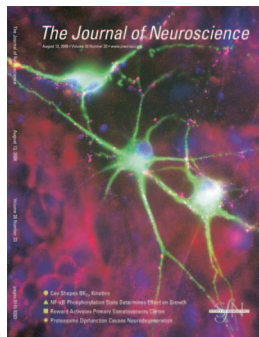


The Journal of Neuroscience

August 13, 2008 • Volume 28 Number 33 www.jneurosci.org



Cover legend: Embryonic (day 17) retinal ganglion cells (RGCs) require contact-mediated signals from neighboring cell types to become synaptically receptive. Here embryonic neurons are plated on top of a confluent layer of mixed retinal cells, which are sufficient to induce synapse formation. Dendrites are stained with MAP2 (green), and synaptic puncta are shown as an overlap synaptotagmin (blue) and PSD-95 (red). For more information, see the article by Barker et al. in this issue (pages 8150–8160).

i This Week in The Journal

Journal Club

- 8145 **Temporal Patterns of Olfactory Bulb Interneuron Neurogenesis**
Darya Pino and Jennifer L. Freese
- 8148 **Alzheimer's Disease: A Search for Broken Links**
Valentin Riedl and Christopher J. Honey

Brief Communications

- 8268 **Very Slow EEG Fluctuations Predict the Dynamics of Stimulus Detection and Oscillation Amplitudes in Humans**
Simo Monto, Satu Palva, Juha Voipio, and J. Matias Palva

Articles

CELLULAR/MOLECULAR

- 8150 **Developmental Control of Synaptic Receptivity**
Alison J. Barker, Selina M. Koch, Jamian Reed, Ben A. Barres, and Erik M. Ullian
- 8217 **Distinct Deep Short-Axon Cell Subtypes of the Main Olfactory Bulb Provide Novel Intrabulbar and Extrabulbar GABAergic Connections**
Mark D. Eyre, Miklos Antal, and Zoltan Nusser
- 8238 **Repolarizing Responses of BK_{Ca}-Cav Complexes Are Distinctly Shaped by Their Cav Subunits**
Henrike Berkefeld and Bernd Fakler
- 8257 **Phorbol Esters Modulate Spontaneous and Ca²⁺-Evoked Transmitter Release via Acting on Both Munc13 and Protein Kinase C**
Xuelin Lou, Natalya Korogod, Nils Brose, and Ralf Schneggenburger
- 8273 **Efficient Recruitment of Layer 2/3 Interneurons by Layer 4 Input in Single Columns of Rat Somatosensory Cortex**
Moritz Helmstaedter, Jochen F. Staiger, Bert Sakmann, and Dirk Feldmeyer
- 8294 **A Novel Purification Method for CNS Projection Neurons Leads to the Identification of Brain Vascular Cells as a Source of Trophic Support for Corticospinal Motor Neurons**
Jason C. Dugas, Wim Mandemakers, Madolyn Rogers, Adiljan Ibrahim, Richard Daneman, and Ben A. Barres
- 8306 **Mitochondrial Membrane Potential in Axons Increases with Local Nerve Growth Factor or Semaphorin Signaling**
Jessica Verburg and Peter J. Hollenbeck

- 8316 **Nervous Wreck and Cdc42 Cooperate to Regulate Endocytic Actin Assembly during Synaptic Growth**
Avital A. Rodal, Rebecca N. Motola-Barnes, and J. Troy Littleton
- 8326 **Cdk5 Phosphorylation of WAVE2 Regulates Oligodendrocyte Precursor Cell Migration through Nonreceptor Tyrosine Kinase Fyn**
Yuki Miyamoto, Junji Yamauchi, and Akito Tanoue
- 8344 **Regulation of Axonal Elongation and Pathfinding from the Entorhinal Cortex to the Dentate Gyrus in the Hippocampus by the Chemokine Stromal Cell-Derived Factor 1 α**
Yoichi Ohshima, Takekazu Kubo, Ryuta Koyama, Masaki Ueno, Masanori Nakagawa, and Toshihide Yamashita

