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Cover legend: Giant fiber neurons of Drosophila melanogaster injected with Lucifer yellow (magenta) and Neurobiotin (blue), in animals with GFP expression in auditory axons driven by the engrailed gene (green). Neurobiotin is retrogradely transferred across gap junctions from the giant fiber into a subset of the auditory axons (cyan). Perturbation of engrailed leads to changes in synaptic connectivity. Below are shown heads of animals with engrailed-driven GFP expression. For more details, see the article by Pézier et al. (pages 11691–11704).

i This Week in The Journal

## **Journal Club**

- 11515 Distilling Consciousness: Isolated the Underlying Brain Activity?

  Antonella Macerollo and Graziella Quattrocchi
- 11517 Thalamus and Cortex: Inseparable Partners in Shaping Sleep Slow Waves?
  François David and Joscha T. Schmiedt

#### **Brief Communications**

11519 A Class of GABAergic Neurons in the Prefrontal Cortex Sends Long-Range Projections to the Nucleus Accumbens and Elicits Acute Avoidance Behavior Anthony T. Lee, Daniel Vogt, John L. Rubenstein, and Vikaas S. Sohal

#### **Articles**

#### CELLULAR/MOLECULAR

- Phasic Dopaminergic Activity Exerts Fast Control of Cholinergic Interneuron Firing via Sequential NMDA, D2, and D1 Receptor Activation

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- 11641 Synaptopodin Regulates Spine Plasticity: Mediation by Calcium Stores
  Eduard Korkotian, Michael Frotscher, and Menahem Segal
- 11673 Molecular Mechanisms Contributing to TARP Regulation of Channel Conductance and Polyamine Block of Calcium-Permeable AMPA Receptors David Soto, Ian D. Coombs, Esther Gratacòs-Batlle, Mark Farrant, and Stuart G. Cull-Candy
- 11781 Vesicular Glutamate Transporter Expression Level Affects Synaptic Vesicle Release
  Probability at Hippocampal Synapses in Culture
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  and Christian Rosenmund
- 11792 Fast Phasic Release Properties of Dopamine Studied with a Channel Biosensor Geraldine J. Kress, Hong-Jin Shu, Andrew Yu, Amanda Taylor, Ann Benz, Steve Harmon, and Steven Mennerick
- 11826 Differential Regulation of Cone Calcium Signals by Different Horizontal Cell Feedback Mechanisms in the Mouse Retina Robin Kemmler, Konrad Schultz, Karin Dedek, Thomas Euler, and Timm Schubert
- 11844 MHC Class I Limits Hippocampal Synapse Density by Inhibiting Neuronal Insulin Receptor Signaling
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#### DEVELOPMENT/PLASTICITY/REPAIR

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11571 Change of Fate Commitment in Adult Neural Progenitor Cells Subjected to Chronic Inflammation

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11684 Deletion of Prostaglandin E<sub>2</sub> Synthesizing Enzymes in Brain Endothelial Cells Attenuates Inflammatory Fever

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11691 Engrailed Alters the Specificity of Synaptic Connections of *Drosophila* Auditory
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- 11733 Unification of Neuronal Spikes, Seizures, and Spreading Depression Yina Wei, Ghanim Ullah, and Steven J. Schiff
- 11744 Inhibition of Adenylyl Cyclase Type 5 Prevents L-DOPA-Induced Dyskinesia in an Animal Model of Parkinson's Disease
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- 11812 Tat 101-Mediated Enhancement of Brain Pericyte Migration Involves Platelet-Derived Growth Factor Subunit B Homodimer: Implications for Human Immunodeficiency Virus-Associated Neurocognitive Disorders

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