Letters

Behavioral Research and AIDS Prevention

Allan M. Brandt's essay on the history of efforts to control syphilis (22 Jan., p. 375) barely touches on a critical element: the application of behavioral research to plan, evaluate, and redirect public health programs to prevent sexually transmitted diseases (STDs).

To motivate military inductees to avoid venereal infection, the motion picture *Fit to Fight* (later revised to *Fit to Win*) was shown during basic training (Fig. 1) and evaluated in 1919 by pretest and post-test measures developed at the Psychological Laboratory, Johns Hopkins University. Lashley and Watson (*1*) found that research participants formed general impressions, but could not remember specific information. The emotional effects of horror and fear hardly persisted beyond 6 weeks after the film was seen. Lashley and Watson concluded, "These data give no indication that the film is effective in modifying sexual behavior" (*2*, p. 61).

Attempts to use behavioral research to understand the spread of STDs (*3*) and evaluate interventions (*4*) occurred sporadically over the ensuing decades. A Behavioral Research Activities Unit was finally established at the Communicable Disease Center (now the Centers for Disease Control) in 1962 on the recommendation of a national task force to eradicate syphilis (*5*). Syphilis is now making another of its "remarkable comebacks" (*6*), but the unit was abolished in 1971. Very little support for behavioral research on STDs was forthcoming until a highly unusual and apparently acquired immunodeficiency syndrome (AIDS) began to be detected in homosexual men in 1981 (*7*).

As plans for a national AIDS information and education campaign evolved in 1987, federal, social, and behavioral scientists assembled to plan for assessments of knowledge, attitudes, and beliefs (*8*). Preliminary results show that most Americans know the facts about AIDS, but many still cling to unsupported beliefs about transmission through biting insects and by sharing eating utensils. The Commission on Behavioral and Social Sciences and Education of the National Academy of Sciences has called together a group of scientists to develop a social and behavioral research agenda for AIDS. The Special Program on AIDS of the World Health Organization has chosen social and behavioral research as a cornerstone for its efforts to prevent global transmission. Let us hope these initial efforts to apply the social and behavioral sciences will be more successful in curtailing the spread of AIDS than were earlier and inconsistent attempts to use social and behavioral research to stop syphilis.

WILLIAM W. DARROW
AIDS Program, Center for Infectious Diseases, Centers for Disease Control, Atlanta, GA 30333

Fig. 1. Poster for the film *Fit to Win*, declared obscene in 1919 by the New York State Board of Censors (*1*). [Photo courtesy of the Social Welfare History Archives, University of Minnesota, Minneapolis, MN]

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Significance of Frog in Amber

The report by George O. Poinar, Jr., and David C. Cannatella (4 Sept., p. 1215) of an *Eleutherodactylus* from upper Eocene Dominican amber is of great interest because the specimen is the first of this genus from the Tertiary of the West Indies. However, contrary to the authors' argument that the find constitutes evidence for a vicariance view, it places only weak constraints on reconstructions of Caribbean zoogeographic history. The presence in the upper Eocene of an *Eleutherodactylus* of unknown affinities on the north paleoisland of Hispaniola (*1*) is consistent with either vicariance or over-water dispersal views of that history and does not support the former. Indeed, when considered together with the other known vertebrate amber fossils, it is supportive, albeit only weakly, of the over-water dispersal view.

The vicariance view supposes that the Greater Antillean fauna was transported on a land barge from Nuclear Central America (*2*), while the dispersal view sees it as a temporally heterogeneous accumulation that arrived by occasional means of transport (*3, 4*). Pregill's supposition (*3*) that most dispersal occurred in the Oligocene and Miocene was constrained by fossil evidence as then known. While the vicariance view requires that Greater Antillean taxa be old enough to have been present in Nuclear