

The ARCHIVES OF GENERAL PSYCHIATRY is a member of the consortium of AMA journals listed below. The complete text of all AMA journals is available online from Dialog Information Services and Ovid Technologies, Inc.

The Journal of the American Medical Association (JAMA)

Archives of Dermatology
Archives of Facial Plastic Surgery
Archives of General Psychiatry
Archives of Internal Medicine
Archives of Neurology
Archives of Ophthalmology
Archives of Otolaryngology—Head & Neck Surgery
Archives of Pathology & Laboratory Medicine
Archives of Pediatrics & Adolescent Medicine
Archives of Surgery

The ARCHIVES OF GENERAL PSYCHIATRY (ISSN 0003-990x) is published monthly by the American Medical Association, 515 N State St, Chicago, IL 60610, and is an official publication of the Association. The ARCHIVES OF GENERAL PSYCHIATRY reaches more than 31 000 readers in over 79 countries each month. Periodicals postage rates paid at Chicago, IL, and at additional mailing offices. GST registration number: 12622 5556 RT. Canada Post International Publications Mail (Canadian Distribution) Sales Agreement No. 318633.

Printed in the USA.

SUBSCRIPTION RATES—The personal subscription rates for the ARCHIVES OF GENERAL PSYCHIATRY are \$175 for 1 year (12 issues) in the United States and US possessions; \$225 in the Americas; £155 outside the Americas. The institution rates for 1 year are \$325 in the United States; \$425 in the Americas; £275 outside the Americas. Special rates for residents and medical students are available. Address all subscription communications to: Subscriber Services Center, American Medical Association, PO Box 10946, Chicago, IL 60610-0946. Phone: (800) 262-2350. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. For mailing addresses outside the United States and US possessions, see International Subscription Information.

CHANGE OF ADDRESS—POSTMASTER, send all address changes to ARCHIVES OF GENERAL PSYCHIATRY, c/o Subscriber Services, American Medical Association, 515 N State St, Chicago, IL 60610. Please notify us of address change at least 6 weeks in advance to ensure uninterrupted service. Include both old and new addresses, a recent mailing label, and new ZIP code. For mailing addresses outside the United States and US possessions, see International Subscription Information.

SUBSCRIBER SERVICES—For information about subscribing to any of the AMA publications, change of address, missing issues, or purchasing back issues, please contact Subscriber Services Center, American Medical Association, PO Box 10946, Chicago, IL 60610-0946, or call (800) 262-2350 or (312) 670-SUBS (670-7827) between 8:30 AM and 4:30 PM CST. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. For mailing addresses outside the United States and US possessions, see International Subscription Information.

INTERNATIONAL SUBSCRIPTION INFORMATION—Subscriptions outside the United States and US possessions are served according to geographic region. Please address correspondence to the following 2 offices based on delivery address: (1) For delivery in North America, Central America, and South America, contact Subscriber Services, AMA, PO Box 10946, Chicago, IL 60610-0946. Phone: (312) 670-7827. Fax: (312) 464-5831. E-mail: ama-subs@ama-assn.org. (2) For delivery outside the Americas, contact Subscription Department, JAMA & Archives Journals, American Medical Association, Tower House, Sovereign Park, Market Harborough, Leicestershire LE16 9EF, England. Telephone: +44 (0) 1858-438880, Fax: +44 (0) 1858-434958.

REPRINTS—Authors place their reprint order at the time the edited typescript is reviewed and should allow 4 to 6 weeks for delivery following publication. Requests for individual reprints should be sent directly to the author at the address shown in the article.

For bulk reprint orders for distribution by commercial organizations, please contact Wanda Bartolotta, 2441 84th St, Brooklyn, NY 11214. Phone: (718) 946-7424. Fax: (718) 946-7372. E-mail: wanda_bartolotta@ama-assn.org. For reprint orders in limited quantities for distribution by educational organizations and for author reprints, please contact Reprint Coordinator, 515 N State St, Chicago, IL 60610. Phone: (312) 464-4594. Fax: (312) 464-4849.

PERMISSIONS—Contact Rhonda Bailey, Permissions Assistant, 515 N State St, Chicago, IL 60610. Phone: (312) 464-2513.

