

# JAMA

## EDITORIAL STAFF

EDITOR IN CHIEF

Catherine D. DeAngelis, MD, MPH

**Executive Deputy Editor:** Phil B. Fontanarosa, MD, MBA  
**Deputy Editors:** Richard M. Glass, MD, Drummond Rennie, MD, Margaret A. Winker, MD  
**Managing Deputy Editor:** Annette Flanagan  
**Senior Contributing Editor:** M. Therese Southgate, MD  
**Senior Editors:** Robert M. Golub, MD, Ronna Henry, MD  
**Associate Senior Editor:** Roxanne K. Young  
**Contributing Editors:** Derek C. Angus, MD, MPH, Helene M. Cole, MD, Thomas B. Cole, MD, MPH, David S. Cooper, MD, J. Michael Gaziano, MD, MPH, David H. Mark, MD, MPH, Mary McGrae McDermott, MD, Robert A. McNutt, MD, Boris Pasche, MD, PhD, Eric D. Peterson, MD, MPH, Jeanette M. Smith, MD, Janet M. Torpy, MD, John L. Zeller, MD, PhD, Gianna Zuccotti, MD, MPH, Jody W. Zylke, MD  
**Statistical Editor:** Naomi Vaisrub, PhD  
**Associate Editor:** Charlene Breedlove  
**Fishbein Fellow:** Huan J. Chang, MD, MPH  
**Contributing Writers:** Christine K. Cassel, MD, Allan S. Detsky, MD, PhD, Lawrence O. Gostin, JD, LLD, Jeffrey P. Koplan, MD, MPH, David S. Ludwig, MD, PhD, Howard Markel, MD, PhD, Bruce M. Psaty, MD, PhD, Stephen M. Shortell, PhD, Steven H. Woolf, MD, MPH  
**Medical News & Perspectives:** Joan Stephenson, PhD (editor); Bridget M. Kuehn, Mike Mitka (senior staff writers); Rebecca Voelker (associate managing editor)  
**Assistant Editors:** Carrie Butt, Angela Grayson, Jennifer Reiling  
**Administration:** Marla A. Hall (director); Gloria Tate (supervisor); Deanna M. Willis (staff assistant)

**Manuscript Editing:** Stacy L. Christiansen (director); Coleen Adamson, Joy K. Jaeger, Phil Sefton, Heather A. Shebel, Beverly Stewart (senior manuscript editors); Kim S. P. Campbell, Kristine B. Simmons; Jennifer Reddy, Cara Wallace (freelance manuscript editors)

**Editorial Graphics:** Cassio Lynn, Alison E. Burke (senior medical illustrators); David Song (editorial assistant)

**Electronic Media:** Michelle Kurzynski (director, development and design); Christopher Hastings, Peter Kim, Craig McCaffrey (developers/designers); Reuben Rios (Web administrative assistant)

**Editorial Assistants:** Mary Cannon, Susan Collister, Carmina Conley, Dawn Cortez, Cheryl Dixon, Audrey Forman, Gwenn Gregg, Lisa Hardin, Rachell M. Lozano, Rosa E. Miranda, Lupe Morales, Ethel Pinkston

**Workflow and Content Management Systems:** Larry Bryant (director); Paul Frank (systems administrator); Monica Mungle (editorial systems manager); J.D. Neff (associate developer)

**Editorial Systems and Administration:** Elaine Williams (director); Gale Saulsberry (database specialist); Lenette Gardner-Gullens (electronic input supervisor); Fanny L. Brown, Celina Canchola (electronic input specialists)

**Editorial Counsel:** Joseph P. Thornton, JD

**Survey Research Specialist:** Joseph S. Wislar

**JAMA/Archives Media Relations:** Jann Ingmire (director); Jim Michalski, Cindy Kuzma, Daisy Franco

**Editors of International Editions:** Bassel Atallah, MD, Middle East; Ivan Vidmar, MD, Slovenia

## EDITORIAL BOARD

**Daniel M. Albert, MD**  
University of Wisconsin Hospital and Clinics, Madison, Wisconsin  
Editor, *Archives of Ophthalmology*

**Donald M. Berwick, MD, MPP**  
Institute for Healthcare Improvement  
Boston, Massachusetts

**Philip Cagle, MD**  
The Methodist Hospital  
Houston, Texas

**Cyril Chantler, MD, FRCP**  
London, United Kingdom

**Joseph T. Coyle, MD**  
Harvard Medical School  
Boston, Massachusetts  
Editor, *Archives of General Psychiatry*

**Laura K. DeLong, MD, MPH**  
Emory University School of Medicine  
Atlanta, Georgia

**Ronald G. Evens, MD**  
Barnes-Jewish Hospital  
St Louis, Missouri

**Julie Freischlag, MD**  
Johns Hopkins University  
School of Medicine  
Baltimore, Maryland  
Editor, *Archives of Surgery*

