



JAMDA

Journal of the American Medical Directors Association

LONG-TERM CARE: MANAGEMENT, APPLIED RESEARCH AND CLINICAL ISSUES

JAMDA, the official journal of the American Medical Directors Association, is a peer reviewed publication

EDITOR-IN-CHIEF

John E. Morley, MB, BCH
Saint Louis University Medical Center
Division of Geriatric Medicine
1402 S. Grand Boulevard, Room M238
St. Louis, MO 63104
Tel: (314) 977-8462
Fax: (314) 771-8575
E-mail: morley@slu.edu

ASSOCIATE EDITORS

David R. Thomas, MD, CMD
E-mail: thomasdr@slu.edu
Julie K. Gammack, MD
E-mail: gammackj@slu.edu

MANAGING EDITOR

Valerie Tanner
Saint Louis University School of Medicine
Division of Geriatric Medicine
1402 S. Grand Boulevard, Room M238
St. Louis, MO 63104
Tel: (314) 977-8464
Fax: (314) 771-8575
E-mail: tannerv@slu.edu

EDITOR EMERITUS

Dan Osterweil, MD, CMD

EDITORIAL BOARD

Steven M. Albert, PhD, MSPH, University of Pittsburgh School of Public Health, Pittsburgh, PA
Wilbert S. Aronow, MD, New York Medical College, New Rochelle, NY
Connie W. Bales, PhD, RD, Duke University Center for Aging, Durham, NC
Barbara M. Bates-Jensen, PhD, RN, UCLA School of Nursing & Medicine & VA Greater LA GRECC, Pasadena, CA
Manju T. Beier, PharmD, FASCP, University of Michigan & Geriatric Consultant Resources, LOC, Ann Arbor, MI
Dan G. Blazer, MD, PhD, Duke University Medical Center, Durham, NC
Gideon A. Caplan, MBBS, FRACP, Prince of Wales Hospital, Randwick, Australia
Matteo Cesari, MD, PhD, Catholic University of the Sacred Heart, Roma, Italy
Leung-Wing Chu, MBBS, FRCP, University of Hong Kong, Queen Mary Hospital, Hong Kong SAR
T. S. Dharmarajan, MD, FACP, AGSF, Montefiore Medical Ctr, Bronx, NY & New York Medical College, Valhalla, NY
Jacob Dimant, MD, CMD, Lutheran Medical Center & Lutheran Augustana Ctr, Brooklyn, NY
Lisette C.P.G.M. de Groot, MSc, PhD, Wageningen University, The Netherlands
Ligia J. Dominguez, MD, University of Palermo, Italy
Paul J. Drinka, MD, Wisconsin Veterans Home at King, WI
G. Paul Eleazer, MD, University of South Carolina School of Medicine, Columbia, SC
William J. Evans, MD, University of Arkansas, Little Rock, AR
Connie J. Evashwick, ScD, FACHE, Saint Louis University School of Public Health, St. Louis, MO
Luigi Ferrucci, PhD, MD, National Institute on Aging, NIH, & Harbor Hospital, Baltimore, MD
Joseph H. Flaherty, MD, Saint Louis University School of Medicine, St. Louis, MO
Rita A. Frantz, PhD, RN, FAAN, CWCN, Univ. Iowa College of Nursing, Iowa City, IA
Aimee D. Garcia, MD, CWS, FCCWS, Baylor College of Medicine & Michael E. DeBakey VA Med Ctr, Houston, TX
George T. Grossberg, MD, Saint Louis University School of Medicine, St. Louis, MO
Victor A. Hirth, MD, MHA, University of South Carolina & Palmetto Health, Columbia, SC
Paul R. Katz, MD, CMD, Monroe Community Hospital, Rochester, NY
Heather H. Keller, RD, PhD, University of Guelph, Ontario, Canada
Anne M. Kenny, MD, Univ Connecticut Hlth Ctr, Center on Aging, Farmington, CT
Moon Jong Kim, MD, MPH, Pochon CHA University, College of Medicine, Sungnam, Korea
Reto W. Kressig, MD, University Hospital Basel, Geriatrics, Basel, Switzerland
Francesco Landi, MD, Catholic University of Sacred Heart, Rome, Italy
Larry Lawhorne, MD, Wright State University Boonshoft School of Medicine, Geriatrics, Dayton, OH
Steven A. Levenson, MD, CMD, Baltimore, MD