ADVERTISING PRINCIPLES—Each advertisement in this issue has been reviewed and complies with the principles governing advertising in AMA scientific publications. A copy of these principles is available on request. The appearance of advertising in AMA publications is not an AMA guarantee or endorsement of the product or the claims made for the product by the manufacturer.

WORLD WIDE WEB ADDRESS—<http://www.ama-assn.org>

GENERAL PSYCHIATRY HOME PAGE—<http://www.archgenpsychiatry.com>

Publication Staff
 Offices: 515 N State St, Chicago, IL 60610

Editorial Processing Department

Division Director: Cheryl Iverson
Department Director: Paula Glitman
Copyediting Manager:
 Brenda Gregoline
Freelance Copyediting Manager:
 Diane L. Cannon
Freelance Copyediting Coordinators:
 Gwen Chaffen
 Connie Manno
Electronic Editing Specialist:
 Paul Frank
Assistant Electronic Editing Specialist:
 Monica Mungle
Senior Copy Editors:
 Erin M. Giannini
 Vickey Golden
Copy Editors:
 Lauren B. Fischer
 Juana N. Llorens
 Rachel Novickas
 Cheryl L. Tobey
Editorial Assistant: Wanda Hill

Scientific Publications & Multimedia Applications

Assistant to the Editor: Helga Fritz

Scientific Online Resources

Director: Margaret Winker, MD
Electronic Media Department Director:
 Michelle Kurzynski
Web Development Editor: Keith Huff
Web Copy Editor: Erin M. Giannini
Web Office Manager: Marla A. Hall
Editorial Assistant: Gemma Wall

Specialty Journal Division Office

Manager, Marketing Services:
 Geoffrey A. Flick
Assistant to the Publisher:
 Christine Hearne

Circulation & Content Marketing Division

Administrative Assistant:
 Millette Jackson-Bates

Circulation Processing Department

Director: Robert Herling
Circulation Systems Manager:
 Alfred Tomaselli
Circulation Specialists:
 Reginald Jordan
 Kathryn Osten

Circulation Development Department

Director: Bina Oza
Circulation Marketing Managers:
 Vida Damijonaitis
 Donna Goldman
 Michael McGraw
Circulation Marketing Specialist:
 Sandra Garzon

Licensing & Permissions Department

Director: Norman Frankel
Permissions: Rhonda Bailey

Production & Distribution Division

Directors: Karen Adams-Taylor,
 Paul Gasiccki, Vanessa Hayden
Managers: David Antos, Karen Branham,
 Debbie Camp, Diane Darnell,
 Karl Elvin, Betty Frigerio,
 Terri Hanley, Mary Ellen Johnston,
 Carol Piszker, Susan Price,
 Charl Richey, Carmela Ware
Production Assistants: Kristy Kambanis,
 Ruth Sprague
Production Associates and Specialists
Advertising and Production Services:
 LaWanda Brown, Susan Chiara,
 Mary Anne Donley, Sarah Powell,
 Denise Steinhauer, Ellen Yoshihara
Composition: Rebecca Aiken,
 Brenda Chandler-Grayer, Amy Evers,
 Fred Furtner, Mary Ann Kuranda,
 Sandra Lopez
Database & New Media:
 Bruce McGregor (indexer),
 Clifford O. Barrett, Gail Barrett,
 Regina Brownlee, Rowena F. Dagang,
 La'son Diggs Sledge, Angela Smits
Distribution: Linda Alexander,
 Michelle Robinson
Graphics: Joe Amft, Noel Chaparro,
 Carolyn Hall, Maria Kowalkowski,
 Chris Meyer, JoAnne Weiskopf
Proofreading: Daniel James,
 Teresa H. Omiotek,
 Mary Kay Tinerella,
 Barbara Wojtowicz,
 Agnes A. Zarkadas

Advertising

Director, Advertising Sales:
 Peter G. Messina
AMA Classified Advertising Department:
 Thalia Moss, 800-262-2260.
Advertising Office:
 J. P. Cahill & Associates,
 341 S Waiola Ave,
 La Grange, IL
 60525 (708) 352-0322.



