Editorial Board

Mona Al-Sane, BChD, MS, assistant professor, Department of Developmental and Preventive Sciences, Faculty of Dentistry, Kuwait University, Kuwait City, Kuwait

Stephen C. Bayne, PhD, MS, active professor emeritus, Department of Cariology, Restorative Sciences, and Endodontics, School of Dentistry, University of Michigan, Ann Arbor, MI

Ana Bedran-Russo, DDS, MS, PhD, associate professor and program director, Department of Restorative Dentistry, College of Dentistry, University of Illinois at Chicago, Chicago, IL

Paul S. Casamassimo, DDS, MS, professor of pediatric dentistry, College of Dentistry, The Ohio State University, Columbus, OH

Mark Donaldson, BSc (Pharm), PharmD, director, Performance Service, Vizient, Clinical Pharmacy, Whitefish, MT

Dennis W. Engel, DDS, private practitioner, Mequon, WI

David C. Johnsen, MS, DDS, dean and professor of pediatric dentistry, College of Dentistry, University of Iowa, Iowa City, IA

Mel L. Kantor, DDS, MPH, PhD, Oliver M. Ramsey endowed chair in health sciences and director, Institute for Health Sciences, University of Wisconsin-Eau Claire, Eau Claire, WI

Kent D. Nash, PhD, economist and president, Nash & Associates, College Station, TX

Terry G. O’Toole, DDS, a past director, Dental Informatics and Analytics, Veterans Health Administration Office of Dentistry, Department of Veterans Affairs, Washington, DC

Christian Piers, DDS, MFA, past president, American Student Dental Association, Chicago, IL; and resident in orthodontics, School of Dentistry, University of North Carolina at Chapel Hill, Chapel Hill, NC

International Editorial Board

A. Enrique Acosta Gio, DDS, PhD, professor of immunology and microbiology and head of infection control and occupational safety, School of Dentistry, National University of Mexico, Mexico City, Mexico

William W.M. Cheung, DMD, member, Education Committee, Asia Pacific Region, FDI World Dental Federation; honorary associate professor, Faculty of Dentistry, The University of Hong Kong; adjunct associate professor, School of Dental Medicine, University of Pennsylvania, Philadelphia, PA; and private practitioner, Hong Kong

L. Krishna Prasad, MDS, dean, Sibar Institute of Dental Sciences, Guntur, India

David M. Williams, BDS, MSc, PhD, FRCPath, FDSRCS, professor of Global Oral Health, Barts and The London School of Medicine and Dentistry, Queen Mary University of London, London, England

Tao Xu, DMD, PhD, professor, School and Hospital of Stomatology, Peking University, Beijing, China

Subscription Information

Association members should address all inquiries to ussocieties@elsevier.com or (1-800-654-2452) or to Department of Membership, American Dental Association, msc@ada.org or 1-312-440-2614. Customer Service (orders, claims, online, change of address): Please visit our Support Hub page https://service.elsevier.com for assistance. Yearly Subscription Rates: United States and possessions: Individual $201. Canada: Individual $212. All other countries (prices include airspeed delivery): Individual $239. Orders will be billed at the individual rate until proof of status is received. Current prices are in effect for back volumes and back issues. For JADA institutional online subscription inquiries, please contact Science Direct at salessupport@elsevier.com. Further information on this journal is available from the Publisher or from this journal’s website (http://jada.ada.org). Information on other Elsevier products is available through Elsevier’s website (http://www.elsevier.com). BPA Member Business Publications Audit. Vol. 149, No. 10, pages 829-930.

Member subscriptions: 1-312-440-2614
Editorial content: 1-312-440-2791
Manuscript submissions: 1-716-829-6413

Nonmember subscriptions: 1-800-654-2452
Author Guidelines: jada.ada.org/content/authorinfo

ADA Headquarters: The central telephone number is 1-312-440-2500. The ADA’s toll-free telephone number can be found on your membership card.
Editors of JADA International Editions

MIDDLE EAST
Joseph George Ghafari, DMD, professor, Department of Otolaryngology—Head & Neck Surgery, American University of Beirut Medical Center, Beirut, Lebanon

PORTUGAL
Paulo Melo, PhD, DDS, professor of operative dentistry, Faculty of Dentistry, University of Porto, Porto, Portugal

Industry Advisory Board

CHAIR
Michael Glick, DMD, professor, School of Dental Medicine, University at Buffalo, The State University of New York, Buffalo, NY

INDUSTRY REPRESENTATIVES
Mitsi O’Neill, director, Global Professional Services, 3M Oral Care Solutions Division, St. Paul, MN
Candy B. Ross, RDH, director of clinical affairs, ISI/DEXIS/Gendex Dental Systems, Marietta, GA
Jeff Zawada, PhD, director of technical research, A-dec, Newberg, OR

The JADA Industry Advisory Board has no involvement in The Journal’s review and acceptance of manuscripts. That process is overseen by the Editor.
EDITORIAL POLICY

All statements of opinion and of supposed fact are published under the authority of the authors, including editorials and letters. They are not to be accepted as the views of the American Dental Association or its subsidiaries unless such statements have been expressly adopted by the Association. Articles are accepted with the understanding that they have not been published previously and that they are submitted solely to The Journal. Information on any products mentioned may be available from the authors. Neither the American Dental Association nor any of its subsidiaries has any financial interest in any products mentioned in editorial content, and The Journal requires all authors to disclose any financial or other interests they may have in products or services described in their articles.

