



**Cover legend:** This image shows the presence of multiple T-bars, marked by the cytoskeletal protein Bruchpilot (green), at active zones of neuromuscular junction synapses in *Drosophila* larvae deficient in glutamate receptor subunit GluRIIC. Remaining glutamate receptors are labeled by GluRIID antibody (magenta). For more information, see the article by Hong et al. (pages 2817–2827).

## 2789 This Week in The Journal

### Journal Club

- 2790 **The Joyful Reduction of Uncertainty: Music Perception as a Window to Predictive Neuronal Processing**  
Nils Kraus

### Research Articles

#### CELLULAR/MOLECULAR

- 2793 **The Relationship Between Glutamate Dynamics and Activity-Dependent Synaptic Plasticity**  
Jocelyn R. Barnes, Bandhan Mukherjee, Ben C. Rogers, Firoozeh Nafar, Madeline Gosse, and Matthew P. Parsons
- 2808 **Direct Interaction of PP2A Phosphatase with GABA<sub>B</sub> Receptors Alters Functional Signaling**  
Xiaofan Li, Miho Terunuma, Tarek G. Deeb, Shari Wiseman, Menelas N. Pangalos, Angus C. Nairn, Stephen J. Moss, and Paul A. Slesinger
- 2817 **Structural Remodeling of Active Zones Is Associated with Synaptic Homeostasis**  
Huilin Hong, Kai Zhao, Shiyang Huang, Sheng Huang, Aiyu Yao, Yuqiang Jiang, Stephan Sigrist, Lu Zhao, and Yong Q. Zhang

#### DEVELOPMENT/PLASTICITY/REPAIR

- 2828 **Activity Dependent and Independent Determinants of Synaptic Size Diversity**  
Liran Hazan and Noam E. Ziv

#### SYSTEMS/CIRCUITS

- 2849 **Cortico-Thalamo-Cortical Circuits of Mouse Forelimb S1 Are Organized Primarily as Recurrent Loops**  
KuangHua Guo, Naoki Yamawaki, John M. Barrett, Martinna Tapies, and Gordon M. G. Shepherd
- 2859 **Parkinsonian Beta Dynamics during Rest and Movement in the Dorsal Pallidum and Subthalamic Nucleus**  
Robert S. Eisinger, Jackson N. Cagle, Enrico Opri, Jose Alcantara, Stephanie Cernera, Kelly D. Foote, Michael S. Okun, and Aysegul Gunduz
- 2868 **Abundance Compensates Kinetics: Similar Effect of Dopamine Signals on D1 and D2 Receptor Populations**  
Lars Hunger, Arvind Kumar, and Robert Schmidt

- 2882 **Acetylcholine Modulates Cerebellar Granule Cell Spiking by Regulating the Balance of Synaptic Excitation and Inhibition**  
Taylor R. Fore, Benjamin N. Taylor, Nicolas Brunel, and Court Hull
- 2895 **Sleep Differentially Affects Early and Late Neuronal Responses to Sounds in Auditory and Perirhinal Cortices**  
Yaniv Sela, Aaron Joseph Krom, Lottem Bergman, Noa Regev, and Yuval Nir

#### BEHAVIORAL/COGNITIVE

- 2906 **Differential Effects of Awareness and Task Relevance on Early and Late ERPs in a No-Report Visual Oddball Paradigm**  
Insa Schlossmacher, Torge Dellert, Michael Pitts, Maximilian Bruchmann, and Thomas Straube
- 2914 **Sensory Modality-Independent Activation of the Brain Network for Language**  
Sophie Arana, André Marquand, Annika Hultén, Peter Hagoort, and Jan-Mathijs Schoffelen
- 2925 **Human Lateral Frontal Pole Contributes to Control over Emotional Approach–Avoidance Actions**  
Bob Bramson, Davide Folloni, Lennart Verhagen, Bart Hartogsveld, Rogier B. Mars, Ivan Toni, and Karin Roelofs
- 2935 **Dopamine Receptor Dop1R2 Stabilizes Appetitive Olfactory Memory through the Raf/MAPK Pathway in *Drosophila***  
Huan Sun, Tomoki Nishioka, Shun Hiramatsu, Shu Kondo, Mutsuki Amano, Kozo Kaibuchi, Toshiharu Ichinose, and Hiromu Tanimoto

#### NEUROBIOLOGY OF DISEASE

- 2943 **Loss of Piccolo Function in Rats Induces Cerebellar Network Dysfunction and Pontocerebellar Hypoplasia Type 3-like Phenotypes**  
Joanne Falck, Christine Bruns, Sheila Hoffmann-Conaway, Isabelle Straub, Erik J. Plautz, Marta Orlando, Humaira Munawar, Marion Rivalan, York Winter, Zsuzsanna Izsvák, Dietmar Schmitz, F. Kent Hamra, Stefan Hallermann, Craig Curtis Garner, and Frauke Ackermann
- 2960 **Microglial Depletion with CSF1R Inhibitor During Chronic Phase of Experimental Traumatic Brain Injury Reduces Neurodegeneration and Neurological Deficits**  
Rebecca J. Henry, Rodney M. Ritzel, James P. Barrett, Sarah J. Doran, Yun Jiao, Jennie B. Leach, Gregory L. Szeto, Junfang Wu, Bogdan A. Stoica, Alan I. Faden, and David J. Loane

---

Persons interested in becoming members of the Society for Neuroscience should contact the Membership Department at [membership@sfn.org](mailto: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](mailto:jn@sfn.org) or 202-962-4000.