

# The Journal of Neuroscience

## EDITOR-IN-CHIEF

John H.R. Maunsell

## SENIOR EDITORS

Mark Bothwell  
Valina Dawson  
Nancy Ip  
Sabine Kastner  
Jeanne Nerbonne  
David Perkel  
Matthew Rushworth  
Yavin Shaham

## REVIEWING EDITORS

Jose Manuel Alonso  
Dora Angelaki  
Christopher I. Baker  
Tracy L. Bale  
Christophe Bernard  
Jeffrey Diamond  
Mark Farrant  
Alyson Fournier  
Vittorio Gallo  
Michael Gold  
Jay A. Gottfried  
Ege T. Kavalali  
Paul J. Kenny  
Eric Klann  
James Knierim  
Gary E. Landreth  
Daeyeol Lee  
Joseph LoTurco  
Diane Merry  
Farzan Nadim  
Sam Pleasure  
Charan Ranganath  
Dan H. Sanes  
Geoffrey Schoenbaum  
Charles Schroeder  
Ruth S. Slack  
Jane M. Sullivan  
Ivan Toni  
Catherine S. Woolley

## ASSOCIATE EDITORS

### Behavioral/Cognitive

Mark Baxter  
Kent Berridge  
Leonardo Cohen  
Ralph Dileone  
Stan Floresco  
Karl Friston  
Jacqueline Gottlieb  
Bruce Hope  
J. David Jentsch  
Donald Katz  
George Koob  
Gavin McNally  
Micah Murray  
Uta Noppeney  
Paul Phillips  
Cathy Price  
Greg Quirk  
Matthew R. Roesch  
Glenn E. Schafe  
Gordon Shulman  
Harwig Siebner  
Garret Stuber  
Marina Wolf

### Cellular/Molecular

Laszlo Acsady  
Heinz Beck  
Larry I. Benowitz  
Paul Buckmaster  
Patrizia Casaccia-Bonnett  
Pablo Castillo  
Lu Chen  
Anis Contractor  
Liset M. de la Prida  
Sulayman Dib-Hajj

Cheryl Dreyfus  
Lisa Goodrich  
Helmut Haas  
Yasunori Hayashi  
Dax Hoffman  
Kamran Khodakhah  
Carl Lupica  
Olivier Manzoni  
BethAnn McLaughlin  
Lin Mei  
Suzanne Moenter  
Bernd Nilius  
Linda Overstreet-Wadiche  
Jelena Radulovic  
Matthew Rasband  
Christian Rosenmund  
Bernardo Sabatini  
Jürgen Sandkühler  
Steven Scherer  
Laura Schrader  
Mark Shapiro  
Joshua Singer  
Ben Strowbridge  
Bettina Winckler  
Danny G. Winder

### Development/Plasticity/Repair

Stewart A. Anderson  
Ottavio Arancio  
Heather Cameron  
Jonah Chan  
Jean-François Cloutier  
Donna Fekete  
Wilma Friedman  
Roman Giger  
Robert Hevner  
Jenny Hsieh  
Matthew Kelley  
Dimitri Krainc  
Wendy Macklin  
Keith Murai  
Todd Sacktor  
Carlo Sala  
Helen E. Scharfman  
Jorg B. Schulz  
Deanna Smith  
Michael Sofroniew  
Hongjun Song  
Terrence Town  
Flora Vaccarino  
Fengquan Zhou

### Neurobiology of Disease

Josef Anrather  
Douglas Bayliss  
Paolo Calabresi  
Monica Carson  
Alain Chedotal  
Jun Chen  
Mark Cookson  
William Dauer  
Patrick Dougherty  
David Eidelberg  
Frank M. Faraci  
Mel Feany  
Bonnie Lynne Firestein  
Todd Golde  
Christian Haass  
Giles Hardingham  
Markus Heilig  
Uwe Heinemann  
Eric Huang  
Frances Jensen  
Robert Kalb  
David Lynch  
Leonard Petrucelli  
David Pleasure  
Krish Sathian  
Tara Spires-Jones  
Raymond Swanson  
Miquel Vila  
Dianna Willis

