

# JNeurosci

THE JOURNAL OF NEUROSCIENCE

## EDITOR-IN-CHIEF

Marina Picciotto

## SENIOR EDITORS

Greg DeAngelis  
Jeanne Nerbonne  
David Perkel  
Dan H. Sanes  
Yavin Shaham  
Ruth S. Slack  
Ivan Toni  
Catherine S. Woolley

## REVIEWING EDITORS

Jose Manuel Alonso  
Christopher I. Baker  
Tracy L. Bale  
Anne Baron-Van Evercooren  
James Bisley  
Roshan Cools  
Lila Davachi  
Jonathan Demb  
Ruth Anne Eatock  
Fabrizio Gabbiani  
Vittorio Gallo  
Jay A. Gottfried  
Richard Henson  
Artur Kania  
Ege T. Kavalali  
Christoph Kayser  
Paul J. Kenny  
Eric Klann  
Daeyeol Lee  
Jon D. Levine  
Joseph LoTurco  
Mark P. Mattson  
BethAnn McLaughlin  
Pieter Medendorp  
Takeshi Sakurai  
Helen E. Scharfman  
Geoffrey Schoenbaum  
Jane M. Sullivan

## ASSOCIATE EDITORS

Bruno Averbeck  
Bernard Balleine  
Tallie Z. Baram  
Diana Bautista  
Michael Beauchamp  
H. Tad Blair  
Paul Buckmaster  
Jianhua Cang  
Monica Carson  
Manuel Castro-Alamancos  
Joseph F. Cheer  
Jean-François Cloutier  
Leonardo Cohen  
Laura Colgin  
Anis Contractor  
Bevil Conway  
J. Douglas Crawford  
Liset M. de la Prida  
Floris de Lange  
Mauricio R. Delgado  
Hanneke den Ouden  
Alain Destexhe  
Mingzhou Ding  
Cheryl Dreyfus  
Joseph El Khoury  
Abdeljabbar El Manira  
James Fawcett  
Lesley K. Fellows  
Andre Fenton  
Vincent Ferrera  
Stan Floresco  
Alex Fornito  
Christie D. Fowler  
Michael J. Frank  
Paul Frankland  
Jack Gallant  
Patricia Gaspar  
Jonathan Godbout  
Todd Golde

Shannon Gourley  
Christian Haass  
Saskia Haegens  
Simon Hanslmayr  
Matthew R. Hayes  
Biyu He  
Jens-Max Hopf  
Jenny Hsieh  
Eric Huang  
Andrew Huberman  
Frances Jensen  
Sheena A. Josselyn  
Thorsten Kahnt  
Donald Katz

Matthew Kelley  
Baljit Khakh  
Hackjin Kim  
Marlies Knipper  
Dimitri Krainc  
Rohini Kuner  
Mark Laubach  
Michael S. Levine  
Ifat Levy  
Andrew Lieberman  
Angelika Lingnau  
Mary Kay Lobo  
David M. Lovinger  
Carl Lupica  
Qiufu Ma  
Lori McMahon  
Gavin McNally  
Hugo Merchant  
Suzanne M. Moenter  
Lisa Monteggia  
Marisela Morales  
Maria Concetta Morrone  
Keith Murai  
Gabe Murphy  
Timothy H. Murphy  
Maiken Nedergaard  
Bernad Nilius  
John O'Doherty  
Jonas Oblser  
Christopher Pack  
Anitha Pasupathy  
Luiz Pessoa  
Paul Phillips  
David Pleasure  
Gina R. Poe  
Lucas Pozzo-Miller  
Cathy Price  
Antonio Rangel  
Matthew Rasband  
Margaret E. Rice  
Erik D. Roberson  
Matthew R. Roesch  
Christian Rosenmund  
Edward S. Ruthazer  
Carlo Sala  
Jürgen Sandkühler  
Krish Sathian  
Jorg B. Schulz  
Hyojung Seo  
Barry Setlow  
Mark Shapero  
Gordon Shulman  
Hartwig Siebner  
Wayne S. Sossin  
Tara Spire-Jones  
William C. Stacey  
Thomas A. Stalner  
Hans Straka  
Garret Stuber  
Raymond Swanson  
Carla Taveggia  
Gregor Thut  
Philippe N. Tobler  
Kuei Y. Tseng  
Flora Vaccarino  
Matthijs van der Meer  
Timothy J. Vickery  
Henrique Von Gersdorff  
Nicole Wenderoth  
Donna M. Wilcock

Dianna Willis  
Bettina Winckler  
Danny G. Winder  
Catharine Antonia Winstanley  
Teresa L. Wood  
Lawrence Wrabetz  
Lori Zeltser  
Fengquan Zhou  
Ulf Ziemann

## FEATURES EDITOR

Teresa Esch

## EDITORIAL STAFF

Blythe Alexander  
Adam Buck  
Zachary Dourafei  
Charnay Patterson  
Jacqueline Perry  
Julia Piper  
Suzanne Rosenzweig  
Allison Schubauer  
Courtney Simmons

*The Journal of Neuroscience* (ISSN-0270-6474) is an 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 4 issue. The Volume 37 (2017) Institutional subscription rates are available online at <http://jneurosci.org/content/subscriptions/cost>. Single copies for the U.S. are \$100, \$115 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 four (4) 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 202-962-4911, [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 The Society for Neuroscience, 1121 14th St., NW, Suite 1010, Washington, DC 20005, phone 202-962-4000, [adsales@sfn.org](mailto:adsales@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, Chemical Abstracts, Current Contents, EMBASE/Excerpta Medica, Index Medicus/Medline, 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 © 2017 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*.