

SCIENCE NEWS®

The Weekly Newsmagazine of Science

A Science Service Publication
Volume 132, No. 23, December 5, 1987

E. G. Sherburne Jr.	Publisher	
Joel Greenberg	Editor	
Dietrick E. Thomsen	Senior Editor/ Physical Sciences	
Laurie Jackson	Managing Editor	
Wendy McCarren	Production/Design Director	
Bruce Bower	Behavioral Sciences	
Richard Monastersky	Earth Sciences	
Stefi Weisburd	General Science	
Diane D. Edwards,	Life Sciences/ Rick Weiss	Biomedicine
Janet Raloff,	Policy/Technology	
Ivars Peterson		
Jonathan Eberhart	Space Sciences	
Janice Rickerich	Assistant to the Editor	
Steve Eisenberg	Science Writer Intern	
Jane M. Livermore	Books	
Donald R. Harless	Advertising/Business Manager	

Copyright © 1987 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. 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

Why immunosuppression?

"Interleukin-1's secret message to ACTH"
(SN: 10/31/87, p.277) is nicely concluded with
an interesting point quoted from Robert
Sapolsky: "Why, during stress, should you
want to suppress the immune system?"

A teleological or anthropomorphic inquiry
into this question would tend to result in
confusion. It appears the interleukin-1 may be
involved in a gross feedback or regulatory
system with ACTH. As interleukin-1 initiates a
healing response it possibly stimulates a
suppressive system — stress? Excess phys-
iological or psychological stress would en-
courage an imbalance in the regulatory sys-
tem. As follows, the imbalance would result in
mild to severe immunosuppression.

To address the ultimate interpretation of
the "why" question, immunosuppression
from injury stress may have evolutionary
significance: Who wants a rapid and painful

This Week

- 356 Signs of a New High in Ceramic Superconductivity
- 356 Herpes latency makes 'anti-sense'
- 357 Leukemic cells rehabilitated in rats
- 357 Second AIDS vaccine approved for testing
- 357 Keeping topsoil down on the farm
- 358 Tense moments between two quakes
- 358 Hamster jet lag: Running it off
- 359 High-powered discussions on high-temperature superconductivity
- 359 An antidrug malaria pump?

Research Notes

- 360 Biomedicine
- 361 Astronomy
- 361 Technology

Articles

362 The Plankton-Climate Connection

Cover: Scanning electron micrograph (inset) shows three individual coccolithophorids, one-celled plankton that measure about 6 microns in diameter. Scientists are discovering that these and other plankton species produce a chemical that can influence the reflectivity of clouds covering the world's oceans. As a result, these tiny spheres are helping to set the climate of the entire earth. (Image: NASA; Inset: Greta A. Fryxell/University of Oslo)



Departments

- 355 Letters
- 366 Books

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; *Secretary*, Hilleary F. Hoskinson; Joseph W. Berg Jr.; Edward Bliss Jr.; Bowen C. Dees; David A. Goslin; J. David Hann; Milton Harris; Elena O. Nightingale; O.W. Riegel; H. Guyford Stever; John Troan; Deborah P. Wolfe.

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

immune response during escape from what-
ever may be causing an injury (e.g. during
battle)?

Brian R. Shmaefsky
Instructor, Dept. of Biological Science
Southern Illinois University at Edwardsville
Edwardsville, Ind.

Stereotyped scientists

The distortion of the nature of psychiatry
in movies, described in "Reel Psychiatry"
(SN: 9/19/87, p.188), is part of the widespread
misrepresentation of all branches of science
by popular entertainment. The other sci-
ences also appear to be seen through lenses
of distrust and misunderstanding.

I suspect one could find superficial types of
physical scientists in the movies, like
Schneider's three types of psychiatrists. One
that comes to mind is the supposed scientist
who, working alone and rather casually, sud-
denly makes a wonderful discovery. The
origin of this type is unknown to me, but it
seems to have become, unfortunately, almost

a stereotype of modern culture. A classic
example is Fred MacMurray in Disney's "The
Absent-Minded Professor"; a contemporary
one is the astronomer in "Roxanne" who
discovers a comet between visits to bars and
flirtations. I dub this type the "serendipitous
loner." These are amiable characters for a
movie, but a less appropriate picture of mod-
ern science could scarcely be devised.

There is no immediate harm in these
characterizations — though, like Schneider
and his colleagues, one wonders why the
public should wish it so. However, the way
science plays its role in society, as understood
by the public, is seriously corrupted by these
images, since the public seems to derive
much of its information about society from
films and TV. It would be well if science could
devote some resources to giving a true pic-
ture of science to the general public. In the
long run it would return dividends in the form
of better new scientists and a more stable and
supporting society.

Stuart Wier
Boulder, Colo.

DECEMBER 5, 1987

355