ADVERTISING POLICY

All matters pertaining to advertising should be addressed to Kelly Adamitis, Advertising Sales Manager, Commercial Sales, Elsevier Inc., 1600 John F. Kennedy Boulevard, Suite 1800, Philadelphia, PA 19103, 1-215-434-1166. Allen L. Schwartz, Director of Sales, Western Region, S&S Media Solutions, 10225 N.W. Brentano Lane, McMinnville, OR 97128, phone 1-503-472-8614, fax 1-503-961-0445, cell 1-503-784-8919, e-mail allen@ssmediasol.com. Jim Shavel, Director of Sales, Eastern Region, S&S Media Solutions, 1554 Surrey Brook Court, Yardley, PA 19067, phone 1-215-369-8640, fax 1-215-369-4381, cell 1-215-499-7342, e-mail jim@ssmediasol.com. David Schuh, Account Executive, 12340 Seal Beach Blvd., Suite B-393, Seal Beach, CA 90740, phone 1-562-981-4480, e-mail david@ssmediasol.com. Leslie Christine Kemmet, Business Development Director, S&S Media Solutions, 4040 36th St. S.E., Tappen, ND 58487, phone 1-701-425-2558, fax 1-701-327-4351, e-mail leslie@ssmediasol.com. All advertising appearing in ADA publications must comply with official published advertising standards of the American Dental Association. The publication of an advertisement is not to be construed as an endorsement or approval by the American Dental Association or any of its subsidiaries, councils, commissions or bureaus of the product or service being offered in the advertisement unless the advertisement specifically includes an authorized statement that such approval or endorsement has been granted. A copy of the advertising standards of the American Dental Association is available on request. Classified Advertising, Russell Johns Associates, 5020 W. Linebaugh Ave. #210, Tampa, FL 33624, phone 1-877-394-1388, fax 1-727-445-9380, e-mail jada@russelljohns.com.

PERMISSIONS POLICY

© 2018 The American Dental Association holds the copyright for articles published in The Journal. The Journal and the individual contributions contained in it are protected under copyright, and the following terms and conditions apply to their use in addition to the terms of any Creative Commons or other user license that has been applied by the American Dental Association to an individual article:

Photocopying

Single photocopies of single articles may be made for personal use as allowed by national copyright laws. Authorization is required for all other photocopying, including multiple or systematic copying, copying for advertising or promotional purposes, resale, and all forms of document delivery. Special rates are available for educational institutions that wish to make photocopies for nonprofit educational classroom use. Please contact the the Copyright Clearance Center for permission requests and to pay fees. Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, 1-978-750-8400; fax 1-978-750-4470; www.copyright.com/content/cc3/en/toolbar/getPermission.html. The Journal’s number is 0002-8177. Permission is not required for photocopying of articles published under the CC BY license nor for photocopying for noncommercial purposes in accordance with any other user license applied by the publisher (CC BY-NC-ND).

Reprints

Requests to order reprints or electronic reprints for commercial use in quantities of 100 or more, please contact Derrick Imasa at d.imasa@elsevier.com or 1-212-633-3874.

continued on page A20
**Derivative Works**

Users may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions or companies. Other than for articles published under the CC BY license, permission of the publisher is required for resale or distribution outside the subscribing institution or company. For any subscribed articles or articles published under a CC BY-NC-ND license, permission of the publisher is required for all other derivative works, including compilations and translations.

**Storage or Usage**

Except as outlined above or as set out in the relevant user license, no part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the publisher.

**Permissions**

For information on how to seek permission visit [www.elsevier.com/permissions](http://www.elsevier.com/permissions) or call: (+1) 800-523-4069 x3808.

**Author Rights**

Author(s) may have additional rights in their articles as set out in their agreement with the publisher (more information at [http://www.elsevier.com/authorsrights](http://www.elsevier.com/authorsrights)).

**Notice**

No responsibility is assumed by the publisher or the American Dental Association for any injury and/or damage to persons or property as a matter of products liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in the material herein. Because of rapid advances in the medical sciences, in particular, independent verification of diagnoses and drug dosages should be made. Although all advertising material is expected to conform to ethical (medical) standards, inclusion in this publication does not constitute a guarantee or endorsement of the quality or value of such product or of the claims made of it by its manufacturer.