

# JNeurosci

THE JOURNAL OF NEUROSCIENCE

January 10, 2018 • Volume 38 Number 2 • www.jneurosci.org



**Cover legend:** This image acquired with super resolution STED microscopy shows a fixed cortical axonal growth cone stained for F-actin (magenta) in the growth cone periphery and microtubules (cyan) in the center. The entry of single microtubules into filopodia and extension along actin filament bundles is regulated by the microtubule associated protein tau. For more information see the article by Biswas and Kalil (pages 291–307).

## i This Week in The Journal

### Journal Club

- 257 **Cognitive Control, the Anterior Cingulate, and Nicotinic Receptors: A Case of Heterozygote Advantage**  
Jason Smucny
- 260 **Does Auditory Cortex Code Temporal Information from Acoustic and Cochlear Implant Stimulation in a Similar Way?**  
Charlotte Amalie Navntoft and Victor Adenis

### Research Articles

#### CELLULAR/MOLECULAR

- 291 **The Microtubule-Associated Protein Tau Mediates the Organization of Microtubules and Their Dynamic Exploration of Actin-Rich Lamellipodia and Filopodia of Cortical Growth Cones**  
Sayantane Biswas and Katherine Kalil
- 308 **CD44 Signaling Mediates High Molecular Weight Hyaluronan-Induced Antihyperalgesia**  
Luiz F. Ferrari, Eugen V. Khomula, Dioneia Araldi, and Jon D. Levine
- 335 **Tonotopic Variation of the T-Type  $Ca^{2+}$  Current in Avian Auditory Coincidence Detector Neurons**  
Ryota Fukaya, Rei Yamada, and Hiroshi Kuba
- 423 **Modulation of Ether-à-Go-Go Related Gene (ERG) Current Governs Intrinsic Persistent Activity in Rodent Neocortical Pyramidal Cells**  
Edward D. Cui and Ben W. Strowbridge
- 474 **Zinc Inhibits TRPV1 to Alleviate Chemotherapy-Induced Neuropathic Pain**  
Jialie Luo, Alexis Bavencoffe, Pu Yang, Jing Feng, Shijin Yin, Aihua Qian, Weihua Yu, Shenbin Liu, Xuan Gong, Tao Cai, Edgar T. Walters, Carmen W. Dessauer, and Hongzhen Hu

#### DEVELOPMENT/PLASTICITY/REPAIR

- 379 **A Critical Role for Dopamine D5 Receptors in Pain Chronicity in Male Mice**  
Salim Megat, Stephanie Shiers, Jamie K. Moy, Paulino Barragan-Iglesias, Grishma Pradhan, Rebecca P. Seal, Gregory Dussor, and Theodore J. Price

- 498 **Distinct Roles of Different Presynaptic and Postsynaptic NCAM Isoforms in Early Motoneuron–Myotube Interactions Required for Functional Synapse Formation**  
Katsusuke Hata, Yuka Maeno-Hikichi, Norihiro Yumoto, Steven J. Burden, and Lynn T. Landmesser

#### SYSTEMS/CIRCUITS

- 322 **Acetaminophen Relieves Inflammatory Pain through CB<sub>1</sub> Cannabinoid Receptors in the Rostral Ventromedial Medulla**  
Pascal P. Klinger-Gratz, William T. Ralvenius, Elena Neumann, Ako Kato, Rita Nyilas, Zsolt Lele, István Katona, and Hanns Ulrich Zeilhofer
- 347 **The Mouse Pulvinar Nucleus Links the Lateral Extrastriate Cortex, Striatum, and Amygdala**  
Na Zhou, Sean P. Masterson, James K. Damron, William Guido, and Martha E. Bickford
- 398 **Inverted Encoding Models of Human Population Response Conflate Noise and Neural Tuning Width**  
Taosheng Liu, Dylan Cable, and Justin L. Gardner

#### BEHAVIORAL/COGNITIVE

- 263 **Behavioral, Modeling, and Electrophysiological Evidence for Supramodality in Human Metacognition**  
Nathan Faivre, Elisa Filevich, Guillermo Solovey, Simone Kühn, and Olaf Blanke
- 409 **Dissociable Decoding of Spatial Attention and Working Memory from EEG Oscillations and Sustained Potentials**  
Gi-Yeul Bae and Steven J. Luck
- 441 **Restoring Serotonergic Homeostasis in the Lateral Hypothalamus Rescues Sleep Disturbances Induced by Early-Life Obesity**  
Mary Gazea, Alexandre V. Patchev, Elmira Anderzhanova, Este Leidmaa, Anna Pissioti, Cornelia Flachskamm, Osborne F.X. Almeida, and Mayumi Kimura
- 484 **Amphetamine Reverses Escalated Cocaine Intake via Restoration of Dopamine Transporter Conformation**  
Cody A. Siciliano, Kaustuv Saha, Erin S. Calipari, Steve C. Fordahl, Rong Chen, Habibeh Khoshbouei, and Sara R. Jones

#### NEUROBIOLOGY OF DISEASE

- 278 **The Role of Cysteine String Protein  $\alpha$  Phosphorylation at Serine 10 and 34 by Protein Kinase C $\gamma$  for Presynaptic Maintenance**  
Toshihiko Shirafuji, Takehiko Ueyama, Naoko Adachi, Ken-Ichi Yoshino, Yusuke Sotomaru, Junsuke Uwada, Azumi Kaneoka, Taro Ueda, Shigeru Tanaka, Izumi Hide, Naoaki Saito, and Norio Sakai
- 363 **The Autism Protein Ube3A/E6AP Remodels Neuronal Dendritic Arborization via Caspase-Dependent Microtubule Destabilization**  
Natasha Khatri, James P. Gilbert, Yuda Huo, Roozhin Sharaflari, Michael Nee, Hui Qiao, and Heng-Ye Man
- 452 **Disrupted Neuroglial Metabolic Coupling after Peripheral Surgery**  
Teresa Femenía, Alfredo Giménez-Cassina, Simone Codeluppi, Teresa Fernández-Zafra, Yurika Katsu-Jiménez, Niccolò Terrando, Lars I. Eriksson, and Marta Gómez-Galán

465 **Brainstem Pain-Control Circuitry Connectivity in Chronic Neuropathic Pain**  
Emily P. Mills, Flavia Di Pietro, Zeynab Alshelh, Chris C. Peck, Greg M. Murray,  
E. Russell Vickers, and Luke A. Henderson

---

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/content/information-authors>. Authors should refer to these Instructions online for recent changes that are made periodically.

Submissions should be submitted online using the following url: <http://jneurosci.msubmit.net>. Please contact the Central Office, via phone, fax, or e-mail with any questions. Our contact information is as follows: phone, 202-962-4000; e-mail, [jn@sfn.org](mailto:jn@sfn.org).