

# ARCHIVES

OF  
GENERAL PSYCHIATRY

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 Family Medicine

### 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 27 700 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 \$145 for 1 year (12 issues) in the United States and US possessions; \$195 in the Americas; £125 outside the Americas. The institution rates for 1 year are \$245 in the United States; \$345 in the Americas; £195 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, UK, 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, 500 Fifth Ave, #2210, New York, NY 10110. Phone: (212) 354-0050. Fax: (212) 354-1169. 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, Archives Journals

**Director:** Paula Glitman

**Manager:** Brenda Gregoline

**Freelance Manager:** Diane L. Cannon

**Freelance Coordinators:**

Mark Berthold

Connie Manno

**Electronic Editing Specialist:**

Paul Frank

**Assistant Electronic Editing Specialist:**

Monica Mungle

**Senior Copy Editor:**

Vickey Golden

**Copy Editors:**

Lauren L. Bomberger

Erin M. Giannini

Michelle Kurzynski

**Editorial Assistant:** Wanda Hill

**Scientific Information**

**& Multimedia Group**

**Staff Assistant:** Helga Fritz

**Scientific Online Resources**

**Director:** Margaret Winker, MD

**Electronic Media Department**

**Director:** Marty Suter

**Assistant Editors:**

Neil Shankman

Wendi Williams

**Staff Assistant:** Marla A. Hall

**Production & Distribution Division**

**Manager, Budgets & Costs:**

Bonnie Van Cleven

**Publishing Manufacturing Analyst:**

Diane Darnell

**Office Manager:** Karen Branham

**Production Assistant:** Shannon Epplert

**Advertising & Production**

**Department**

**Director:** Karen Adams-Taylor

**Production Specialist:** Terri Hanley

**Manager, Advertising Services:**

Carole Piszker

**Manager, Production Services:**

Susan Price

**Supervisor, Production Services:**

Debbie Camp

**Production Associates:**

Mary Anne Donley

Sarah Powell

Denise Steinhauser

Jo Anne Turner

**Production Assistants:**

Bryan Irzyk

Amelia Zamudio

**Distribution**

**Distribution Manager:** Paul Gasielki

**Distribution Analyst:**

Michelle Robinson

**Traffic Control Specialist:**

Victoria Buckner

### Specialty Journal Division Office

**Assistant to the Publisher:**

Christine Hearne

**Circulation & Content  
Marketing Division**

**Administrative Assistant:**

Millette Jackson-Bates

**Circulation Processing Department**

**Director:** Robert Herling

**Subscriber Services Manager:**

Susan Stoken

**Circulation Systems Manager:**

Alfred Tomaselli

**Circulation Specialists:**

Reginald Jordan

Kathryn Osten

**Circulation Development**

**Department**

**Director:** Bina Oza

**Circulation Marketing Managers:**

Audrey Mathies

Timothy Ryan

**Circulation Marketing Specialists:**

Sandra Garzon

Michael McGraw

**Licensing & Permissions Department**

**Director:** Norman Frankel

**Permissions:** Rhonda Bailey

**International Coordinator:** Sharon Ali

**Electronic Production Department**

**Manager, Composition & Pagination:**

Phil Arko

**Electronic Production Specialists:**

Brenda Chandler-Grayer

Heather Crego

Karl Elvin

Amy Evers

Mary Ann Kuranda

Sandra Lopez

**Manager, Graphics:** Charl Richey

**Electronic Imaging Specialists:**

Joe Amft

Noel Chaparro

Carolyn Hall

Maria Kowalkowski

Chris Meyer

JoAnne Weiskopf

**Manager, Proofreading:**

Teressa H. Omiotek

**Proofreaders:**

David Antos

Daniel James

Rachel Novickas

Mary Kay Tinerella

Barbara Wojtowicz

**Manager, Database & New Media:**

Mary Ellen Johnston

**Indexer:** Kathy Gaydar

**New Media Specialists:**

Gail Barrett

Joel Brammeier

Regina Brownlee

La'son J. Diggs

Melanie Parenti

Angela Smits

**Production Assistant:** Ruth Sprague



# ARCHIVES

OF

## GENERAL PSYCHIATRY

VOL 56 NO. 12, DECEMBER 1999

### REVIEWERS LIST

**Reviewers for 1999** 1064  
*Jack D. Barchas, MD*

### ORIGINAL ARTICLES

**A 14-Month Randomized Clinical Trial of Treatment Strategies for Attention-Deficit/Hyperactivity Disorder** 1073  
*The MTA Cooperative Group*

**Moderators and Mediators of Treatment Response for Children With Attention-Deficit/Hyperactivity Disorder: The Multimodal Treatment Study of Children With Attention-Deficit/Hyperactivity Disorder** 1088  
*The MTA Cooperative Group*