ARCHIVES

OF

GENERAL PSYCHIATRY

MAY 2001

VOLUME 58, NUMBER 5

PAGES 413-520

ORIGINAL ARTICLE

Regional Brain and Ventricular Volumes in Tourette Syndrome 427

Bradley S. Peterson, MD; Lawrence Staib, PhD; Lawrence Scahill, MSN, PhD; Heping Zhang, PhD; Carol Anderson, PhD; James F. Leckman, MD; Donald J. Cohen, MD; John C. Gore, PhD; John Albert, BA; Rebecca Webster, BS

Age-Related Changes in Frontal and Temporal Lobe Volumes in Men: A Magnetic Resonance Imaging Study 461

George Bartzokis, MD; Mace Beckson, MD; Po H. Lu, MA; Keith H. Nuechterlein, PhD; Nancy Edwards, MA; Jim Mintz, PhD

COMMENTARY

Neuroimaging of Pediatric Neuropsychiatric Disorders: Is a Picture Really Worth a Thousand Words? 443

Jay N. Giedd, MD

Decreased Somal Size of Deep Layer 3 Pyramidal Neurons in the Prefrontal Cortex of Subjects With Schizophrenia 466

Joseph N. Pierri, MS, MD; Christine L. E. Volk, BS; Sungyoung Auh, MS; Allan Sampson, PhD; David A. Lewis, MD

ORIGINAL ARTICLES

Cytokine-Associated Emotional and Cognitive Disturbances in Humans 445

Abraham Reichenberg, PhD; Raz Yirmiya, PhD; Andreas Schulz, MD; Thomas Kraus, MD; Monika Haack, MA; Abraham Morag, MD; Thomas Pollmächer, MD

Psychiatric Disorders Among Tortured Bhutanese Refugees in Nepal 475

Mark Van Ommeren, PhD; Joop T. V. M. de Jong, MD, PhD; Bhogendra Sharma, MBBS, MSc; Ivan Komproe, PhD; Suraj B. Thapa, MBBS; Etzel Cardeña, PhD

Association of Maladaptive Parental Behavior With Psychiatric Disorder Among Parents and Their Offspring 453

Jeffrey G. Johnson, PhD; Patricia Cohen, PhD; Stephanie Kasen, PhD; Elizabeth Smailes, MPhil; Judith S. Brook, PhD

COMMENTARY

The Toll of Refugee Status and the State of Trauma Research 483

Carol S. North, MD, MPE

American Medical Association

Physicians dedicated to the health of America



Catherine D. DeAngelis, MD, MPH
Editor in Chief, Scientific Publications
& Multimedia Applications

Peter L. Payerli
Interim Vice President, Publishing
Publisher

Cheryl Iverson
Managing Editor

E. Ratcliffe Anderson, Jr, MD
Executive Vice President,
Chief Executive Officer

Robert A. Musacchio, PhD
Senior Vice President,
Publishing & Business Services

Copyright 2001 by the American Medical Association. All rights reserved.
Reproduction without permission is prohibited.

All articles published, including editorials, letters, and book reviews, represent the opinions of the authors and do not reflect the policy of the American Medical Association, the Editorial Board, or the institution with which the author is affiliated, unless this is clearly specified.

ORIGINAL ARTICLES

Multicenter, Double-blind Comparison of Sertraline and Placebo in the Treatment of Posttraumatic Stress Disorder 485
Jonathan R. T. Davidson, MD; Barbara O. Rothbaum, PhD; Bessel A. van der Kolk, MD; Carolyn R. Sikes, PhD; Gail M. Farfel, PhD

Supportive-Expressive Group Therapy and Distress in Patients With Metastatic Breast Cancer: A Randomized Clinical Intervention Trial 494
Catherine Classen, PhD; Lisa D. Butler, PhD; Cheryl Koopman, PhD; Elaine Miller, RN, MPH; Sue DiMiceli, BA; Janine Giese-Davis, PhD; Patricia Fobair, LCSW, MPH; Robert W. Carlson, MD; Helena C. Kraemer, PhD; David Spiegel, MD