DEVELOPMENT/PLASTICITY/REPAIR

- 8208 **Subfunctionalization of a Retinoid-Binding Protein Provides Evidence for Two Parallel Visual Cycles in the Cone-Dominant Zebrafish Retina**
Valerie C. Fleisch, Helia B. Schonhaler, Johannes von Lintig, and Stephan C. F. Neuhauss
- 8246 **Nuclear Factor κ B Signaling Either Stimulates or Inhibits Neurite Growth Depending on the Phosphorylation Status of p65/RelA**
Humberto Gutierrez, Gerard W. O'Keefe, Núria Gavalda, Denis Gallagher, and Alun M. Davies
- 8285 **Cortisol Inhibits Neuroplasticity Induction in Human Motor Cortex**
Martin V. Sale, Michael C. Ridding, and Michael A. Nordstrom
- 8376 **Repulsive Wnt Signaling Inhibits Axon Regeneration after CNS Injury**
Yaobo Liu, Xiaofei Wang, Chin-Chun Lu, Rachel Kerman, Oswald Steward, Xiao-Ming Xu, and Yimin Zou

BEHAVIORAL/SYSTEMS/COGNITIVE

- 8161 **Reward Facilitates Tactile Judgments and Modulates Hemodynamic Responses in Human Primary Somatosensory Cortex**
Burkhard Pleger, Felix Blankenburg, Christian C. Ruff, Jon Driver, and Raymond J. Dolan
- 8169 **Failure to Mount Adaptive Responses to Stress Results in Dysregulation and Cell Death in the Midbrain Raphe**
Jonathan G. McEuen, Sheryl G. Beck, and Tracy L. Bale
- 8178 **Constitutively Active Rap2 Transgenic Mice Display Fewer Dendritic Spines, Reduced Extracellular Signal-Regulated Kinase Signaling, Enhanced Long-Term Depression, and Impaired Spatial Learning and Fear Extinction**
Jubin Ryu, Kensuke Futai, Monica Feliu, Richard Weinberg, and Morgan Sheng
- 8230 **Intra-Amygdala and Systemic Antagonism of NMDA Receptors Prevents the Reconsolidation of Drug-Associated Memory and Impairs Subsequently Both Novel and Previously Acquired Drug-Seeking Behaviors**
Amy L. Milton, Jonathan L. C. Lee, Victoria J. Butler, Richard Gardner, and Barry J. Everitt
- 8338 **Amygdala and Orbitofrontal Cortex Lesions Differentially Influence Choices during Object Reversal Learning**
Peter H. Rudebeck and Elisabeth A. Murray
- 8361 **Representation of Eye Movements and Stimulus Motion in Topographically Organized Areas of Human Posterior Parietal Cortex**
Christina S. Konen and Sabine Kastner

NEUROBIOLOGY OF DISEASE

- 8189 Depletion of 26S Proteasomes in Mouse Brain Neurons Causes Neurodegeneration and Lewy-Like Inclusions Resembling Human Pale Bodies**
Lynn Bedford, David Hay, Anny Devoy, Simon Paine, Des G. Powe, Rashmi Seth, Trevor Gray, Ian Topham, Kevin Fone, Nooshin Rezvani, Maureen Mee, Tim Soane, Robert Layfield, Paul W. Sheppard, Ted Ebendal, Dmitry Usoskin, James Lowe, and R. John Mayer
- 8199 Loss of PINK1 Function Affects Development and Results in Neurodegeneration in Zebrafish**
Oleg Anichtchik, Heike Diekmann, Angeleen Fleming, Alan Roach, Paul Goldsmith, and David C. Rubinsztein
- 8354 Microglial Dysfunction and Defective β -Amyloid Clearance Pathways in Aging Alzheimer's Disease Mice**
Suzanne E. Hickman, Elizabeth K. Allison, and Joseph El Khoury

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://sfn.manuscriptcentral.com>. Please contact the Central Office, via phone, fax, or e-mail with any questions. Our contact information is as follows: phone, 202-962-4000; fax, 202-962-4945; e-mail, jn@sfn.org.