**Julie L. Gerberding, MD, MPH**  
Emory University  
School of Medicine  
Atlanta, Georgia

**Michael M. E. Johns, MD**  
Robert W. Woodruff Health Sciences  
Center of Emory University  
Atlanta, Georgia

**Robert P. Kelch, MD**  
University of Michigan  
Ann Arbor, Michigan

**Wayne F. Larrabee Jr, MD**  
University of Washington  
Seattle, Washington  
Editor, *Archives of Facial Plastic Surgery*

**Risa Lavizzo-Mourey, MD**  
The Robert Wood Johnson Foundation  
Princeton, New Jersey

**Paul A. Levine, MD**  
University of Virginia  
Charlottesville, Virginia  
Editor, *Archives of Otolaryngology—Head & Neck Surgery*

**Donald A. B. Lindberg, MD**  
National Library of Medicine  
Bethesda, Maryland

**C. David Naylor, MD, DPhil**  
University of Toronto  
Toronto, Ontario, Canada

**June E. Osborn, MD**  
Josiah Macy, Jr Foundation  
President Emerita  
Falls Church, Virginia

**Rita F. Redberg, MD, MSc**  
University of California, San Francisco  
School of Medicine  
San Francisco, California  
Editor, *Archives of Internal Medicine*

**Uwe E. Reinhardt, PhD**  
Princeton University  
Princeton, New Jersey  
**Povi Riis, MD, DSCI, DHC**  
Professor of Medicine  
Copenhagen, Denmark

**Frederick P. Rivara, MD, MPH**  
University of Washington  
Seattle, Washington  
Editor, *Archives of Pediatrics & Adolescent Medicine*

**June K. Robinson, MD**  
The Feinberg School of Medicine,  
Northwestern University  
Chicago, Illinois  
Editor, *Archives of Dermatology*

**Roger N. Rosenberg, MD**  
University of Texas Southwestern  
Medical Center, Dallas, Texas  
Editor, *Archives of Neurology*

## JOURNAL OVERSIGHT COMMITTEE

**Jordan J. Cohen, MD (chair)**  
George Washington University  
Washington, DC

**Karen Antman, MD**  
Boston University  
Boston, Massachusetts

**Kathleen Case**  
patientINFORM  
Philadelphia, Pennsylvania

**Steven L. Kanter, MD**  
University of Pittsburgh  
School of Medicine  
Pittsburgh, Pennsylvania

**Robert A. Musacchio, PhD**  
American Medical Association  
Chicago, Illinois

**Olufunmilayo Olopade, MD**  
University of Chicago  
Pritzker School of Medicine  
Chicago, Illinois

**Edward H. Shortliffe, MD, PhD**  
University of Arizona  
College of Medicine  
Arizona State University  
Phoenix, Arizona

## FORMER EDITORS

**Nathan S. Davis, MD (1883-1888)**

**John B. Hamilton, MD**  
(1889, 1893-1898)

**John H. Hollister, MD (1889-1891)**

**James C. Culbertson, MD (1891-1893)**

**Truman W. Miller, MD (1899)**

**George H. Simmons, MD (1899-1924)**

**Morris Fishbein, MD (1924-1949)**

**Austin Smith, MD (1949-1958)**

**Johnson F. Hammond, MD**  
(1958-1959)

**John H. Talbott, MD (1959-1969)**

**Hugh H. Hussey, MD (1970-1973)**

**Robert H. Moser, MD (1973-1975)**

**William R. Barclay, MD (1975-1982)**

**George D. Lundberg, MD**  
(1982-1999)

# JAMA

## PUBLISHING AND BUSINESS STAFF

PUBLISHER

Robert A. Musacchio, PhD

### ADVERTISING SALES AND MARKETING

#### Advertising Sales, Marketing and Research

**Director:** Mark Thornbury  
Phone: (973) 263-9191 ext 212  
mark.thornbury@ama-assn.org

#### Reprint Communications

**Director:** Mark Kuhns  
Phone: (312) 464-0776  
mark.kuhns@ama-assn.org

#### Sales Representative:

Susan Lovenberg  
Phone: (973) 263-9191 ext 218  
sue.lovenberg@ama-assn.org

#### Classified Advertising/Circulation Promotion

**Assistant Publisher, Director:** Geoffrey Flick  
Phone: (312) 464-2464  
geoffrey.flick@ama-assn.org

#### Sales Manager:

Thalia Moss  
Phone: (312) 464-4169  
thalia.moss@ama-assn.org

#### Staff:

Michelle Sharpe

#### Sales Representatives:

Rachelle Brooks  
Phone: (312) 464-2490  
rachelle.brooks@ama-assn.org

Tem Harrier

Phone: (312) 464-2491  
tem.harrier@ama-assn.org

**Division Director:** Jeffery J. Bonistalli  
Phone: (312) 464-2551  
jeff.bonistalli@ama-assn.org

**Manager:** Kathy Russell

**Staff:** Mirna Monal

#### Sales Representatives:

Maureen A. Reichert  
Phone: (973) 263-9191 ext 226  
maureen.reichert@ama-assn.org

