

The Weekly Newsmagazine of Science

Science Service Publication Volume 148, No. 5, July 29, 1995

Alfred Scott McLaren Blair Burns Potter Dan Skripkar Publisher
Interim Editor
Production/Design
Director
Associate Editor

David Lindley Janet Raloff

Ron Cowen

Associate Editor Senior Editor Environment/Policy Astronomy

Bruce Bower Richard Lipkin Richard Monastersky Behavioral Sciences Chemistry/ Materials Science Earth Sciences Biology Biomedicine

John Travis Kathleen Fackelmann, Lisa Seachrist Tina Adler

Life Sciences
Mathematics/Physics
Editorial Assistant
Science Writer Intern

Cait Anthony Donald R. Harless

Ivars Peterson Damaris Christensen

Corinna Wu

Books/Resource Manager Advertising/Business Manager

SCIENCE NEWS (ISSN 0036-8423) is published weekly on Saturday, except the last week in December, for \$49.50 for 1 year or \$88.00 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. Pepublication of any portion of Science News without written permission of the publisher is prohibited.

Editorial and Business Offices: 1719 N St. N.W., Washington, D.C. 20036 (202-785-2255)

Advertising Representative: Lewis Edge & Associates, Inc. 366 Wall St., Princeton, N.J. 08540 (609-683-7900)

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**

68 Mouse Obesity Cured by Hormone 68 Probing the interior of a coarsening foam 69 Structure of protein-enzyme complex found 69 Hubble sheds light on galaxy formation 70 Ice age sent shivers through the tropics 70 Do proteins in cells make computations? 71 Hominid bones show strides toward walking 71 Immune factor inhibits the spread of HIV

#### **Research Notes**

75 Technology79 Astronomy79 Behavior

#### **Articles**

72 Tapping Government Know-How

Cover: Fireworks over the Magic Kingdom at the Walt Disney World Resort in Lake Buena Vista, Fla. When this subsidiary of the Walt Disney Co. needed to improve its fireworks igniters, it turned to Department of Energy scientists, joining a growing number of companies forming partnerships with federal laboratories. (Photo: Walt Disney Co.)

76 Getting the Blues

## **Departments**

66 Books 67 Letters



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

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

# Letters

### Languishing languages

I was disappointed by the tone and attitude of the reader responses to your article on endangered languages (SN: 5/6/95, p.275).

The preservation of an endangered language is often central to the preservation of a minority group's culture. Ultimately, it is the decisions of that group that determine the survival of the language, but linguists can be of help by bringing knowledge and technology to the preservation effort. Once vanished, however, a language is exceedingly difficult to revive, even if there are written or video records of it.

It is doubtful that linguistic differences are at the root of most conflicts in the world. Both Bosnia and Rwanda are staunchly monolingual societies.

Anthony R. Davis Menlo Park. Calif.

## Latex gloves source of allergen?

According to "Latex allergies from right out of thin air?" (SN: 4/22/95, p.244), a number of allergists contend that airborne latex particles are responsible for the alarming increase in serious allergic reactions, some of them fatal. A more likely source is the conscientious dentist.

The mucous membranes of the mouth are permeable to many chemicals. The rapid relief from angina provided by sublingual nitroglycerin tablets and the equally rapid nicotine surge from smokeless tobacco are clear indicators of oral membrane permeability.

Prior to the late 1980s, very few dentists routinely used gloves; today, latex gloves are used for even the most mundane procedures. This means that virtually every potentially allergic person in our society over the age of 3 has been sensitized by a topical application of latex allergen. Moreover, this

sensitization is exacerbated at 6-month checkup intervals.

Some of us in dentistry have watched these changes with dismay. The surgical soaps, disposables, autoclaves, and chemical disinfectants, in conjunction with common sense that we used in the 1970s and 1980s worked very well. Furthermore, there is no scientific evidence that latex gloves provide an added benefit for either the dentist or the patient. Yet we are experiencing an alarming increase in allergic reactions, both in the general population and in dental health workers.

Because of pervasive attitudes and fears, no one can advocate a return to gloveless dentistry. But in the future, before we decide to "fix" something as basic as the delivery of dental services, maybe we should be first required to show that it's really broken.

Stephen D. Carter Stone Mountain, Ga.

JULY 29, 1995

SCIENCE NEWS, VOL.148

67