molecular Determinants Responsible for Differences in Desensitization Kinetics of AMPA Receptor Splice Variants**
Jennifer C. Quirk, Edward R. Siuda, and Eric S. Nisenbaum

Articles

CELLULAR/MOLECULAR

- 11226 **Mutation of Glutamate 155 of the GABA_A Receptor β_2 Subunit Produces a Spontaneously Open Channel: A Trigger for Channel Activation**
J. Glen Newell, Ross A. McDevitt, and Cynthia Czajkowski
- 11244 **Precise Localization of $\alpha 7$ Nicotinic Acetylcholine Receptors on Glutamatergic Axon Terminals in the Rat Ventral Tegmental Area**
Ian W. Jones and Susan Wonnacott
- 11273 **Neuroglial Metabolism in the Awake Rat Brain: CO₂ Fixation Increases with Brain Activity**
Gülin Öz, Deborah A. Berkich, Pierre-Gilles Henry, Yuping Xu, Kathryn LaNoue, Susan M. Hutson, and Rolf Gruetter
- 11328 **Nicotine Enhancement of Dopamine Release by a Calcium-Dependent Increase in the Size of the Readily Releasable Pool of Synaptic Vesicles**
Timothy J. Turner
- 11346 **Localization of Brain-Derived Neurotrophic Factor to Distinct Terminals of Mossy Fiber Axons Implies Regulation of Both Excitation and Feedforward Inhibition of CA3 Pyramidal Cells**
Steve C. Danzer and James O. McNamara
- 11368 **Different Presynaptic Roles of Synapsins at Excitatory and Inhibitory Synapses**
Daniel Gitler, Yoshiko Takagishi, Jian Feng, Yong Ren, Ramona M. Rodriguiz, William C. Wetsel, Paul Greengard, and George J. Augustine
- 11391 **Augmentation Increases Vesicular Release Probability in the Presence of Masking Depression at the Frog Neuromuscular Junction**
Jonathan M. Kalkstein and Karl L. Magleby
- 11429 **GABA_A Receptor-Associated Protein Traffics GABA_A Receptors to the Plasma Membrane in Neurons**
Tarek A. Leil, Zi-Wei Chen, Chang-Sheng S. Chang, and Richard W. Olsen

- 11473 **Molecular Dissection of the Semaphorin 4D Receptor Plexin-B1-Stimulated R-Ras GTPase-Activating Protein Activity and Neurite Remodeling in Hippocampal Neurons**
Izumi Oinuma, Hironori Katoh, and Manabu Negishi

DEVELOPMENT/PLASTICITY/REPAIR

- 11215 **CNS Myelin Paranodes Require Nkx6-2 Homeoprotein Transcriptional Activity for Normal Structure**
Cherie Southwood, Chris He, James Garbern, John Kamholz, Edgardo Arroyo, and Alexander Gow
- 11291 **Role of Actin Filaments in the Axonal Transport of Microtubules**
Thomas P. Hasaka, Kenneth A. Myers, and Peter W. Baas
- 11317 **Step Training-Dependent Plasticity in Spinal Cutaneous Pathways**
Marie-Pascale Côté and Jean-Pierre Gossard
- 11421 **Impaired Synaptic Function in the Microglial KARAP/DAP12-Deficient Mouse**
Anne Roumier, Catherine Béchade, Jean-Christophe Poncer, Karl-Heinz Smalla, Elena Tomasello, Eric Vivier, Eckart D. Gundelfinger, Antoine Triller, and Alain Bessis
- 11463 **Photoreceptor Differentiation during Retinal Development, Growth, and Regeneration in a Metamorphic Vertebrate**
Michelle M. Mader and David A. Cameron

BEHAVIORAL/SYSTEMS/COGNITIVE

- 11236 **Subcortical Modulation of Attention Counters Change Blindness**
James Cavanaugh and Robert H. Wurtz
- 11264 **Functional Mapping of the Auditory Midbrain during Mate Call Reception**
Kim L. Hoke, Sabrina S. Burmeister, Russell D. Fernald, A. Stanley Rand, Michael J. Ryan, and Walter Wilczynski
- 11307 **Selectivity for the Spatial and Nonspatial Attributes of Auditory Stimuli in the Ventrolateral Prefrontal Cortex**
Yale E. Cohen, Brian E. Russ, Gordon W. Gifford III, Ruwan Kiringoda, and Katherine A. MacLean
- 11337 **Conversion of the Modulatory Actions of Dopamine on Spinal Reflexes from Depression to Facilitation in D₃ Receptor Knock-Out Mice**
Stefan Clemens and Shawn Hochman
- 11356 **Inferior Olive Oscillations Gate Transmission of Motor Cortical Activity to the Cerebellum**
Sarah P. Marshall and Eric J. Lang
- 11381 **Different Sensory Systems Share Projection Neurons But Elicit Distinct Motor Patterns**
Dawn M. Blitz, Mark P. Beenhakker, and Michael P. Nusbaum
- 11439 **Interaction between the Corticotropin-Releasing Factor System and Hypocretins (Orexins): A Novel Circuit Mediating Stress Response**
Raphaëlle Winsky-Sommerer, Akihiro Yamanaka, Sabrina Diano, Erzsebet Borok, Amanda J. Roberts, Takeshi Sakurai, Thomas S. Kilduff, Tamas L. Horvath, and Luis de Lecea
- 11449 **High-Dose Methamphetamine Acutely Activates the Striatonigral Pathway to Increase Striatal Glutamate and Mediate Long-Term Dopamine Toxicity**
Karla A. Mark, Jean-Jacques Soghomonian, and Bryan K. Yamamoto
- 11457 **Central Structures Necessary and Sufficient for Ingestive and Glycemic Responses to Urocortin I Administration**
Derek Daniels, Stacy Markison, Harvey J. Grill, and Joel M. Kaplan

