

# The Journal of Neuroscience

## EDITOR-IN-CHIEF

Dora E. Angelaki

## SENIOR EDITORS

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

## REVIEWING EDITORS

Jose Manuel Alonso  
Christopher I. Baker  
Tracy L. Bale  
Gregory DeAngelis  
Jeffrey Diamond  
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  
Anna Christina Nobre  
Sam Pleasure  
Dan H. Sanes  
Helen E. Scharfman  
Geoffrey Schoenbaum  
Charles Schroeder  
Ruth S. Slack  
Jane M. Sullivan  
Ivan Toni  
Catherine S. Woolley

## ASSOCIATE EDITORS

### Behavioral/Cognitive

Mark Baxter  
Michael Beauchamp  
Leonardo Cohen  
Lila Davachi  
Floris de Lange  
Ralph Dileone  
Stan Floresco  
Alex Fornito  
Karl Friston  
Jack Gallant  
Biyu He  
Bruce Hope  
Sheena A. Josselyn  
Donald Katz  
Ifat Levy  
Gavin McNally  
Micah Murray  
Uta Noppeney  
John O'Doherty  
Luiz Pessoa  
Paul Phillips  
Cathy Price  
Greg Quirk  
Antonio Rangel  
Matthew R. Roesch  
Gordon Shulman  
Harwig Siebner  
Garret Stuber  
Gregor Thut  
Philippe N. Tobler  
Ulf Ziemann

### Cellular/Molecular

Anne Baron-van  
Diana Bautista  
Heinz Beck  
Paul Buckmaster

Anis Contractor  
Liset M. de la Prida  
Sulayman Dib-Hajj  
Cheryl Dreyfus  
James Fawcett  
Lisa Goodrich  
Helmut Haas  
Artur Kania  
Kamran Khodakhah  
Carl Lupica  
Olivier Manzoni  
Lori McMahon  
Lin Mei  
Suzanne Moenter  
Maiken Nedergaard  
Bernd Nilius  
Linda Overstreet-Wadiche  
Matthew Rasband  
Christian Rosenmund  
Jürgen Sandkühler  
Laura Schrader  
Mark Shapiro  
Joshua Singer  
Wayne S. Sossin  
Henrique Van Gersdorff  
Bettina Winckler  
Danny G. Winder

### Development/Plasticity/Repair

Heather Cameron  
Jonah Chan  
Jean-François Cloutier  
Donna Fekete  
Roman Giger  
Robert Hevner  
Jenny Hsieh  
Matthew Kelley  
Marlies Knipper  
Dimitri Krainc  
Qiufu Ma  
Keith Murai  
Lucas Pozzo-Miller  
Edward S. Ruthazer  
Carlo Sala  
Jorg B. Schulz  
Michael Sofroniew  
Carla Tavecchia  
Terrence Town  
Flora Vaccarino  
Teresa L. Wood  
Lawrence Wrabetz  
Fengquan Zhou

### Neurobiology of Disease

Josef Anrather  
Douglas Bayliss  
Monica Carson  
Alain Chedotal  
William Dauer  
Patrick Dougherty  
Joseph El Khoury  
David Eidelberg  
Frank M. Faraci  
Jonathan Godbout  
Todd Golde  
Christian Haass  
Giles Hardingham  
Markus Heilig  
Uwe Heinemann  
Eric Huang  
Frances Jensen  
Robert Kalb  
Michael S. Levine  
Andrew Lieberman  
Timothy H. Murphy  
David Pleasure  
Erik D. Roberson  
Barry Setlow  
Krish Sathian  
Barry Setlow  
Tara Spire-Jones  
William C. Stacey  
Raymond Swanson

Donna M. Wilcock  
Dianna Willis

## Systems/Circuits

Bruno Averbeck  
Tallie Z. Baram  
H. Tad Blair  
James Bisley  
Matteo Carandini  
Manuel Castro-Alamancos  
Laura Colgin  
Bevil Conway  
J. Douglas Crawford  
Alain Destexhe  
Abdeljabbar El Manira  
Andre Fenton  
Vincent Ferrera  
Paul Frankland  
Patricia Gaspar  
Asif Ghazanfar  
Michael Hasselmo  
Andrew Huberman  
Christoph Kayser  
Andrew King  
Richard Krauzlis  
Rohini Kuner  
Mark Laubach  
Mary Kay Lobo  
Julio Martinez-Trujillo  
Lisa Monteggia  
Gabe Murphy  
Guy Orban  
Richard Palmiter  
Anitha Pasupathy  
Gina R. Poe  
Gregg Recanzone  
Margaret E. Rice  
Dorit Ron  
Hans Straka  
Alessandro Treves  
Doris Tsao  
Matthijs van der Meer  
Lori Zeltser

## FEATURES EDITOR

Teresa Esch

## EDITORIAL STAFF

Kari Black  
Zachary Dourafei  
Michael Eppenberger  
Chanelle Grannum  
Justin Martinez  
Jacqueline Perry  
Suzanne Rosenzweig

*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 7 issue. The Volume 35 (2015) Institutional subscription rates are available online at <http://www.jneurosci.org/subscriptions/cost.dtl>. Single copies for the U.S. are \$85, \$105 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, [subscriptions@sfn.org](mailto:subscriptions@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 of Neuroscience* at a reduced rate should contact the Society's Membership Department (phone 202-962-4000, [membership@sfn.org](mailto:membership@sfn.org)). Society members should also direct back issue requests to [subscriptions@sfn.org](mailto:subscriptions@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 of Neuroscience* 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, Index Medicus/Medline, Index to Scientific Reviews, PubMed, PubMed Central, and PsycINFO. © *The Journal of Neuroscience* is printed on acid-free paper that meets the minimum requirements of ANSI Standard Z39.48-1984 (Permanence of Paper). Copyright © 2015 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*.