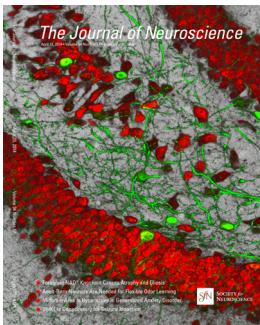


# The Journal of Neuroscience

April 23, 2014 • Volume 34 Number 17 • www.jneurosci.org



**Cover legend:** Confocal immunofluorescence image showing localization of the transcriptional coactivator Crtc1 in neurons of the adult mouse hippocampus. Crtc1 (green) localizes in neurites and nuclei of CA3 hippocampal and dentate gyrus neurons (red, NeuN) after adeno-associated viral-Crtc1 infection. Composition by Núria Barba. For more information, see article by Parra-Damas et al. (pages 5776–5787).

## i This Week in The Journal

### Journal Club

- 5735 The Neural Correlates of Working Memory Impairment in Attention-Deficit/Hyperactivity Disorder  
Hannah L. Pincham

### Brief Communications

- 5965 CNS Axons Globally Increase Axonal Transport after Peripheral Conditioning  
Fernando M. Mar, Anabel R. Simões, Sérgio Leite, Marlene M. Morgado, Telma E. Santos, Inês S. Rodrigo, Carla A. Teixeira, Thomas Misgeld, and Mónica M. Sousa
- 5998 Alpha Power Gates Relevant Information during Working Memory Updating  
Peter Manza, Chui Luen Vera Hau, and Hoi-Chung Leung (梁海松)
- 6023 Optogenetic-Mediated Release of Histamine Reveals Distal and Autoregulatory Mechanisms for Controlling Arousal  
Rhianan H. Williams, Melissa J. S. Chee, Daniel Kroeger, Loris L. Ferrari, Eleftheria Maratos-Flier, Thomas E. Scammell, and Elda Arrigoni
- 6078 Structural Plasticity within the Barrel Cortex during Initial Phases of Whisker-Dependent Learning  
Sandra J. Kuhlman, Daniel H. O'Connor, Kevin Fox, and Karel Svoboda
- 6107 Mice with Compromised 5-HT Function Lack Phosphotyrosine-Mediated Inhibitory Control over Prefrontal 5-HT Responses  
Nathalie M. Goodfellow, Derya Sargin, Mark S. Ansorge, Jay A. Gingrich, and Evelyn K. Lambe

### Articles

#### CELLULAR/MOLECULAR

- 5738 Progressive Degeneration of Dopaminergic Neurons through TRP Channel-Induced Cell Death  
Archana Nagarajan, Ye Ning, Kaja Reisner, Zafir Buraei, Jan Petter Larsen, Oliver Hobert, and Maria Doitsidou
- 5800 Expression of Nampt in Hippocampal and Cortical Excitatory Neurons Is Critical for Cognitive Function  
Liana Roberts Stein, David F. Wozniak, Joshua T. Dearborn, Shunsuke Kubota, Rajendra S. Apte, Yukitoshi Izumi, Charles F. Zorumski, and Shin-ichi Imai

**5927 LMTK3 Deficiency Causes Pronounced Locomotor Hyperactivity and Impairs Endocytic Trafficking**

Takeshi Inoue, Naosuke Hoshina, Takanobu Nakazawa, Yuji Kiyama, Shizuka Kobayashi, Takaya Abe, Toshifumi Yamamoto, Toshiya Manabe, and Tadashi Yamamoto

**DEVELOPMENT/PLASTICITY/REPAIR**

**5788 Continuous Postnatal Neurogenesis Contributes to Formation of the Olfactory Bulb Neural Circuits and Flexible Olfactory Associative Learning**

Masayuki Sakamoto, Nao Ieki, Goichi Miyoshi, Daisuke Mochimaru, Hitoshi Miyachi, Tetsuya Imura, Masahiro Yamaguchi, Gord Fishell, Kensaku Mori, Ryoichiro Kageyama, and Itaru Imayoshi

**5895 The Role of Arp2/3 in Growth Cone Actin Dynamics and Guidance Is Substrate Dependent**

José E. San Miguel-Ruiz and Paul C. Letourneau

**6098 *In Vivo* Regulation of NGF-Mediated Functions by Nedd4-2 Ubiquitination of TrkA**

Tao Yu, Laura Calvo, Begoña Anta, Saray López-Benito, Roger López-Bellido, Cristina Vicente-García, Lino Tessarollo, Raquel E. Rodriguez, and Juan C. Arévalo