NEUROBIOLOGY OF DISEASE

- 11253 **Anandamide-Evoked Activation of Vanilloid Receptor 1 Contributes to the Development of Bladder Hyperreflexia and Nociceptive Transmission to Spinal Dorsal Horn Neurons in Cystitis**
Paulo Dinis, Ana Charrua, Antonio Avelino, Mohammed Yaqoob, Stuart Bevan, Istvan Nagy, and Francisco Cruz
- 11280 **Protease-Resistant Human Prion Protein and Ferritin Are Cotransported across Caco-2 Epithelial Cells: Implications for Species Barrier in Prion Uptake from the Intestine**
Ravi Shankar Mishra, Subhabrata Basu, Yaping Gu, Xiu Luo, Wen-Quan Zou, Richa Mishra, Ruliang Li, Shu G. Chen, Pierluigi Gambetti, Hisashi Fujioka, and Neena Singh
- 11404 **Somatostatin Receptor 2 Is Activated in Cortical Neurons and Contributes to Neurodegeneration after Focal Ischemia**
Ralf K. Stumm, Chun Zhou, Stefan Schulz, Matthias Endres, Golo Kronenberg, Jeremy P. Allen, Giovanni Tulipano, and Volker Höllt
- 11481 **Erratum: Structural Abnormalities at Neuromuscular Synapses Lacking Multiple Syntrophin Isoforms**
Marvin E. Adams, Neal Kramarcy, Taku Fukuda, Andrew G. Engel, Robert Sealock, and Stanley C. Froehner

Erratum: In the article “A Novel Ca^{2+} -Independent Signaling Pathway to Extracellular Signal-Regulated Protein Kinase by Coactivation of NMDA Receptors and Metabotropic Glutamate Receptor 5 in Neurons,” by Lu Yang, Limin Mao, Qingsong Tang, Shazia Samdani, Zhenguo Liu, and John Q. Wang, which appeared on pages 10846–10857 of the December 1, 2004 issue, links to on-line supplemental material were not incorporated. Supplemental Figure 1 pertains to the last sentence of the Discussion and is available on-line at <http://www.jneurosci.org/cgi/content/full/24/48/10846/DC1>.

Correction: In the article “Switching Mature Retinal Ganglion Cells to a Robust Growth State *In Vivo*: Gene Expression and Synergy with RhoA Inactivation,” by Dietmar Fischer, Victoria Petkova, Solon Thanos, and Larry I. Benowitz, which appeared on pages 8726–8740 of the October 6, 2004 issue, several important references were omitted:

Baugh LR, Hill AA, Brown EL, Hunter CP (2001) Quantitative analysis of mRNA amplification by *in vitro* transcription. *Nucleic Acids Res* 29:E29.

Catapano LA (2001) Stage-specific control of neocortical callosal projection neuron survival and differentiation. PhD thesis, Harvard University.

Catapano LA, Arnold MW, Perez FA, Macklis JD (2001) Specific neurotrophic factors support the survival of cortical projection neurons at distinct stages of development. *J Neurosci* 21:8863–8872.

Catapano LA, Arlotta P, Cage TA, Macklis JD (2004) Stage-specific and opposing roles of BDNF, NT-3 and bFGF in differentiation of purified callosal projection neurons toward cellular repair of complex circuitry. *Eur J Neurosci* 19:2421–2434.

Addendum: For the same article by Fischer et al. listed above, the authors would like to add an acknowledgment thanking Drs. Lisa Catapano, Paola Arlotta, and Jeffrey Macklis for advice about cell sorting, RNA amplification, and microarrays prior to the publication of these methods (including P. Arlotta, B. J. Molyneaux, J. Chen, R. Kominami, and J. D. Macklis, unpublished observations, and Dr. Catapano’s thesis).

Correction: In the article “Visual Experience Regulates Transient Expression and Dendritic Localization of Fragile X Mental Retardation Protein,” by Lisa A. Gabel, Sandra Won, Hideki Kawai, Margaret McKinney, Alan M. Tartakoff, and Justin R. Fallon, which appeared on pages 10579–10583 of the November 24, 2004 issue,

funding information was inadvertently omitted by the authors. The authors would like to acknowledge that their work was also supported by the Foundation Jerome Lejeune.

Persons interested in becoming members of the Society for Neuroscience should contact the Membership Department, Society for Neuroscience, 11 Dupont Circle, NW, Suite 500, Washington, DC 20036, phone 202-462-6688.

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.sfn.org/content/Publications/TheJournalofNeuroscience/BriefComm/ifa.html>).

Submissions should be submitted online using the following url: <http://sfn.manuscriptcentral.com>. Please contact the Central Office, via phone, fax, or e-mail with any questions. Our contact information is as follows: phone, 202-462-6688; fax, 202-462-1547; e-mail, jn@sfn.org.