

# SCIENCE NEWS®

The Weekly Newsmagazine of Science

A Science Service Publication  
Volume 136, No. 19, November 4, 1989

E. G. Sherburne Jr.	Publisher
Patrick Young	Editor
Laurie Jackson	Managing Editor
Janice Rickerich	Production/Design Director
Bruce Bower	Behavioral Sciences
Ivan Amato	Chemistry/ Materials Science
Richard Monastersky	Earth Sciences
Janet Raloff	Environment/Policy
Kathy A. Fackelmann, Rick Weiss	Life Sciences/ Biomedicine
Ivars Peterson	Mathematics/Physics
Jonathan Eberhart	Space Sciences
Liz Marshall	Editorial Assistant
Diane E. Loupe, Aline McKenzie	Science Writer Interns
Wendy Smith	Books/Resource Manager
Donald R. Harless	Advertising/Business Manager

Copyright © 1989 by Science Service, Inc.,  
Editorial and Business Offices,  
1719 N St., N.W., Washington, D.C. 20036.  
Republication of any portion of SCIENCE NEWS  
without written permission of the publisher is  
prohibited.

Subscription Department  
231 West Center Street, Marion, Ohio 43305

Subscription rate: 1 yr., \$34.50; 2 yrs., \$58.00.  
(Foreign postage \$6.00 additional per year.) Change of  
address: Four to six weeks' notice is required. Please  
state exactly how magazine is to be addressed.  
Include zip code. For new subscriptions only call  
(1) 800-247-2160. Printed in U.S.A. POSTMASTER:  
Send address changes to Science News, 231 West  
Center Street, Marion, OH 43305. Second class  
postage paid at Washington, D.C., and additional  
mailing offices. Title registered as trademark U.S. and  
Canadian Patent Offices. Published every Saturday by  
SCIENCE SERVICE, Inc., 1719 N St., N.W.,  
Washington, D.C. 20036. (202-785-2255)  
ISSN 0036-8423

## Letters

### Sahara's glory days

I read with great interest "Rivers in the Sand" (SN: 8/26/89, p.138). In 1961, after a month of intensive photographic examination and interpretation of geologic features in part of the Kharga depression in the Western Desert, I participated in a working field trip there. This was in the early development stages of the New Valley Project, a program to tap deep aquifers for water to irrigate large areas in the Western Desert.

We camped near Baris, where there was an area formerly occupied by a lake (lying near or across the Sir-B Path depicted on your map). Wind erosion in the lake bed exposed many vertical sections of organic-rich lacustrine deposits, consisting of sand, silt and clay that contained significant amounts of phosphate and calcium eroded from the surrounding formations of Cretaceous and Tertiary age. This approximately 50-kilometer-long lake existed during and after Late Pleistocene ice-age time.

Near the shore of the southern part of this

### This Week

- 292 New Therapies Brighten Stroke Horizon
- 292 Keeping a quantum kettle from boiling
- 293 Marrow rebuilt with umbilical-cord blood
- 293 Panic attacks increase suicide attempts
- 294 Carotenoids: Colorful cancer protection
- 294 The deadly cost of 65 mph
- 294 Pregnancy raises risk of Type II diabetes
- 295 The quick recipe for a soup of black gold
- 295 Nonexistent technology gets a hearing
- 300 Neptune: A new page in the book of worlds

### Research Notes

- 302 Behavior
- 302 Science & Society

### Articles

#### 297 Transplanting the Light Fantastic

Cover: Hidden in this hodgepodge of stained cells rests hope of restored vision for some individuals with degenerating retinas. This cross section of a mouse retina shows, to the right of the arrow, a missing layer of light-sensitive cells. Without these cells, the mouse is blind. To the left of the arrow lies a healthy population of these critical cells, alive and functioning four weeks after being transplanted from a donor mouse. Recent successes with retinal cell transplants in animals hint that some human retinal diseases, such as retinitis pigmentosa, may not remain incurable. (Photo: Martin S. Silverman)



- 298 AIDS Predictors
- 301 Phobos: Moonlet of the Pits

### Departments

- 290 Books
- 291 Letters

Science Service Institution for the public understanding of science founded 1921; a nonprofit corporation.  
Board of Trustees — *Chairman*, Glenn T. Seaborg; *Vice Chairman*, Gerald F. Tape; *Treasurer*, Willis Harlow Shapley; *Joseph W. Berg Jr.*; *Edward Bliss Jr.*; *Robert W. Fri*; *David A. Goslin*; *J. David Hann*; *Milton Harris*; *Leon M. Lederman*; *Elena O. Nightingale*; *Ben Patrusky*; *H. Guyford Stever*; *Deborah P. Wolfe*.  
Honorary Trustees — *Bowen C. Dees*; *O. W. Riegel*; *John Troan*.  
President: E. G. Sherburne Jr.; Business Manager: Donald R. Harless.

lake were the remnants of a settlement. Beautifully carved and crafted Nubian sandstone blocks constituted the older buildings of Egyptian architecture, augmented by later Greek and Roman structures. What really fascinated me were the remains of a quarry-stone pier jutting from the hillside, below the town, out onto the dry lake bed. I imagined the boat and barge traffic plying the waters of this probably vegetation-bordered lake thousands of years ago and visualized the stark contrast with the present desert.

Jim Minard  
Everett, Wash.

### Tricking the AIDS virus

"Teaching Antibodies New Tricks" (SN: 9/2/89, p.152) suggests two ways of attacking the AIDS problem. One method would involve the synthesis of monoclonal antibodies enzymatically capable of degrading the gp120 glycoprotein in various ways, thus blocking the virus from docking on receptor-containing cells. Monoclonal enzymatic antibodies would be administered as a treatment for individuals who already have AIDS.

A second approach might be to administer, as a vaccine, actual transition-state analogs used to successfully create the monoclonal antibodies used in the above-stated treatment. Vaccinated individuals would make their own antibodies that would degrade gp120, thus preventing any infectious viruses from docking.

Robert P. Zimmerer, Professor of Biology  
Elizabeth Wade, student  
Juniata College  
Huntingdon, Pa.

### Lefty lineage

Researchers might be interested to hear that I'm the first lefty in my family ("Lefties and Longevity: Look Again," SN: 9/16/89, p.18). I married a right-hander, and our children are all right-handers. However, all the grandchildren are left-handed. A left-handed granddaughter married a left-hander, and all their children are right-handers.

As for longevity, I'm 86 and still in excellent health, but then I don't play baseball.

Muffie Stevenson  
Miami, Fla.

NOVEMBER 4, 1989

291