

SCIENCE

Published by the **American Association for the Advancement of Science (AAAS)**, *Science* serves its readers as a forum for the presentation and discussion of important issues related to the advancement of science, including the presentation of minority or conflicting points of view, rather than by publishing only material on which a consensus has been reached. Accordingly, all articles published in *Science*—including editorials, news and comment, and book reviews—are signed and reflect the individual views of the authors and not official points of view adopted by the AAAS or the institutions with which the authors are affiliated.

The American Association for the Advancement of Science was founded in 1848 and incorporated in 1874. Its objectives are to further the work of scientists, to facilitate cooperation among them, to foster scientific freedom and responsibility, to improve the effectiveness of science in the promotion of human welfare, to advance education in science, and to increase public understanding and appreciation of the importance and promise of the methods of science in human progress.

Membership/Circulation

Director: Michael Spinella

Deputy Director: Marlene Zendell

Member Services: Rebecca Dickerson, *Manager*; Mary Curry, *Supervisor*; Pat Butler, Helen Williams, Laurie Baker, *Representatives*

Promotions: Dee Valencia, *Manager*; Hilary Baar, Angela Mumeke, *Coordinators*

Research: Kathleen Markey, *Manager*; Robert Smariga, *Assistant*

Financial Analyst: Jacquelyn Roberts

Administrative Assistant: Nina Araujo de Kobes

Science Member Services

Marion, Ohio: 800-347-6969;

Washington, DC: 202-326-6417

Other AAAS Programs: 202-326-6400

Advertising and Finance

Associate Publisher: Beth Rosner

Advertising Sales Manager: Susan A. Meredith

Recruitment Advertising Manager: Janis Crowley

Advertising Business Manager: Deborah Rivera-Wienhold

Traffic Manager: Tina Turano

Recruitment: Michele Pearl, *Operations Manager*; Dan

Moran, *Traffic Manager*; Debbie Cummings, Celeste

Wakefield, Angela Wheeler, *Sales*

Marketing Associate: Allison Pritchard

Reprints Manager: Corrine Harris

Permissions Manager: Arlene Ennis

Sales Associate: Carol Maddox

ADVERTISING SALES: East Coast/E. Canada: Richard

Teeling, 201-904-9774, FAX 201-904-9701 • **Southeast:**

Mark Anderson, 305-856-8567, FAX 305-856-1056 •

Midwest: Donald Holbrook, 708-516-8882, FAX 708-516-

8883 • **West Coast/W. Canada:** Neil Boylan, 415-673-

9265, FAX 415-673-9267 • **UK, Scandinavia, France,**

Italy, Belgium, the Netherlands: Andrew Davies, (44)

457-838-519, FAX (44) 457-838-898 • **Germany/**

Switzerland/Austria: Tracey Peers, (44) 270-760-108,

FAX (44) 270-759-597 • **Japan:** Mashy Yoshikawa, (3)

3235-5961, FAX (3) 3235-5852

Recruitment: 202-326-6555, FAX 202-682-0816

European Recruitment: AnneMarie Vis, (44) 0223-

302067, FAX (44) 0223-302068

Australia/New Zealand Recruitment: Keith Sandell, (61)

02-922-2977, FAX (61) 02-922-1100

Send materials to *Science* Advertising, 1333 H Street,

NW, Washington, DC 20005.

Information for Contributors appears on pages 37–39 of the 7 January 1994 issue. Editorial correspondence, including requests for permission to reprint and reprint orders, should be sent to 1333 H Street, NW, Washington, DC 20005.

LETTERS

Frog Endangerment

In their letter “Tropical poison frogs,” Charles W. Myers and John W. Daly (19 Nov., p. 1193), who are undoubtedly experts in the biology of dendrobatid frogs, provide incorrect information about the meaning of the frogs’ listing under the Convention on International Trade in Endangered Species (CITES).

All dendrobatid frogs of the genera *Dendrobates* and *Phylllobates* are listed in CITES Appendix II, which does not equate to “threatened” status, nor does it require evidence of “endangerment.” The listing, designed to regulate trade in vulnerable species, does require that an exporting country first make a judgment that trade will not be detrimental to the species before issuing an export permit. If range countries are refusing to issue such permits, it may be because they have made determinations that trade from their populations is not sustainable, or because they have other, stricter domestic measures separate from CITES which ban such trade, a sovereign right of every nation with or without international treaties.

Perhaps we in the regulatory agencies need to do a better job in working with the scientific community to explain what trade is regulated internationally, and why. Cooperative efforts between scientific researchers and conservationists are crucial if we are to conserve tropical biodiversity and the genetic bank it encompasses.

Marshall P. Jones
Chief,

Office of CITES Management Authority,
Fish and Wildlife Service,
U.S. Department of the Interior,
Washington, DC 20240

Smallpox Virus Stocks

Having thus far stayed out of the debate about smallpox destruction, I am moved to comment on the thoughtful Policy Forums published recently in *Science* (19 Nov., pp. 1223 and 1225) where two sets of eminent virologists (B. W. J. Mahy *et al.* and W. K. Joklik *et al.*) come to such opposite conclusions.

I am persuaded by the arguments of Mahy *et al.* for destroying existing stocks of the virus. The opponents are not really arguing against destruction, but rather for continued research. They might even agree

that if no research is being done on the virus, it might as well be destroyed.

I find it hard to believe that we need to, or even will, continue research on a virus whose release from containment would be such a disaster while its present threat is nil. The opponents of its destruction propose a broad program of “studying in detail [smallpox’s] molecular pathogenesis.” They apparently believe that this can be done in a secure P4 facility. I have seen such facilities, and they are cumbersome, to say the least. I cannot see carrying out a wide-ranging program of molecular analysis on an eradicated disease in such a difficult and expensive facility. If any other facility were used, the problem of security would be serious: the opponents of destruction themselves note that in the laboratory in Birmingham, England, where escape occurred, “simple but essential administrative precautions were ignored.” The sole insurance against a repeat would be the type of vigilance that only a P4 facility can maintain over the long haul.

While I agree that a deeper understanding of pathogenesis will help counter microbial infections, I doubt that we so desperately need to study smallpox that it would be worth the risk inherent in the experimentation. Much of the value of research can be gained from studying related viruses, especially vaccinia. Eradication of the virus as well as its disease will better serve the long-term interests of humanity as the proponents of destruction have argued.

David Baltimore
Rockefeller University,
1230 York Avenue,
New York, NY 10021-6390

The Importance of Restaurants in Superconductivity Research

We were surprised to read in Gary Taubes’ Research News article “Holding the lines in high-temperature superconductors” (17 Sep., p. 1521) that the “ultimate solution to the problem” of pinning in high- T_c superconductors “was suggested at a Chinese restaurant in Anaheim, California, in March 1990” when “[John] Clem suggested that since a vortex is a linear object, ‘a really keen way to immobilize it’ . . . would be to create . . . ‘a line-like potential well, a line of normal non-superconducting material, a microscopic hole through the super-