

SCIENCE NEWS®

The Weekly Newsmagazine of Science

Science Service Publication
Volume 150, No. 21, November 23, 1996

Thomas Peter Bennett Publisher
Julie Ann Miller Editor
Blair Burns Potter Managing Editor
Dan Skripkar Production/Design Director
David Lindley Associate Editor
Janet Raloff Senior Editor
Environment/Policy
Ivars Peterson Online Editor
Mathematics/Physics
Bruce Bower Behavioral Sciences
Richard Monastersky Internship Coordinator
Earth Science
Kathleen Fackelmann, Steve Sternberg Biomedicine
Ron Cowen Astronomy
Tina Adler Life Sciences
John Travis Biology
Corinna Wu Chemistry/
Materials Science
Dan Vergano Science Writer Intern
Meghan Mitchell Editorial Assistant
Cait Anthony Books/Advertising
Donald R. Harless Vice President/
Business Manager

SCIENCE NEWS (ISSN 0036-8423) is published weekly on Saturday, except the last week in December, for \$49.50 for 1 year or \$88.00 for 2 years (foreign postage \$6.00 additional per year) by Science Service, Inc., 1719 N Street, N.W., Washington, D.C. 20036. Preferred Periodicals postage paid at Washington, D.C., and additional mailing office. POSTMASTER: Send address changes to SCIENCE NEWS, P.O. Box 1925, Marion, Ohio 43305. Change of address: Four to six weeks' notice is required — old and new addresses, including zip codes, must be provided. Copyright © 1996 by Science Service, Inc. Title registered as trademark U.S. and Canadian Patent Offices. Printed in U.S.A. on recycled paper. ♻️ Reproduction of any portion of SCIENCE NEWS without written permission of the publisher is prohibited.

Editorial and Business Offices
1719 N St. N.W., Washington, D.C. 20036
202-785-2255; scinews@scisvc.org

Advertising Representative
Lewis Edge & Associates, Inc.
366 Wall St., Princeton, N.J. 08540, 609-683-7900

Subscription Department
P.O. Box 1925, Marion, Ohio 43305
For new subscriptions only, call 1-800-247-2160.
For customer service, call 1-800-552-4412.

SCIENCE NEWS ONLINE <http://www.sciencenews.org>

This Week

- 324 Butterfly Wings It with a Few Genes
- 324 Probe makes unintended splash
- 325 Rough math: Focusing on rogue waves at sea
- 325 Eyeing fetal cells to reverse blindness
- 326 New view of quasars sheds light on origin
- 326 Language mastery goes native in the brain
- 327 Volcanoes under ice: Recipe for a flood
- 327 Drawing a bead on quantum dot lasers

Research Notes

- 328 Anthropology
- 328 Astronomy
- 335 Biomedicine
- 335 Evolution

Articles

- 330 Is Noise a Neural Necessity?
Cover: Whether or how the brain interprets what the eyes and other sensory systems encounter can be strongly influenced by noise—unrelated stimuli generated inside or outside the body. This realization, brought home by a host of new studies, is spawning some innovative therapies for nerve-related disorders. (Montage: Design Imaging)
- 332 The Gods of Sugarscape

Departments

- 322 Books
- 323 Letters

Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921 to increase the public understanding of science. Through its youth programs, it administers the International Science and Engineering Fair and the Science Talent Search for the Westinghouse science scholarships.

Board of Trustees — *Chairman*, Dudley Herschbach; *Vice Chairman*, Gerald F. Tape; *Secretary*, David A. Goslin; *Treasurer*, Willis Harlow Shapley; Joseph W. Berg Jr.; Robert W. Fri; J. David Hann; Shirley M. Malcom; Eve L. Menger; C. Bradley Moore; Ben Patrusky; H. Guyford Stever; Sanford J. Ungar; Deborah P. Wolfe.

Honorary Trustees — *Chairman Emeritus*, Glenn T. Seaborg; Edward Bliss Jr.; Bowen C. Dees; Elena O. Nightingale; O.W. Riegel; John Troan.



Letters

Connections may decline with age

"Memorable debate: Do old brain cells die?" (SN: 9/7/96, p. 150) prompts me to ask whether anyone has made a study of the connections between the cells. Maybe the same number of cells is there but the connections to them fail.

James F. Jackson
Carlisle, Ind.

The connections, or synapses, between brain cells may indeed change with age, but no conclusive studies have been done. — J. Travis

Send communications to:

Editor, SCIENCE NEWS
1719 N Street, N.W.
Washington, D.C. 20036
or: scinews@scisvc.org
All letters subject to editing.

In search of the elusive coca bean

While I haven't had the pleasure of reading Wade Davis' new book (Books, SN: 9/7/96, p. 155), I know both him and R.E. Schultes, and I knew the late Timothy Plowman. Matter of fact, the U.S. Department of Agriculture supported their research at one time, but that was when they were studying coca, the source of cocaine, not cocoa, the source of chocolate, two of Latin America's major contributions to the world economy.

Jim Duke
Fulton, Md.

Obesity-depression link in Asia?

I'm skeptical of a genetic link between obesity and depression if the only studies were of U.S. women ("Gene pair may incite obesity, depression," SN: 9/21/96, p. 181). Has any comparable work been done in non-Western countries?

My hunch is that we are so "thin conscious" that failure to live up to media stan-

dards creates anxiety and depression. Would the same link appear in, say, India or China—based upon genetics only?

Del Dietrich
Campbell, Calif.

Lost traveller?

How did your piece of Texarkana end up in Argentina west of the Andes, which you say grew up to its east ("The original Arkansas Traveler," SN: 9/21/96, p. 186)?

Phil Payne
Lompoc, Calif.

Actually, we are both wrong about the geography. Argentina is east of the Andes, which grew to its west.

— D. Vergano

CORRECTION

In "Deadly Ebola virus seen to thrive in bats" (SN: 11/9/96, p. 294), Fort Detrick was incorrectly described as being located in Frederickburg, Md. It is in Frederick, Md. — The Editors