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578  *Tet1* Isoforms Differentially Regulate Gene Expression, Synaptic Transmission, and Memory in the Mammalian Brain  

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594 Purinergic Signaling Controls Spontaneous Activity in the Auditory System throughout Early Development  
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613 CB1 Receptor Signaling Modulates Amygdalar Plasticity during Context-Cocaine Memory Reconsolidation to Promote Subsequent Cocaine Seeking  
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630 The Spinal Control of Backward Locomotion  
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648 Unexpected Role of Physiological Estrogen in Acute Stress-Induced Memory Deficits  
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663 Heterogeneity of Age-Related Neural Hyperactivity along the CA3 Transverse Axis  
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674 Endogenous Cholinergic Signaling Modulates Sound-Evoked Responses of the Medial Nucleus of the Trapezoid Body  
Chao Zhang, Nichole L. Beebe, Brett R. Schofield, Michael Pecka, and R. Michael Burger

689 High-Frequency Neuronal Bursting is Essential for Circadian and Sleep Behaviors in *Drosophila*  
Florencia Fernandez-Chiappe, Lia Frenkel, Carina Celeste Colque, Ana Ricciuti, Bryan Hahm, Karina Cerredo, Nara Inés Muraro, and Maria Fernanda Ceriani

Cover legend: This image shows spontaneous correlated firing of spiral ganglion neurons in the developing mouse cochlea. Five discrete events were pseudo-colored based on time of occurrence to highlight the spatial activation of neurons that will ultimately process similar frequencies of sound. ATP release and subsequent P2RY1 activation on non-sensory supporting cells initiates burst firing of inner hair cells that propagates to the central auditory system via the spiral ganglion neurons. For more information, see the article by Babola et al. (pages 594–612). Cover Image: Zhirong Wang and Travis Babola.
Cocaine-Dependent Acquisition of Locomotor Sensitization and Conditioned Place Preference Requires D1 Dopaminergic Signaling through a Cyclic AMP, NCS-Rapgef2, ERK, and Egr-1/Zif268 Pathway
Sunny Zhihong Jiang, Sean Sweat, Sam P. Dahlke, Kathleen Loane, Gunner Drossel, Wenqin Xu, Hugo A. Tejeda, Charles R. Gerfen, and Lee E. Eiden

Memory Reactivation during Learning Simultaneously Promotes Dentate Gyrus/CA2,3 Pattern Differentiation and CA1 Memory Integration
Robert J. Molitor, Katherine R. Sherrill, Neal W. Morton, Alexandra A. Miller, and Alison R. Preston

L-Theanine Prevents Long-Term Affective and Cognitive Side Effects of Adolescent Δ-9-Tetrahydrocannabinol Exposure and Blocks Associated Molecular and Neuronal Abnormalities in the Mesocorticolimbic Circuitry
Marta De Felice, Justine Renard, Roger Hudson, Hanna J. Szudlarek, Brian J. Pereira, Susanne Schmid, Walter J. Rushlow, and Steven R. Laviolette

Causal Evidence for a Double Dissociation between Object- and Scene-Selective Regions of Visual Cortex: A Preregistered TMS Replication Study
Miles Wischnewski and Marius V. Peelen

Dissecting the Roles of Supervised and Unsupervised Learning in Perceptual Discrimination Judgments
Yonatan Loewenstein, Ofri Raviv, and Merav Ahissar

Neuronal Firing and Waveform Alterations through Ictal Recruitment in Humans

Mutant Huntingtin Is Cleared from the Brain via Active Mechanisms in Huntington Disease
Nicholas S. Caron, Raul Banos, Christopher Yanick, Amirah E. Aly, Lauren M. Byrne, Ethan D. Smith, Yuanyun Xie, Stephen E.P. Smith, Nalini Potluri, Hailey Findlay Black, Lorenzo Casal, Seunghyun Ko, Daphne Cheung, Hyeongju Kim, Ihn Sik Seong, Edward J. Wild, Ji-Joon Song, Michael R. Hayden, and Amber L. Southwell

The Two Cysteines of Tau Protein Are Functionally Distinct and Contribute Differentially to Its Pathogenicity in Vivo
Engie Prifti, Eleni N. Tsakiri, Ergina Vourkou, George Stamatakis, Martina Samiotaki, and Katerina Papanikolopoulou

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