Nancy E. Souza

Phone: (973) 263-9191 ext 209  
nancy.souza@ama-assn.org

#### Worldwide Sales

**Director:** Vida Damijonaitis  
Phone: +1 (312) 464-4766  
vida.damijonaitis@ama-assn.org

#### Regional Managers:

Saskia Bolore, Americas

Phone: +1 (312) 464-4371  
saskia.bolore@ama-assn.org

Gretchen Linder, Europe/Middle East/Africa

Phone: +1 (312) 464-2543  
gretchen.linder@ama-assn.org

Jeremy Nielsen, Asia/Pacific

Phone: +1 (312) 464-2449  
jeremy.nielsen@ama-assn.org

### JOURNAL SALES AND ONLINE BUSINESS

#### Sales Representatives:

Rebecca Haas  
Phone: +1 (312) 464-2452  
becky.haas@ama-assn.org  
Christine Hearne  
Phone: +1 (312) 464-2524  
christine.hearne@ama-assn.org

#### Marketing and Product Development

**Manager:** Elizabeth Solaro  
Phone: +1 (312) 464-4812  
elizabeth.solaro@ama-assn.org

#### Staff:

Sara Nicholson

Phone: +1 (312) 464-2453  
sara.nicholson@ama-assn.org

Millette Jackson-Bates

Phone: +1 (312) 464-4868  
millette.jackson-bates@ama-assn.org

#### Online Advertising Sales Representative:

R. J. Lewis, E-Healthcaresolutions  
Phone: (609) 882-8887  
rlewis@e-healthcaresolutions.com

### PUBLISHING OPERATIONS

#### Advertising and Production Services:

Karen Allbright, Bernadette Bauer,  
Rhonda Bailey Brown, Euwanaha Joiner-Smith,  
Brian McCartney, John Pantlind, Cindy Rendlen,  
Denise Steinhauer, Ellen Yoshihara

**Circulation Services:** Julie Burton,  
Michael Deegan, Donovan Hanson,  
Noemi Olmo, Kathryn Osten

**Composition and New Media:** Gail Barrett,  
Regina Brownlee, Brenda Chandler-Grayer, Scott Curl,  
Amy Evers, Teri Hutchison, Mary Ann Kuranda,  
Joshua Lampinen, Fred Marshall, Patricia E. Panek,  
La'son Diggs Sledge, George Thomson

**Graphics:** Joe Amft, Maria Duda, Fred Furtner,  
Carolyn Hall, Maria Kowalkowski, JoAnne Weiskopf

**Proofreading:** Carol Joy Farrell, Daniel James,  
Judith A. Literskis, Teresa H. Omiotek,  
Barbara Wojtowicz, Agnes A. Zarkadas

**Division Director:** Vanessa Hayden

**Directors:** Karen Adams-Taylor,  
Susana Eloy de Vitale, Ryan Patella, Sue Sherrill

**Managers:** David Antos, Karen Branham,  
Suzanne J. Bukovsky, Debbie Camp, Susan Chiara,  
Diane Darnell, Karl Elvin, Mary Ellen Johnston,  
Michael McGraw, Chris Meyer, Sean O'Donnell,  
Sean Ohlson, Phil O'Leary, Susan Price,  
Stacy Tucker

### AMA EXECUTIVES AND TRUSTEES

**Executive Vice President, Chief Executive Officer:**  
Michael D. Maves, MD, MBA

**Chief Operating Officer:** Bernard L. Hengesbaugh

**Senior Vice President, Publishing and  
Business Services:** Robert A. Musacchio, PhD

**President:** J. James Rohack, MD

**President-Elect:** Cecil B. Wilson, MD

**Immediate Past President:** Nancy H. Nielsen, MD, PhD

**Secretary:** Joseph P. Annis, MD

**Speaker, House of Delegates:** Jeremy A. Lazarus, MD

**Vice-Speaker, House of Delegates:**  
Andrew W. Gurman, MD

**Trustees:** Raj Ambay, MD, DDS; Joseph P. Annis, MD;  
David O. Barbe, MD; Peter W. Carmel, MD;

William A. Dolan, MD; Andrew W. Gurman, MD;  
William A. Hazel Jr, MD; Cyril M. Hetsko, MD;  
Joseph M. Heyman, MD (immediate past chair);  
Ardis D. Hoven, MD (chair-elect); Christopher K. Kay;  
Edward L. Langston, MD; Jeremy A. Lazarus, MD;  
Justin B. Mahida; Mary Anne McCaffree, MD; Nancy  
H. Nielsen, MD, PhD; Rebecca J. Patchin, MD (chair);  
J. James Rohack, MD; Steven J. Stack, MD; Robert M.  
Wah, MD; Cecil B. Wilson, MD