

THIS WEEK

Who'll visit Halley?	228
Superluminal expansion evidence	229
Spermicides linked to birth defects	229
Drug vs. second heart attacks	230
Mental patients' rights	230
Definitive mouse cloning	230
Recombinant hepatitis diagnosis	230
Myopia: Making fine print	230
Cotton dust tales	231
Two heads are deadlier than one	231
Iron inadequacy a matter of form	231

RESEARCH NOTES

Chemistry	232
Behavior	236
Biomedicine	236

ARTICLES

A new tube in the lab	234
Ballooning for fun and science	237

DEPARTMENTS

Letters	227
Books	239

COVER: Scientists have been doing for years what sports balloonists have only attempted — sending a balloon around the world. Recent developments in research ballooning may translate into success for aeronauts. See p. 237.

Publisher	E. G. Sherburne Jr.
Editor	Robert J. Trotter
Senior Editor and Physical Sciences	Dietrick E. Thomsen
Behavioral Sciences	Joel Greenberg
Biomedicine	Joan Arehart-Treichel
Chemistry	Linda Garmon
Earth Sciences	Susan West
Life Sciences	Julie Ann Miller
Policy/Technology	Janet Raloff
Space Sciences	Jonathan Eberhart
Contributing Editors	Lynn Arthur Steen (mathematics) Kendrick Frazier John H. Douglas Michael A. Guillen
Science Writer Intern	Bruce Bower
Assistant Editor	Judy Klein
Art Director	Dale Appleman
Assistant to the Editor	Betsy Gordon
Books	Jane M. Livermore
Business Manager	Donald Harless
Advertising	Scherago Associates 1515 Broadway New York, N.Y. 10036 Fred W. Dieffenbach, Sales Director

Copyright © 1981 by Science Service, Inc., 1719 N St., N.W., Washington, D.C. 20036. Reproduction of any portion of SCIENCE NEWS without written permission of the publisher is prohibited.

Editorial and Business Offices
1719 N Street, N.W.
Washington, D.C. 20036

Subscription Department
231 West Center Street, Marion, Ohio 43302

Subscription rate: 1 yr., \$19.50; 2 yrs., \$34.00; 3 yrs., \$47.50 (Add \$3 a year for Canada and Mexico, \$4 for all other countries.) 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. 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

Carcinogen with cream?

The reservations re coffee-drinking and pancreatic cancer (SN: 3/21/81, p. 181) are well justified. The Harvard researchers were reported in newspaper accounts projecting their next study on comparison of those who take coffee black and those who add milk and/or sugar. This means they failed to make this distinction in the initial study, which vitiates their confidently stated findings. They seem not to have sufficiently distinguished contaminants — whether in coffee bean storage, or in removal of caffeine or in added milk — from constituents of coffee per se. Nor do they seem to have ascertained whether coffee is the weak watery type or full-bodied or espresso. A proper question would be: Do you find black coffee upsetting and so add milk and sugar? They might well take season and humidity into account, since coffee drinking in a place of almost zero humidity (e.g. American desert) will likely affect one differently than in the usual N. American climate, or in places of high humidity where tea is usually preferred.

The comparison to alcohol, tea, etc. was proper, but does not exhaust the possibilities. For the next study of pancreatic cancer — presuming grants are still forthcoming — why not compare the coffee drinkers with those who do or do not take foods with calcium propionate added to retard spoilage.

Alex Wayman
New York, N.Y.

Ames test equivalent

The initiation of exchange of information dealing with effects of environmental agents on behavior is timely (SN: 1/17/81, p. 42). It was interesting to note that the Director of the Center for Science in the Public Interest also recognizes the need for an Ames test equivalent which would quickly and inexpensively detect neurotoxins.

We submitted a research proposal in 1979 which is directed toward the development of just such a test. The proposal was resubmitted in 1980 and approved for funding by the Office of Research and Development, Environmental Protection Agency. The basic element of the proposal involves determining the effects of known and suspected neurotoxins on phosphorylation of synaptosomal membrane proteins and concurrent behavioral changes. We propose to extend the test to formed elements of blood since in many cases the biochemical mechanisms of cells are similar even though they exist in tissues of quite different functions. The methods and equipment used are readily available in most hospitals and research facilities.

Joseph Ellis Suggs
Chapel Hill, N.C.

Space politics

I enjoyed Jonathan Eberhart's overview of the space shuttle (SN: 3/21/81, p.186). Although I hope that the shuttle will make space flights routine, I can't agree that they will ever become boring.

But Mr. Eberhart and the space community as well seem to be operating on the assumption that once the shuttle's flight capabilities are actually demonstrated, there will be an automatic resurgence in the U.S. space program. This assumption is based on a kind of selective perception: There will surely be a huge groundswell of public interest in space once again, but the hard reality of a continually restricted budget will be the true determinant of the space program's future course.

The Reagan administration's proposed cuts in NASA's budget total over \$600 million. While these cuts have not affected the shuttle itself, they have completely halted any new programs that could capitalize on the shuttle's capability to provide routine access to space.

It is time the space community realized that the name of the game is politics: The space program was born of politics, has declined through politics, and will revive only when the space community gets directly involved in politics.

Fortunately, there is an organization whose aim is to do just that. The Campaign For Space Political Action Committee was founded in the spring of 1980 to work for an expanded U.S. space program by getting directly involved in the election of pro-space candidates. The Campaign is gearing up now to establish the first pro-space lobbyist in Washington (two full-time lobbyists are currently working against Solar Power Satellite legislation). But to accomplish this goal, the CFS must build a broad base of citizen support. Interested readers are urged to write:

The Campaign for Space
Political Action Committee
P. O. Box 1526
Bainbridge, Ga. 31717

Thomas J. Frieling
Bainbridge, Ga.

Correct PVC

I think the article "Plastic fire drills" (SN: 3/7/81, p.152) is excellent, and I was quoted properly. One point was a mistake. It is stated that "PVC-CN is the polyvinylchloride material used in wallpaper and to coat electric cables." While it is correct that PVC is used this way (and in many others), PVC-CN formulation is not on the market — it is an experimental material which was formulated for me by Dr. O'Mara of B. F. Goodrich. The polyvinylchloride used in commercial application is probably closer to PVC-A or PVC, both shown on the graph, than to PVC-CN.

Yves Alarie, Ph.D.
Pittsburgh, Pa.

SCIENCE SERVICE

Institution for the public understanding of science founded 1921; a nonprofit corporation.

Board of Trustees — *President*, Glenn T. Seaborg, University of California, Berkeley, CA; *Vice President*, Gerald F. Tape, Associated Universities, Washington, DC; *Treasurer*, Milton Harris, Washington, DC; *Secretary*, Julius Duscha, Washington Journalism Center, Washington, DC; *Allen V. Astin*, Bethesda, MD; *Joseph W. Berg Jr.*, National Research Council, Washington, DC; *Edward Bliss Jr.*, Newburyport, MA; *Bowen C. Dees*, The Franklin Institute, Philadelphia, PA; *David A. Goslin*, National Research Council, Washington, DC; *Elizabeth Neufeld*, National Institutes of Health, Bethesda, MD; *O. W. Riegel*, Glasgow, VA; *Edward W. Scripps II*, Edward W. Scripps Trust, Carson City, NV; *John Troan*, Pittsburgh Press, Pittsburgh, PA; *Deborah P. Wolfe*, Queens College of City University of New York, Flushing, L.I., NY

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