**6112 HDAC1 and HDAC2 Control the Specification of Neural Crest Cells into Peripheral Glia**

Claire Jacob, Pirmin Lötscher, Stefanie Engler, Arianna Baggolini, Sandra Varum Tavares, Valérie Brügger, Nessy John, Stine Büchmann-Møller, Paige L. Snider, Simon J. Conway, Teppei Yamaguchi, Patrick Matthias, Lukas Sommer, Ned Mantel, and Ueli Suter

**SYSTEMS/CIRCUITS**

**5835 Motion Integration for Ocular Pursuit Does Not Hinder Perceptual Segregation of Moving Objects**

Zhenlan Jin, Scott N.J. Watamaniuk, Aarlenne Z. Khan, Elena Potapchuk, and Stephen J. Heinen

**5861 Activation of Dopaminergic D2/D3 Receptors Modulates Dorsalventral Connectivity in the Hippocampus and Reverses the Impairment of Working Memory after Nerve Injury**

Helder Cardoso-Cruz, Margarida Dourado, Clara Monteiro, Mariana R. Matos, and Vasco Galhardo

**5874 Valence-Specific Effects of BDNF Val<sup>66</sup>Met Polymorphism on Dopaminergic Stress and Reward Processing in Humans**

Marta Peciña, Mercedes Martínez-Jauand, Tiffany Love, Joseph Heffernan, Pedro Montoya, Colin Hodgkinson, Christian S. Stohler, David Goldman, and Jon-Kar Zubieta

**5938 Corticostriatal Coordination through Coherent Phase-Amplitude Coupling**  
Constantin von Nicolai, Gerhard Engler, Andrew Sharott, Andreas K. Engel, Christian K. Moll, and Markus Siegel

**5949 Slow Oscillations in the Mouse Hippocampus Entrained by Nasal Respiration**  
Yevgenij Yanovsky, Mareva Ciatipis, Andreas Draguhn, Adriano B.L. Tort, and Jurij Brankač

- 5971 **Decoding Ventromedial Hypothalamic Neural Activity during Male Mouse Aggression**  
Annegret L. Falkner, Piotr Dollar, Pietro Perona, David J. Anderson, and Dayu Lin
- 6040 **Vasoactive Intestinal Polypeptide Mediates Circadian Rhythms in Mammalian Olfactory Bulb and Olfaction**  
Jae-eun Kang Miller, Daniel Granados-Fuentes, Thomas Wang, Luciano Marpegan, Timothy E. Holy, and Erik D. Herzog
- 6047 **Leptin-Responsive GABAergic Neurons Regulate Fertility through Pathways That Result in Reduced Kisspeptinergic Tone**  
Cecilia Martin, Víctor M. Navarro, Serap Simavli, Linh Vong, Rona S. Carroll, Bradford B. Lowell, and Ursula B. Kaiser
- 6065 **The Generation of Antiphase Oscillations and Synchrony by a Rebound-Based Vertebrate Central Pattern Generator**  
Wen-Chang Li, Robert Merrison-Hort, Hong-Yan Zhang, and Roman Borisyuk
- BEHAVIORAL/COGNITIVE**
- 5747 **Pain Reduces Sexual Motivation in Female But Not Male Mice**  
Melissa A. Farmer, Alison Leja, Emily Foxen-Craft, Lindsey Chan, Leigh C. MacIntyre, Tina Niaki, Mengsha Chen, Josiane C.S. Mapplebeck, Vanessa Tabry, Lucas Topham, Melissa Sukosd, Yitzchak M. Binik, James G. Pfau, and Jeffrey S. Mogil
- 5816 **The Brain's Temporal Dynamics from a Collective Decision to Individual Action**  
Caroline J. Charpentier, Christina Moutsiana, Neil Garrett, and Tali Sharot
- 5842 **Developmental Changes in the Organization of Functional Connections between the Basal Ganglia and Cerebral Cortex**  
Deanna J. Greene, Timothy O. Laumann, Joseph W. Dubis, S. Katie Ihnen, Maital Neta, Jonathan D. Power, John R. Pruett Jr., Kevin J. Black, and Bradley L. Schlaggar
- 5855 **Hyper-Reactive Human Ventral Tegmental Area and Aberrant Mesocorticolimbic Connectivity in Overgeneralization of Fear in Generalized Anxiety Disorder**  
Jiook Cha (자지욱), Joshua M. Carlson, Daniel J. DeDora, Tsafir Greenberg, Greg H. Proudfoot, and Lilianne R. Mujica-Parodi
- 5918 **Apathy in Parkinson's Disease: Neurophysiological Evidence of Impaired Incentive Processing**  
Saul Martínez-Horta, Jordi Riba, Ramón Fernández de Bobadilla, Javier Pagonabarraga, Berta Pascual-Sedano, Rosa María Antonijuan, Sergio Romero, Miquel Àngel Mañanas, Carmen García-Sánchez, and Jaime Kulisevsky
- 5985 **Modulation Dynamics in the Orofacial Sensorimotor Cortex during Motor Skill Acquisition**  
Fritzie I. Arce-McShane, Nicholas G. Hatsopoulos, Jye-Chang Lee, Callum F. Ross, and Barry J. Sessle
- 6003 **Effects of Hippocampal State-Contingent Trial Presentation on Hippocampus-Dependent Nonspatial Classical Conditioning and Extinction**  
Miriam S. Nokia and Jan Wikgren

