

The Weekly Newsmagazine of Science

A Science Service Publication Volume 139, No. 17, April 27, 1991

E.G. Sherburne Jr. Patrick Young Laurie Jackson Janice Rickerich

Publisher Editor Managing Editor Production/Design Director

Senior Editor Environment/Policy Janet Raloff **Bruce Bower Behavioral Sciences** Elizabeth Pennisi Chemistry/ Materials Science

Earth Sciences Richard Monastersky Ron Cowen General Science Carol Ezzell Life Sciences/ Kathy A. Fackelmann Biomedicine Ivars Peterson Mathematics/Physics Jonathan Eberhart Space Sciences Larry Norland **Editorial Assistant** Wendy Gibbons, Tim Walker Science Writer Interns

Liz Marshall Books/Resource Manager Donald R. Harless Advertising/Business

SCIENCE NEWS (ISSN 0036-8423) is published SCIENCE NEWS (ISSN 0036-8423) is published weekly on Saturday, except the last week in December, for \$34.50 for 1 year or \$58.00 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, 231 West Center Street, Marion, OH 43305. Change of address: Four to six weeks' notice is required — old and new addresses, including zip codes, must be provided.

Copyright © 1991 by Science Service, Inc. Title registered as trademark U.S. and Canadian Patent Offices. Printed in U.S.A.

Editorial and Business Offices: 1719 N St., N.W., Washington, D.C. 20036 (202-785-2255) Republication of any portion of Science News without written permission of the publisher is prohibited.

Subscription Department: 231 West Center St., Marion, OH 43305 For new subscriptions only, call 1-800-247-2160.

This Week

260 New Evidence of a Heavy Neutrino 260 A little less fat won't cut cancer risk 261 Researchers examine Astro's universe 261 Prostate screen: Blood test rates best Vision system puts eyesight in blind spots 262 262 Steroid slackens pace of muscular dystrophy 263 Fracture formula yields volcanic forecasts Quirk in antibody action yields cheap assay 263 263 Colds may thwart vaccines

Research Notes

268 Biomedicine 270 Chemistry 271 Biology 271 Genetics

Articles

264 From Tarweed to Silversword

Cover: Argyroxiphium sandwicense macrocephalum, a Hawaiian silversword that lives on the slopes of Maui's Haleakala volcano, flowers only once and then dies. Evolutionary biologists have traced Hawaii's silverswords to a California ancestor — a finding that challenges scientists' assumptions about the origins of plants on islands and continents around the world. (Photo: Gerald D. Carr/University of Hawaii)

266 Married to Antarctica

Departments

258 Books 259 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.; Robert W. Fri; David A. Goslin; J. David Hann; Milton Harris; Leon M. Lederman; Shirley M. Malcom; Elena O. Nightingale; Ben Patrusky; H. Guyford Stever; Sanford J. Ungar; Deborah P.

Honorary Trustees - Edward Bliss Jr.; Bowen C. Dees; O.W. Riegel; John Troan.

President: E. G. Sherburne Jr.; Business Manager: Donald R. Harless

Letters

Misleading wording?

In "A radical mechanism for methane buildup" (SN: 2/23/91, p.116), you state that Jim Kao and Xuexi Tie "announced their finding in a press release," an unfortunate wording that could mislead your readers about the scientists' actions and intentions.

The Los Alamos National Laboratory researchers announced their finding in December at the Symposium on Global Tracer Transport Models, sponsored by the United Nations World Meteorological Organization. In February, the public information office at Los Alamos issued a press release to call attention to the public presentation of a significant research result.

It is common practice to use the presentation of new findings at a scientific conference as the "peg" on which to hang a story. Your writer's choice to play up the press release and to include other researchers' comments that the Los Alamos work has not yet appeared in a peer-reviewed journal, if applied uniformly to all Science News articles, could discount much of the research you report.

John R. Gustafson Senior Public Information Specialist Los Alamos National Laboratory Los Alamos, N.M.

It's common practice at SCIENCE NEWS to describe reactions of outside experts to new research findings, whether or not the findings have appeared in a peer-reviewed journal. In this case, several atmospheric scientists specifically cited the public announcement of Kao and Tie's unusual results before rigorous peer review as one of several reasons for their skepticism. In the preceding paragraph, the article clearly states that the Los Alamos researchers first discussed their findings at a climate symposium in Decem-- the editors

Rosy request carries thorns

The only way "scientists can bask in the President's rosy-hued funding requests" ("President's budget: Rosy outlook for R&D," SN: 2/9/91, p.87) is if we put on rose-colored

While the proposed budget offers some

long-overdue increases to a few programs, most scientists have little to celebrate when the largest slice of the R&D pie-53 percent-is devoted to military research projects. In comparison, NIH and NSF funds, which are the cornerstone of U.S. basic research, make up only 8.8 percent of the budget. This R&D budget continues the policies of the past decade by favoring military hardware over medical research, development of alternative energy sources or environmental protection.

Scientists should also look at the President's proposed cuts in education funding if they wish to gauge the impact of the '92 budget on science overall. A 30 percent cut in Guaranteed Student Loans, a 36 percent cut in College Work Study and cuts in numerous granting programs (the overall real decrease in education dollars is 18 percent) do not bode well for the next generation of U.S. researchers

A budget that gives defense R&D twice the dollar increase it gives to civilian R&D is not rosy, it's rotten.

> Margaret Shield Graduate Student, Biochemistry University of Washington Seattle, Wash.

APRIL 27, 1991 259