

June 13, 2018 • Volume 38 Number 24 • www.jneurosci.org



Cover legend: This montage illustrates two brown ghost knifefish (Apteronotus leptorhynchus) communicating by means of electric signals. The spectrogram in the middle highlights a sequence of so called "chirps" that these neotropical fish use to synchronize spawning. Recordings of courtship, spawning, and aggression behaviors in natural habitats in Panamá revealed unexpected electrosensory stimuli that have been neglected so far in neurophysiological studies. For more information, see the article by Henninger and colleges (page 5456 –5465).

i This Week in The Journal

Viewpoints

5441 Specialized Subpopulations of Deep-Layer Pyramidal Neurons in the Neocortex:
 Bridging Cellular Properties to Functional Consequences
 Arielle Baker, Brian Kalmbach, Mieko Morishima, Juhyun Kim, Ashley Juavinett,
 Nuo Li, and Nikolai Dembrow

Research Articles

CELLULAR/MOLECULAR

5478 miR126-5p Downregulation Facilitates Axon Degeneration and NMJ Disruption via a Non-Cell-Autonomous Mechanism in ALS Roy Maimon, Ariel Ionescu, Avichai Bonnie, Sahar Sweetat, Shane Wald-Altman, Shani Inbar, Tal Gradus, Davide Trotti, Miguel Weil, Oded Behar, and Eran Perlson

The Frequency Response of Outer Hair Cell Voltage-Dependent Motility Is Limited by Kinetics of Prestin
 Joseph Santos-Sacchi and Winston Tan

5523 Suppression of AMPA Receptor Exocytosis Contributes to Hippocampal LTD Shumpei Fujii, Hiromitsu Tanaka, and Tomoo Hirano

Neurotrophin Responsiveness of Sympathetic Neurons Is Regulated by Rapid
 Mobilization of the p75 Receptor to the Cell Surface through TrkA Activation of Arf6
 F. Edward Hickman, Emily M. Stanley, and Bruce D. Carter

DEVELOPMENT/PLASTICITY/REPAIR

5551 A Critical Neurodevelopmental Role for L-Type Voltage-Gated Calcium Channels in Neurite Extension and Radial Migration

Satoshi Kamijo, Yuichiro Ishii, Shin-ichiro Horigane, Kanzo Suzuki, Masamichi Ohkura, Junichi Nakai, Hajime Fujii, Sayaka Takemoto-Kimura, and Haruhiko Bito

SYSTEMS/CIRCUITS

- 5456 Statistics of Natural Communication Signals Observed in the Wild Identify Important Yet Neglected Stimulus Regimes in Weakly Electric Fish Jörg Henninger, Rüdiger Krahe, Frank Kirschbaum, Jan Grewe, and Jan Benda
- 5466 Neural Signatures of the Processing of Temporal Patterns in Sound Björn Herrmann and Ingrid S. Johnsrude

5507 Identification of a Rhythmic Firing Pattern in the Enteric Nervous System That Generates Rhythmic Electrical Activity in Smooth Muscle

Nick J. Spencer, Timothy J. Hibberd, Lee Travis, Lukasz Wiklendt, Marcello Costa, Hongzhen Hu, Simon J. Brookes, David A. Wattchow, Phil G. Dinning, Damien J. Keating, and Julian Sorensen

BEHAVIORAL/COGNITIVE

5538 Somatotopic Representation of Second Pain in the Primary Somatosensory Cortex of Humans and Rodents

Qingqing Q. Jin, Guangqi Q. Wu, Weiwei W. Peng, Xiaolei L. Xia, Li Hu, and Giandomenico D. Iannetti

5620 Subthalamic Nucleus Neurons Differentially Encode Early and Late Aspects of Speech Production

Witold J. Lipski, Ahmad Alhourani, Tara Pirnia, Peter W. Jones, Christina Dastolfo-Hromack, Leah B. Helou, Donald J. Crammond, Susan Shaiman, Michael W. Dickey, Lori L. Holt, Robert S. Turner, Julie A. Fiez, and R. Mark Richardson

5632 Expectations Do Not Alter Early Sensory Processing during Perceptual Decision-Making

Nuttida Rungratsameetaweemana, Sirawaj Itthipuripat, Annalisa Salazar, and John T. Serences

NEUROBIOLOGY OF DISEASE

5567 A Central Extended Amygdala Circuit That Modulates Anxiety Sandra Abrens Melody V Wu, Alessandro Furlan, Ga-Ram Hwang

Sandra Ahrens, Melody V. Wu, Alessandro Furlan, Ga-Ram Hwang, Raehum Paik, Haohong Li, Mario A. Penzo, Jessica Tollkuhn, and Bo Li

5584 Prostaglandin Transporter OATP2A1/SLCO2A1 Is Essential for Body Temperature Regulation during Fever

Yoshinobu Nakamura, Takeo Nakanishi, Hiroaki Shimada, Junya Shimizu, Rika Aotani, Shio Maruyama, Kei Higuchi, Takashi Okura, Yoshiharu Deguchi, and Ikumi Tamai

5596 Polyamine Modulation of Anticonvulsant Drug Response: A Potential Mechanism Contributing to Pharmacoresistance in Chronic Epilepsy

Niklas Michael Beckonert, Thoralf Opitz, Julika Pitsch, Patrício Soares da Silva, and Heinz Beck

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.