- 6011 Motor Cortical Correlates of Arm Resting in the Context of a Reaching Task and Implications for Prosthetic Control**  
Meel Velliste, Scott D. Kennedy, Andrew B. Schwartz, Andrew S. Whitford, Jeong-Woo Sohn, and Angus J. C. McMorland
- 6057 Infralimbic BDNF/TrkB Enhancement of GluN2B Currents Facilitates Extinction of a Cocaine-Conditioned Place Preference**  
James M. Otis, Michael K. Fitzgerald, and Devin Mueller
- NEUROBIOLOGY OF DISEASE**
- 5754 Nerve Injury-Induced Neuropathic Pain Causes Disinhibition of the Anterior Cingulate Cortex**  
Sigrid Marie Blom, Jean-Pascal Pfister, Mirko Santello, Walter Senn, and Thomas Nevin
- 5765 Role of GluK1 Kainate Receptors in Seizures, Epileptic Discharges, and Epileptogenesis**  
Brita Fritsch, Janine Reis, Maciej Gasior, Rafal M. Kaminski, and Michael A. Rogawski
- 5776 Crtc1 Activates a Transcriptional Program Deregulated at Early Alzheimer's Disease-Related Stages**  
Arnaldo Parra-Damas, Jorge Valero, Meng Chen, Judit España, Elsa Martín, Isidro Ferrer, José Rodríguez-Alvarez, and Carlos A. Saura
- 5824 Overexpression of the Steroidogenic Enzyme Cytochrome P450 Side Chain Cleavage in the Ventral Tegmental Area Increases 3 $\alpha$ ,5 $\alpha$ -THP and Reduces Long-Term Operant Ethanol Self-Administration**  
Jason B. Cook, David F. Werner, Antoniette M. Maldonado-Devincci, Maggie N. Leonard, Kristen R. Fisher, Todd K. O'Buckley, Patrizia Porcu, Thomas J. McCown, Joyce Besheer, Clyde W. Hodge, and A. Leslie Morrow
- 5882 Suppression of Alzheimer-Associated Inflammation by Microglial Prostaglandin-E<sub>2</sub> EP4 Receptor Signaling**  
Nathaniel S. Woodling, Qian Wang, Prachi G. Priyam, Paul Larkin, Ju Shi, Jenny U. Johansson, Irene Zagol-Ikapitte, Olivier Boutaud, and Katrin I. Andreasson
- 5909 Source-Reconstruction of Event-Related Fields Reveals Hyperfunction and Hypofunction of Cortical Circuits in Antipsychotic-Naive, First-Episode Schizophrenia Patients during Mooney Face Processing**  
Davide Rivolta, Nazareth P. Castellanos, Cerisa Stawowsky, Saskia Helbling, Michael Wibral, Christine Grützner, Dagmar Koethe, Katharina Birkner, Laura Kranaster, Frank Enning, Wolf Singer, F. Markus Leweke, and Peter J. Uhlhaas
- 6030 Casein Kinase 1 Suppresses Activation of REST in Insulted Hippocampal Neurons and Halts Ischemia-Induced Neuronal Death**  
Naoki Kaneko, Jee-Yeon Hwang, Michael Gertner, Fabrizio Pontarelli, and R. Suzanne Zukin
- 6084 Activity-Dependent Tau Protein Translocation to Excitatory Synapse Is Disrupted by Exposure to Amyloid-Beta Oligomers**  
Marie Lise Frandemiche, Sandrine De Seranno, Travis Rush, Eve Borel, Auréliane Elie, Isabelle Arnal, Fabien Lanté, and Alain Buisson

**6123 Correction:** The article “Coding of Shape Features in the Macaque Anterior Intraparietal Area” by Maria C. Romero, Pierpaolo Pani, and Peter Janssen appeared on pages 4006–4021 of the March 12, 2014 issue. A correction for that article appears on pages 6123–6124.

---

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/misc/itoa.shtml>. Authors should refer to these Instructions online for recent changes that are made periodically.

*Brief Communications* Instructions for Authors are available via Internet ([http://www.jneurosci.org/misc/ifa\\_bc.shtml](http://www.jneurosci.org/misc/ifa_bc.shtml)).

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; fax, 202-962-4945; e-mail, [jn@sfn.org](mailto:jn@sfn.org).