

#### The Weekly Newsmagazine of Science

Science Service Publication Volume 147, No. 2, January 14, 1995

Alfred Scott McLaren Patrick Young Blair Burns Potter

Publisher Editor Managing Editor

Dan Skripkar Production/Design Director Greg W. Pearson Janet Raloff

Associate Editor Senior Editor Environment/Policy Astronomy

Ron Cowen **Bruce Bower** Behavioral Sciences Richard Lipkin Richard Monastersky

Chemistry/ Materials Science Earth Sciences General Science Kathy A. Fackelmann, Elizabeth Pennisi Life Sciences/ Biomedicine Mathematics/Physics Editorial Assistant

Adrienne C. Brooks Cait Anthony Donald R. Harless

Tina Adler

Ivars Peterson

Larry Norland

Science Writer Intern Books/Resource Manager Advertising/Business Manager

SCIENCE NEWS (ISSN 0036-8423) is published SCIENCE NEWS (ISSN 0036-8423) is published weekly on Saturday, except the last week in December, for \$44.50 for 1 year or \$78.00 for 2 years (foreign postage \$6.00 additional per year) by Science Service, Inc., 1719 N Street, N.W., Washington, D.C. 20036. Second-class 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 © 1995 by Science Service, Inc. Title registered as trademark U.S. and Canadian Patent Offices. Printed in U.S.A. on recycled paper.

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:

P.O. Box 1925, Marion, Ohio 43305 For new subscriptions only, call 1-800-247-2160. For customer service, call 1-800-347-6969.

#### This Week

20 Republicans Talk Tough on Science

Keck goes the distance for faraway galaxy 20 21 Chaotic chaos in linked electrical circuits

21 HIV toll: Over a billion white cells a day

22 Grief sometimes heads down a grievous path

22 HIV's infectious nature

23 A new catalyst yields a rubbery plastic 23 Lead may foster immune attack on brain

# **Research Notes**

26 Health Physics

28 Biology

Biomedicine 28

#### **Articles**

Launches and Liftoffs in '95 24

> Cover: Many of the 18 space science missions scheduled for launch this ye Cover: Marry or the To space science missions scheduled for lather this year will focus on Earth and its interaction with the sun. These missions include the Solar and Heliospheric Observatory (lower left), which will examine how the sun transports energy from its turbulent interior to its outer atmosphere. Cluster, a group of four identical spacecraft, will study the ionized gas in Earth's magnetosphere. (Artist's rendering: European Space Agency)

30 Quantum Bits

#### **Departments**

19 Letters 27 **Books** 



Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Programs it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the *Directory of Student Science Training Programs for Precollege Students*.

Board of Trustees — Chairman, Glenn T. Seaborg; Vice Chairman, Gerald F. Tape; Secretary, David A. Goslin; Treasurer, Willis Harlow Shapley; Joseph W. Berg Jr.; Robert W. Fri; J. David Hann; Dudley Herschbach; Shirley M. Malcom; Elena O. Nightingale; Ben Patrusky; Peter H. Raver; H. Guyford Stever; Sanford J. Ungar; Deborah P. Wolfe. Honorary Trustees — Edward Bliss Jr.; Bowen C. Dees; O.W. Riegel; John Troan.

President: Alfred Scott McLaren; Vice President and Business Manager: Donald R. Harless.

# Letters

## Protist finding downplayed

The "revelation" that myxozoa are perhaps more closely related to metozoa than it was assumed is not startling to protistologists or protozoologists ("Protist joins metazoan family tree," SN: 10/1/94, p.220).

Most biologists for the past 100 years have been aware that there is no clear dividing line between protists, mesozoa, or metozoa other than an arbitrary one, for convenience

DNA and RNA comparisons will no doubt reveal more "startling" relationships in the near future.

Eugene C. Bovee Professor Emeritus of Physiology and Cell Biology University of Kansas Lawrence, Kan.

# Girls, boys use different 'fuel'

Of six evaluative attitude scores, seventhgrade boys' Theoretical ones (indicating an

orientation toward theorizing and scientific investigation) showed the highest correlation with their scores on eight aptitude and achievement tests ("Images of Intellect," SN: 10/8/94, p.236). Conversely, the girls' Aesthetic scores (orientation toward form, harmony, and beauty) correlated best with their performance on the eight tests.

The gender difference was rather large. Apparently, seeking to discover "truth" "fueled the mental engine" of those bright boys, whereas aesthetic orientation fueled that of those bright girls.

Julian C. Stanley Professor of Psychology Johns Hopkins University Baltimore, Md.

### Radium research update

Your recent article "Reassessing Radium's Risks" (SN: 9/10/94, p.172) notes my role at the time of publication as science adviser to a private endeavor attempting to register names of individuals who received nasopha-

ryngeal (nasal) radium exposure. Since then, I have terminated my association with that group and have begun work on a proposal with a major New England-based medical treatment and research center to establish a center for the investigation of possible health effects of radium irradiation on veterans and members of the public.

Anyone wishing to be notified of developments in this area or to register as having received radium nasal irradiation, either as a member of the general public (for general hearing or otitis media-related problems) or as a Navy or Army Air Forces veteran (for problems with pressure equalization), should call me at (401)727-4947.

Stewart Farber Pawtucket, R.I.

Address communications to: Editor, SCIENCE NEWS 1719 Ń Street, N.W. Washington, D.C. 20036 All letters subject to editing.

**JANUARY 14, 1995** 19