Leslie S. Libow, MD, Jewish Home & Hospital & Life Care & Mt. Sinai School of Medicine, New York, NY
Jay S. Luxenberg, MD, Jewish Home, San Francisco, CA
Kenneth W. Lyles, MD, Duke University and V A Medical Center, Durham, NC
Edward R. Marcantonio, MD, SM, Harvard University & Beth Israel Deaconess Medical Center, Boston, MA
Barbara J. Messenger-Rapport, MD, PhD, FACP, CMD, Cleveland Clinic, Section of Geriatric Medicine, Cleveland, OH
Simin N. Meydani, DVM, PhD, Tufts University Human Nutrition Ctr on Aging, Brookline, MA
Joseph G. Ouslander, MD, CMD, Institute for Quality Aging, Boca Raton, FL
Naushira Pandya, MD, CMD, Nova Southeastern University College of Osteopathic Medicine, Ft. Lauderdale, FL
Miguel A. Paniagua, MD, Saint Louis University School of Medicine, St. Louis, MO
Debra Parker Oliver, PhD, MSW, University of Missouri, Columbia, MO
Giuseppe Paolisso, MD, University of Naples, Napoli, Italy
Steven L. Phillips, MD, CMD, Geriatric Care of Nevada, Reno, NV
Kaisu H. Pitkälä, PhD, University of Helsinki, Vantaa, Finland
Mary Pat Rapp, DSN, University of Texas Health Science Ctr-Houston & Geriatric Assoc of America, Houston, TX
Michael W. Rich, MD, Washington University School of Medicine, Internal Medicine, St. Louis, MO
Miriam B. Rodin, MD, PhD, CMD, Saint Louis University School of Medicine, St. Louis, MO
Laurence Z. Rubenstein, MD, MPH, VA Greater LA GRECC, Sepulveda, CA
Richard O. Schamp, MD, CMD, Saint Louis University School of Medicine, St. Louis, MO
Cornel C. Sieber, MD, Friedrich-Alexander-University Erlangen-Nürnberg, Nürnberg, Germany
Sandra F. Simmons, PhD, Vanderbilt University School of Medicine, Nashville, TN
Alan J. Sinclair, MSc, MD, FRCP, University of Bedfordshire, United Kingdom
Maria Fiatarone Singh, MD, University of Sydney, Lidcombe, Australia
Jay P. Slotkin, MD, MPH, AGSF, FACP, San Simeon by the Sound Ctr for Nursing & Rehab, Greenport, NY and SUNY at Stony Brook University, NY
David A. Smith, MD, FAAFP, CMD, Texas A & M University College of Medicine, Brownwood, TX
Karl E. Steinberg, MD, CMD, Scripps Coastal Medical Center, UCSD and Naval Hospital, Camp Pendleton, CA
Robert S. Tan, MD, MBA, University of Texas-Houston, Baylor College of Medicine, Houston, TX
Eric G. Tangalos, MD, CMD, Mayo Clinic, Rochester, MN
Nina Tumosa, PhD, Dept of Veterans Affairs VISN 15 GRECC and Saint Louis University, St. Louis, MO
Bruno Vellas, MD, CHU Toulouse, Gerontologie Clinique, Toulouse, France
Nancy T. Weintraub, MD, Greater Los Angeles VA Medical Center, GRECC, UCLA Geffen School of Medicine, Sepulveda, CA
Heidi K. White, MD, Duke U & Durham VA Medical Center GRECC, NC
Shing-shing Yeh, PhD, MD, Northport VA Medical Center, NY

Journal of the American Medical Directors Association (ISSN 1525-8610) Copyright © 2010 by the American Medical Directors Association is published nine times per year by Elsevier Inc., 360 Park Avenue South, New York, NY 10010-1710. Months of issue are January, February, March, May, June, July, September, October, and November. Periodicals postage paid at New York, NY and additional mailing offices.

POSTMASTER: Send address changes to Journal of the American Medical Directors Association, Elsevier Health Sciences Division, Subscription Customer Service, 3251 Riverport Lane, Maryland Heights, MO 63043.