

been informative and easy to write, given the diversity of ecologists with whom Roush spoke and our symposium proposal that provided the necessary background. It is unfortunate that the article took such a narrow view both in topic and in highlighting my comments, particularly since it was the lead article in a special issue devoted to ecology.

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References

1. J. Bernardo, W. J. Resetarits Jr., A. E. Dunham, *Science* **268**, 1065 (1995).

Response: We invited Bernardo and other knowledgeable ecologists to comment on our article and we made changes based on their comments. As Bernardo points out, we even removed a vignette about a researcher with whom Bernardo disagreed. It was not appropriate, however, to shape the entire article to reflect Bernardo's views, which his letter makes clear was his intent.

Bernardo and Resetarits say that we ignored their efforts to focus the article on experimental design. Yet the article high-

lights their own comments and those of other scientists on some of the very issues—such as multiple causality and inference—they raise in their letters. And although they object to our portrayal of the roots of the debate, it was supported by other researchers, some of whom were quoted by name in the article. No one told Resetarits that the strides made in ecological experimentation were “not engaging”; indeed, the article included a long section describing those strides.

It is unfortunate that Bernardo now seeks to distance himself from one of his many “blunt statements” by saying it was made off the record. At no point in our discussions, including the interview he initiated, did Bernardo request that we not quote him.

We regret that the idea of researchers seeking value in myriad experimental approaches did not come across more clearly in the article. We agree with Power *et al.* that ecology is a rich and important field and intend to continue our coverage of it. Our intent in this article was certainly not to provoke controversy, as Bernardo asserts. As these letters, and letters we published on 1 September, indicate, ample controversy already exists.

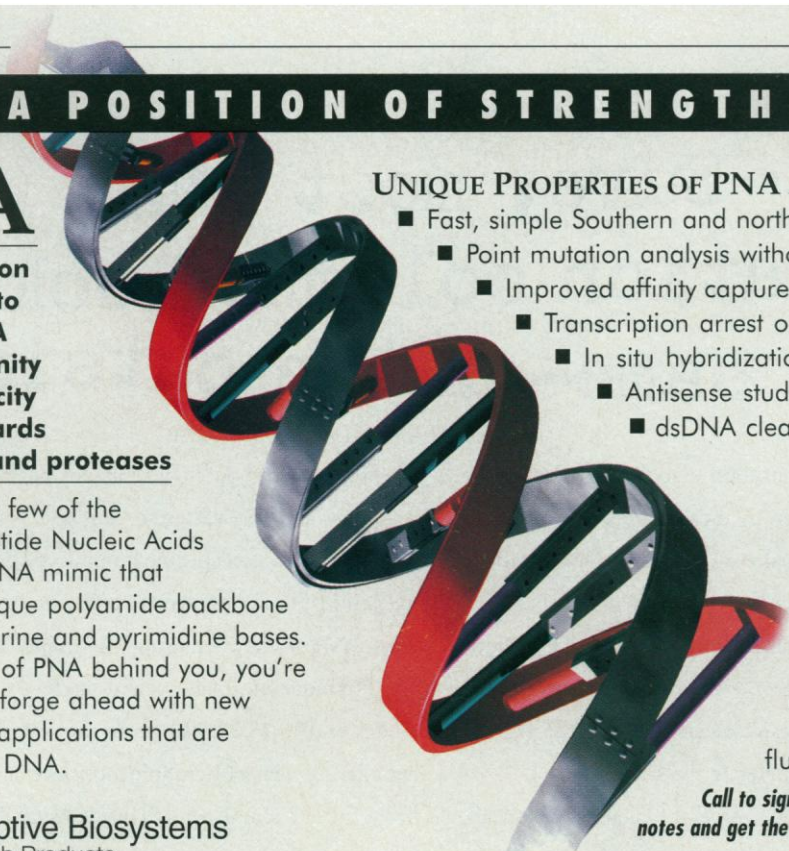
—**Joshua Fischman, Deputy News Editor**

AIDS Intervention in Uganda

Rachel Nowak, in her News article “Testing AIDS interventions: When is the price too high?” (8 Sept., p. 1334), suggests that our study in Rakai District, Uganda, which uses intensive control of sexually transmitted diseases (STDs) through mass treatment as a means of preventing HIV (human immunodeficiency virus) transmission, “runs counter to internationally accepted guidelines.” The basis for this statement is that the international guidelines recommend that should the therapy prove efficacious, it should “be made reasonably available to the inhabitants of the host community or country,” and Nowak writes that “If the intervention works, most Africans may not be able to afford the drugs.”