## Systems/Circuits

Bruno Averbeck  
Michele A. Basso  
James Bisley  
Matteo Carandini  
Laura Colgin  
J. Douglas Crawford  
Jonathan Demb  
Alain Destexhe  
Andre Fenton  
Vincent Ferrera  
Paul Frankland  
Patricia Gaspar  
Asif Ghazanfar  
Geoffrey Ghose  
Patrice Guyenet  
Michael Hasselmo  
Andrew Huberman  
Christoph Kayser  
Andrew King  
Richard Krauzlis  
Roger Lemon  
Julio Martinez-Trujillo  
Lisa Monteggia

Tirin Moore  
Guy Orban  
Richard Palmiter  
Anitha Pasupathy  
Gregg Recanzone  
Dorit Ron  
Hans Straka  
Alessandro Treves  
Doris Tsao  
Rachel I. Wilson  
Lori Zeltzer

## FEATURES EDITOR

Teresa Esch

## EDITORIAL STAFF

Zachary Dourafei  
Chanelle Grannum  
Dante Graves  
Justin Martinez  
Jacqueline Perry  
Suzanne Rosenzweig  
Sola Yu

*The Journal of Neuroscience* (ISSN-0270-6474) is the official journal of the Society for Neuroscience, 1121 14th Street, NW, Suite 1010, Washington, DC 20005. It is published weekly by the Society, fifty weeks a year, one volume a year.

**Subscriptions** are on a volume basis beginning with the January 2 issue. The Volume 33 (2013) Institutional rate information is available on the website: <http://www.jneurosci.org/subscriptions/cost.dtl>. Single copies for the U.S. are \$70, \$90 elsewhere. Institutional subscribers should direct subscription orders, back issue requests, claims, and changes of address to *The Journal of Neuroscience*, Subscription Services, 1121 14th St., NW, Suite 1010, Washington, DC 20005, [subs@sfn.org](mailto:subs@sfn.org). Claims will be honored if received within three (3) months of the month of issue. A maximum of three (3) single-issue claims will be honored per volume per subscriber. Society for Neuroscience members interested in subscribing to *The Journal* at a reduced rate should contact the Society's Membership Department (phone 202-962-4000, [memb@sfn.org](mailto:memb@sfn.org)). Society members should also direct back issue requests to [subs@sfn.org](mailto:subs@sfn.org).

**Advertising** inquiries should be addressed to Marci Leach, The Society for Neuroscience, 1121 14th St., NW, Suite 1010, Washington, DC 20005, phone 202-962-4000, [mleach@sfn.org](mailto:mleach@sfn.org).

**Reprints** of a single copy of an individual article are available from Infotrieve at <http://www.infotrieve.com>.

**Photocopies:** *The Journal* is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923. Authorization to photocopy items for the internal or personal use of specific clients is granted by the Society for Neuroscience provided that the copier pay to the Center the \$15.00 copy fee stated in the code on the first page of each article. Special requests, such as for general distribution, resale, advertising, and promotional purposes or for creating new works, should be directed to Journal Permissions, Society for Neuroscience, 1121 14th St., NW, Suite 1010, Washington, DC 20005, [jnpermissions@sfn.org](mailto:jnpermissions@sfn.org).

**Postmaster:** Send address changes to *The Journal of Neuroscience*, Society for Neuroscience Membership Department, 1121 14th St., NW, Suite 1010, Washington, DC 20005. Periodicals postage paid at Washington, DC, and additional mailing offices. Canada Post International Publications Mail (Canadian Distribution) Sales Agreement No. 0895369. *The Journal of Neuroscience* is indexed by BIOSIS, Brain Information Service, Chemical Abstracts, Current Contents EMBASE/Excerpta Medica, FISHLIJ; Index Medicus, Index to Scientific Reviews, Psychological Abstracts, PsycINFO, and PsycLIT. © *The Journal* is printed on acid-free paper that meets the minimum requirements of ANSI Standard Z39.48-1984 (Permanence of Paper). Copyright © 2013 Society for Neuroscience. All rights reserved.

The ideas and opinions expressed in *The Journal of Neuroscience* do not necessarily reflect those of the Society for Neuroscience or the Editors of *The Journal of Neuroscience*. Publication of an advertisement or other product mention in *The Journal of Neuroscience* should not be construed as an endorsement of the manufacturer's claims. The Society for Neuroscience does not assume any responsibility for any injury and/or damage to persons or property arising from or related to any use of any material contained in *The Journal of Neuroscience*.