

# SCIENCE NEWS®

The Weekly Newsmagazine of Science

A Science Service Publication  
Volume 135, No. 20, May 20, 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, Ingrid Wickelgren	Life Sciences/ Biomedicine
Ivars Peterson	Mathematics/Physics
Jonathan Eberhart	Space Sciences
Liz Marshall	Editorial Assistant
Faye Flam	Science Writer Intern
Wendy McCarren	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

### Musings on Biomuse

"Muscle Melodies and Brain Refrains" (SN: 4/1/89, p.202) intrigues me as a physician.

I foresee the possibility of many future applications for the Biomuse system in that someday the bioelectric signals of the brain may help us understand various psychiatric problems, mood swings and probably brain-dysfunction disorders as well. It may even be able to help us understand whether a patient is telling the truth.

Optimistic people always seem to have music in their hearts, whereas those who are more pessimistic seem to be relatively silent. Maybe it's all in their heads after all!

Lloyd W. Morey  
Wauwatosa, Wis.

**Biomuse seems to open a new method of control.** Is it possible this will provide a way for a person to remain in a safe place while

### This Week

- 308 Vitamins C and E May Prevent Cataracts
- 308 Beetlejuice genes now in biotechnicolor
- 309 Lithium dissolves as alcoholism treatment
- 309 Rise of Tibet and Rockies set ice-age stage
- 310 Cyclosporin therapy heals colon ulcers
- 310 Brighter than the lights of big cities
- 310 'Magic angle' reveals zeolite reactions
- 311 Cold fusion: Searching for hidden helium
- 311 Acid rain: Lowdown on health of lakes
- 311 EPA plans daminozide ban

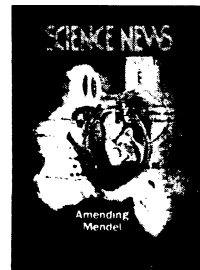
### Research Notes

- 318 Behavior
- 318 Biology
- 319 Earth Sciences
- 319 Space Sciences

### Articles

- 312 A Genetic Gender Gap

Cover: Molecular biology has revolutionized the study of genetics, but for the most part it has added new details rather than turning old thinking on its head. Among the more surprising findings to come from molecular studies in the past five years are those pointing to major differences between the mother's and father's genetic contributions to offspring. Contrary to a century of scientific thought, researchers find that male-derived and female-derived genes are not always created equal. (Illustration by Randy Fletcher)



### Departments

- 306 Books
- 307 Letters

**Science Service** Institution for the public understanding of science founded 1921; a nonprofit corporation.  
Board of Trustees — *President*, Glenn T. Seaborg; *Vice President*, 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.

Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver; Business Manager: Donald R. Harless.

controlling a machine in a hazardous area, such as high radiation or explosive gases? After biosignals have been digitized, it seems they could be sent to distant places — such as the moon or outer space.

James F. Jackson  
Carlisle, Ind.

### Clouding up the issue

When I first studied meteorology in 1942, the clouds described in "Methane Clouding up the Twilight" (SN: 4/22/89, p.255) were called "noctilucent clouds." I notice that your article calls them "noctiluculent clouds." When was the name changed, and why? "Noctilucent" means "shining at night," which is certainly descriptive of these extremely high clouds.

Harold S. Lippmann  
Rockville, Md.

The "name change" was ours — a spelling mistake. *Noctilucent* remains the correct term.

— R. Monastersky

### Pollen 'acrobatics'

"Pollen provides ancient weather report" (SN: 4/8/89, p.220) makes clear our approach, which effectively provides the means of continental climate reconstructions as a complement to oceanic temperature reconstructions from deep-sea records. However, the palynologist's comment about the complexity of our method does not seem acceptable to us.

Our approach is quite simple in its principle: finding and utilizing modern analogs for fossil pollen spectra. If it seems complex, it is precisely for the same reasons that make it valuable: minimization of ecological noises (human action, vegetal dynamics and migration), estimates of the confidence degree of each result and, lastly, validation process.

All the programs involved are at the disposal of whoever may ask for them, and our study may seem "acrobatics" only to naturalists easily intimidated by mathematical

Letters continued on p.317

MAY 20, 1989

307