A 33-Year Follow-up of Narcotics Addicts 503
Yih-Ing Hser, PhD; Valerie Hoffman, PhD; Christine E. Grella, PhD; M. Douglas Anglin, PhD

LETTERS TO THE EDITOR

Leptin as a Possible Modulator of Craving for Alcohol 509
Holger Jahn, MD; Michael Kellner, MD; Dieter Naber, MD; Klaus Wiedemann, MD; Falk Kiefer, MD

Admixture Analysis of Age at Onset in Bipolar I Affective Disorder 510
Frank Bellivier, MD, PhD; Jean-Louis Golmard, MD, PhD; Chantal Henry, MD, PhD; Marion Leboyer, MD, PhD; Frank Schürhoff, MD

Fish Consumption, Depression, and Suicidality in a General Population 512
Antti Tanskanen, MD; Joseph R. Hibbeln, MD; Jukka Hintikka, MD; Kaisa Haatainen, MHS; Kirsi Honkalampi, LicPsych; Heimo Viinamäki, MD

In Reply 513
Andrew L. Stoll, MD

Low Salivary Cortisol and Aggressive Behavior 513
Andrew G. Herzog, MD; Phyllis B. Edelheit, MD; Alan R. Jacobs, MD

In Reply 514
Keith McBurnett, PhD

REGULAR DEPARTMENTS

This Month in Archives of General Psychiatry 423

Correction 515

Classified Advertising 517

Index to Advertisers 520

Instructions for Authors—
See January 2001 issue, page 98, or visit the Web site at <http://www.archgenpsychiatry.com>.

ARCHIVES
OF
GENERAL PSYCHIATRY

Editor:
Jack D. Barchas, MD
 Department of Psychiatry
 Cornell Medical Center
 525 E 68th St, Box 171
 New York, NY 10021
 Phone: (212) 746-3771
 Fax: (212) 746-3772

Associate Editor:
Peter M. Marzuk, MD
 New York, NY

Web Site Editor:
Francis S. Lee, MD, PhD
 New York, NY

Editorial Administrator:
Sheena Rumnit
 New York, NY

Editorial Board:

Huda Akil, PhD
 Ann Arbor, Mich

Ross J. Baldessarini, MD
 Belmont, Mass

Floyd E. Bloom, MD
 La Jolla, Calif

Malcolm B. Bowers, Jr, MD
 New Haven, Conn

David L. Braff, MD
 San Diego, Calif

William T. Carpenter, Jr, MD
 Baltimore, Md

Joseph T. Coyle, MD
 Boston, Mass

Raymond J. Dolan, MD
 London, England

Felton Earls, MD
 Cambridge, Mass

Glen R. Elliott, PhD, MD
 San Francisco, Calif

Ellen Frank, PhD
 Pittsburgh, Pa

Richard M. Glass, MD
 Chicago, Ill

Frederick K. Goodwin, MD
 Bethesda, Md

Fritz A. Henn, PhD, MD
 Mannheim, Germany

Steven E. Hyman, MD
 Bethesda, Md

Kenneth S. Kendler, MD
 Richmond, Va

Kenneth K. Kidd, PhD
 New Haven, Conn

Donald F. Klein, MD
 New York, NY

Helena Chmura Kraemer, PhD
 Stanford, Calif

David J. Kupfer, MD
 Pittsburgh, Pa

Herbert Y. Meltzer, MD
 Nashville, Tenn

Grayson S. Norquist, MD
 Bethesda, Md

Charles P. O'Brien, MD, PhD
 Philadelphia, Pa

Michael Posner, PhD
 Ann Arbor, NY

Judith L. Rapoport, MD
 Bethesda, Md

Alan F. Schatzberg, MD
 Stanford, Calif

Goran Sedvall, MD
 Stockholm, Sweden

Gary L. Tischler, MD
 New York, NY

Ming T. Tsuang, MD, PhD
 Boston, Mass

Stanley J. Watson, Jr, PhD, MD
 Ann Arbor, Mich

Myrna M. Weissman, PhD
 New York, NY

Kenneth B. Wells, MD, MPH
 Los Angeles, Calif