### COMMENTARY

**Development of Clinical Services for Attention-Deficit/Hyperactivity Disorder** 1097  
*Eric Taylor, MB*

### ORIGINAL ARTICLE

**Attenuation of the Euphoric Effects of Cocaine by the Dopamine D1/D5 Antagonist Ecopipam (SCH 39166)** 1101  
*Myroslava K. Romach, MSc, MD; Paul Glue, MD, PhD; Kyle Kampman, MD; Howard L. Kaplan, PhD; Gail R. Somer, MA; Sabrina Poole; Laura Clarke, RN; Vicki Coffin, PhD; James Cornish, MD; Charles P. O'Brien, MD, PhD; Edward M. Sellers, MD, PhD*

### COMMENTARY

**Cocaine Reward and Dopamine Receptors: Love at First Site** 1107  
*George F. Koob, PhD*

### ORIGINAL ARTICLES

**Stepped Collaborative Care for Primary Care Patients With Persistent Symptoms of Depression: A Randomized Trial** 1109  
*Wayne Katon, MD; Michael Von Korff, ScD; Elizabeth Lin, MD, MPH; Greg Simon, MD, MPH; Ed Walker, MD; Jurgen Unützer, MD, MPH; Terry Bush, PhD; Joan Russo, PhD; Evette Ludman, PhD*

## American Medical Association

Physicians dedicated to the health of America



Copyright 1999 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.

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

**Lynn E. Jensen, PhD**  
Chief Operating Officer

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

**Robert L. Kennett**  
Vice President, Publishing

**Peter L. Payerli**  
Publisher

**Peter G. Messina**  
National Sales Manager

**Geoffrey A. Flick**  
Manager, Marketing Services

**Cheryl Iverson**  
Director, Editorial Processing Division

**Vanessa Hayden**  
Director, Production &  
Distribution Division

**James A. Skowrenski**  
Director, Circulation &  
Content Marketing Division

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


**Functional Imaging of Memory Retrieval in Deficit vs Nondéficit Schizophrenia** 1117  
*Stephan Heckers, MD; Donald Goff, MD; Daniel L. Schacter, PhD; Cary R. Savage, PhD; Alan J. Fischman, MD, PhD; Nathaniel M. Alpert, PhD; Scott L. Rauch, MD*


**Neural Correlates of Eye Tracking Deficits in First-degree Relatives of Schizophrenic Patients: A Positron Emission Tomography Study** 1127  
*Gillian A. O'Driscoll, PhD; Chawki Benkelfat, MD; Patrik S. Florencio, BSc; Anne-Lise V. G. Wolff, BSc; Ridha Joober, MD; Samarthji Lal, MD; Alan C. Evans, PhD*


**Enhancement of Memory in Alzheimer Disease With Insulin and Somatostatin, but Not Glucose** 1135  
*Suzanne Craft, PhD; Sanjay Asthana, MD; John W. Newcomer, MD; Charles W. Wilkinson, PhD; Iris Tio Matos, MD; Laura D. Baker, PhD; Monique Cherrier, PhD; Cassin Lofgreen, RN; Shawn Latendresse; Andreana Petrova; Stephen Plymate, MD; Murray Raskind, MD; Karla Grimwood, MS; Richard C. Veith, MD*


**Smoking and Panic Attacks: An Epidemiologic Investigation** 1141  
*Naomi Breslau, PhD; Donald F. Klein, MD*

**PERSPECTIVES**

 **Editor's Note: Psychiatric Practice in the Millennium** 1151  
*Jack D. Barchas, MD; Peter M. Marzuk, MD*

 **In the Year 2099 . . .** 1151  
*Steven S. Sharfstein, MD*

 **Looking Back: The History of Psychiatry in the 21st Century** 1153  
*Robert Michels, MD*

 **Psychiatry 2099: Commerce Without Conscience = Practice Without Prudence** 1155  
*Gary L. Tischler, MD; Boris M. Astrachan, MD*

**REGULAR DEPARTMENTS**

**This Month in Archives of General Psychiatry** 1070

**Index to Volume 56** 1158

**Classified Advertising** 1173

**Index to Advertisers** 1176

**Instructions for Authors—**  
 See January 1999 issue, page 103, 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

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

**David L. Braff, MD**  
 San Diego, Calif

**William T. Carpenter, Jr, MD**  
 Baltimore, Md

**C. Robert Cloninger, MD**  
 St Louis, Mo

**Joseph T. Coyle, MD**  
 Boston, 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

**Eric J. Nestler, MD, PhD**  
 New Haven, Conn

**Grayson S. Norquist, MD**  
 Bethesda, Md

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

**William Z. Potter, MD, PhD**  
 Indianapolis, Ind

**Judith L. Rapoport, MD**  
 Bethesda, Md

**Alan F. Schatzberg, MD**  
 Stanford, Calif

**Gary L. Tischler, MD**  
 New York, NY

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

**Myrna M. Weissman, PhD**  
 New York, NY

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