Drug costs are a relevant issue, but many of those used in the Rakai study are cheap, readily available in Uganda, and appropriate to the Ugandan context. Two drugs, Azithromycin and Ciprofloxacin were selected for their high rates of effectiveness against key STDs and their ease of administration, and their prices have been falling in the United States. Azithromycin now costs approximately \$9.50 per course of treatment, which is comparable to other recommended prescription regi-

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mens for chlamydia and chancroid. Ciprofloxacin, a recommended treatment for gonorrhea, costs only \$1.75 per course.

The Rakai study is not unique; mass treatment with Azithromycin is also being evaluated in a clinical trial of trachoma prevention in several African countries. Historically, therapies such as Ivermectin for river blindness or hepatitis B vaccine, which were expensive during the research phase, are now affordable and widely used. Thus, research costs cannot necessarily be extrapolated to programmatic costs when potential applications are assessed.

The Rakai study was designed to determine the impact of intensive STD control on HIV incidence and to identify which STDs are most strongly associated with HIV transmission. It is an efficacy trial designed to provide the scientific basis for policy and is not intended as an effectiveness study to test an operational strategy per se. The findings from the Rakai study will be used to devise rational, targeted strategies that can be evaluated by operational research. We believe that sound policy should be based on solid science and that the scientific findings from the Rakai study will be applicable to intervention programs in Uganda and elsewhere.

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Additional Reference

We wish to call attention to an additional reference that is relevant to our recent report demonstrating magnetic resonance imaging of elastic properties of materials, on the basis of visualization of acoustic shear waves (29 Sept., p. 1854). Winfried Denk and colleagues have used a method that employs similar motion-sensitizing gradients to observe oscillatory flow of fluid in the cochlea in response to applied longitudinal acoustic waves (1).

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References

1. W. Denk *et al.*, *Proc. Natl. Acad. Sci. U.S.A.* **90**, 1595 (1993).

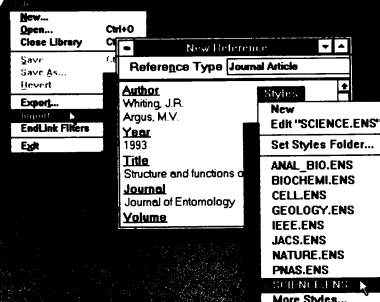
Corrections and Clarifications

In the letter "Asymmetrical ability" by G. Hickok *et al.* (13 Oct., p. 217), the two sets of means and standard deviations that appeared in parentheses were inadvertently interchanged. In line 11 of the second paragraph, the mean should have been -0.34 and the standard deviation, 0.14 . In line 20 of the same paragraph, the mean should have been -0.23 and the standard deviation, 0.24 . Reference 1 should not have been cited in the first sentence of the second paragraph.

Letters to the Editor

Letters may be submitted by e-mail (at science_letters@aaas.org), fax (202-289-7562), or regular mail (Science, 1333 H Street, NW, Washington, DC 20005). Letters will not be routinely acknowledged. Full addresses, signatures, and daytime phone numbers should be included. Letters should be brief (300 words or less) and may be edited for reasons of clarity or space. Beginning in October 1995, our previous policy of consulting with all letter authors before publication will be discontinued.

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apparent adaptation.

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1. Argus, M.V. and S.I. Jones. "1 reflection and wing orientation in butterfly species." *J. of Entomol.* 222-36, 1994.
 2. Biloski, T.V. "South and American Butterflies." (Ed.) *Butterflies*. (New & Howells, 1993), pp. 97-124-36, 1993.
 3. Whiting, J.R. "Struct of butterfly wings."

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