



Cover legend: This image shows nerve fibers (green) that travel from the spiral ganglion towards the hair-cell region in the apical organ of Corti of the mouse cochlea. Most nerve fibers are covered by myelin sheaths (red) to ensure precise transmission of signals into the auditory brainstem. Myelination of auditory nerve fibers in the cochlea is significantly reduced in mice carrying genetic deletion of β -secretase BACE1. For more information, see the article by Dierich et al. (pages 9013–9027).

8827 This Week in The Journal

Journal Club

8828 DNA Methylation within the Amygdala Early in Life Increases Susceptibility for Depression and Anxiety Disorders
Ilan Vonderwalde

Research Articles

CELLULAR/MOLECULAR

- 8831 Spatial Coupling Tunes NMDA Receptor Responses via Ca^{2+} Diffusion
Gary J. Iacobucci and Gabriela K. Popescu
- 8845 Neuropilin 2 Signaling Mediates Corticostriatal Transmission, Spine Maintenance, and Goal-Directed Learning in Mice
Maxime Assous, Edward Martinez, Carol Eisenberg, Fulva Shah, Aleksandra Kosci, Kristie Varghese, Diego Espinoza, Shaznaan Bhimani, James M. Tepper, Michael W. Shiflett, and Tracy S. Tran
- 8860 Electrophysiological and Molecular Characterization of the Parasubiculum
Rosanna P. Sammons, Daniel Parthier, Alexander Stumpf, and Dietmar Schmitz
- 8877 Altered Actin Filament Dynamics in the *Drosophila* Mushroom Bodies Lead to Fast Acquisition of Alcohol Consumption Preference
Andrew R. Butts, Shamsideen A. Ojelade, Eva D. Pronovost, Alexandra Seguin, Collin B. Merrill, Aylin R. Rodan, and Adrian Rothenfluh

DEVELOPMENT/PLASTICITY/REPAIR

- 8885 Skilled Movements in Mice Require Inhibition of Corticospinal Axon Collateral Formation in the Spinal Cord by Semaphorin Signaling
Zirong Gu, Masaki Ueno, Kelsey Klinefelter, Madhulika Mamidi, Takeshi Yagi, and Yutaka Yoshida
- 8900 Slow-Wave Activity in the S1HL Cortex Is Contributed by Different Layer-Specific Field Potential Sources during Development
Tania Ortuño, Victor J. López-Madróna, Julia Makarova, Silvia Tapia-Gonzalez, Alberto Muñoz, Javier DeFelipe, and Oscar Herreras

SYSTEMS/CIRCUITS

- 8916 Multiple Nonauditory Cortical Regions Innervate the Auditory Midbrain
Bas M.J. Olthof, Adrian Rees, and Sarah E. Gartside

- 8929 **Reassessing the Role of Histaminergic Tuberomammillary Neurons in Arousal Control**
Anne Venner, Takatoshi Mochizuki, Roberto De Luca, Christelle Anaclet, Thomas E. Scammell, Clifford B. Saper, Elda Arrigoni, and Patrick M. Fuller

BEHAVIORAL/COGNITIVE

- 8940 **Naturalistic Audio-Movies and Narrative Synchronize “Visual” Cortices across Congenitally Blind But Not Sighted Individuals**
Rita E. Loiotile, Rhodri Cusack, and Marina Bedny
- 8949 **Posterior Hippocampal Spindle Ripples Co-occur with Neocortical Theta Bursts and Downstates-Upstates, and Phase-Lock with Parietal Spindles during NREM Sleep in Humans**
Xi Jiang, Jorge Gonzalez-Martinez, and Eric Halgren
- 8969 **An Integrated Neural Decoder of Linguistic and Experiential Meaning**
Andrew James Anderson, Jeffrey R. Binder, Leonardo Fernandino, Colin J. Humphries, Lisa L. Conant, Rajeev D.S. Raizada, Feng Lin, and Edmund C. Lalor
- 8988 **Phosphorylation of Gephyrin in Zebrafish Mauthner Cells Governs Glycine Receptor Clustering and Behavioral Desensitization to Sound**
Kazutoyo Ogino, Kenta Yamada, Tomoki Nishioka, Yoichi Oda, Kozo Kaibuchi, and Hiromi Hirata

NEUROBIOLOGY OF DISEASE

- 8998 **Altered Dynamics of Canonical Feedback Inhibition Predicts Increased Burst Transmission in Chronic Epilepsy**
Leonie Pothmann, Christian Klos, Oliver Braganza, Sarah Schmidt, Oihane Horno, Raoul-Martin Memmesheimer, and Heinz Beck
- 9013 **β -Secretase BACE1 Is Required for Normal Cochlear Function**
Marlen Dierich, Stephanie Hartmann, Nadine Dietrich, Philip Moeser, Franziska Brede, Lejo Johnson Chacko, Konstantin Tziridis, Achim Schilling, Patrick Krauss, Sabine Hessler, Sandra Karch, Anneliese Schrott-Fischer, Michael Blumer, Carmen Birchmeier, Dominik Oliver, Tobias Moser, Holger Schulze, Christian Alzheimer, Michael G. Leitner, and Tobias Huth
- 9028 **PiRNA-DQ541777 Contributes to Neuropathic Pain via Targeting Cdk5rap1**
Chenjing Zhang, Huanhuan Sha, Yunan Peng, Yin Wang, Cunming Liu, and Xuelong Zhou

Persons interested in becoming members of the Society for Neuroscience should contact the Membership Department at membership@sfn.org or 202-962-4911.

For current submission policies and manuscript preparation guidelines, authors should refer to our Information for Authors at <https://www.jneurosci.org/content/information-authors>.

Manuscripts should be submitted online at <https://jneurosci.msubmit.net>. Please contact the Central Office with any questions at jn@sfn.org or 202-962-4000.