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LETTERS

AIDS Activism and the OAR

As the co-author of the report (*1*) that provided the framework for the expansion of the powers of the National Institutes of Health (NIH) Office of AIDS Research (OAR) in the NIH Revitalization Act of 1993 and one of the key individuals involved in advocating for the congressional approval of these provisions, I must take exception to Jon Cohen's revisionist elaboration of recent events ("Conflicting agendas shape NIH," Special News Report, 24 Sept., p. 1674).

First, the opposition of the directors of the NIH institutes to the plans to enhance the OAR's responsibilities and authorities was based on the first draft of the legislation. Subsequently, the director of the National Cancer Institute, Samuel Broder, worked with staff members in the Department of Health and Human Services and Senator Edward M. Kennedy's (D–MA) office to address the institute directors' concerns.

Second, there was, indeed, significant support among the extramural AIDS research community for the strengthening of the OAR, as embodied in the bill. Cohen recalls the opposition, but he does not mention the group of more than 200 AIDS researchers whose support was vital to the passage of the legislation.

Third, Cohen portrays AIDS activists as uniformly and strongly "in favor of targeted research," and while unstated, the presumption is, at the expense of investigator-initiated work. My organization issued a report (*2*) at the IXth International Conference on AIDS in Berlin this summer, of which I am the author, which belies Cohen's assertions. The report, the product of interviews with three dozen leading scientists in basic research on AIDS, calls for an increase in investigator-initiated awards (R01s) for AIDS, which have steadily decreased over the past several years. The report also calls into question the usefulness and feasibility of a massive directed research effort or "Manhattan Project" for AIDS.

AIDS activists have forged productive partnerships with many AIDS researchers. Our contributions, particularly in the area of clinical research on HIV infection, have been widely acknowledged. The polarization between the research community and people with HIV and their advocates has largely abated in recent years as we realize the common goals we share with scientists and the complexity of the scientific problems which AIDS presents.

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References

1. G. Gonsalves and M. Harrington, "AIDS research at the NIH: A critical review" (Treatment Action Group, Amsterdam, The Netherlands, 1992).
2. G. Gonsalves, "Basic research on HIV infection: A report from the front" (Treatment Action Group, Berlin, Germany, 1993).

Response: I agree with Gonsalves that the tension between AIDS activists and researchers is abating, and I did not mean to portray all AIDS activists as being strongly in favor of targeted research. But Gonsalves is omitting a key point I made in my article: Many breast cancer and AIDS activists are not trying to undermine basic research, but to better organize it. And indeed, when Gonsalves was lobbying for the OAR legislation, he—and, yes, many AIDS researchers—argued for what TAG called "a meaningful long-range strategic plan" to "prioritize among critical scientific issues, evaluate current AIDS programs, suggest changes, and recommend necessary resource real-location or new programs." True, this is not calling for abolishing investigator-initiated research, but it is calling for targeting. And by definition, targeting clashes with unfettered basic research, and that is the source of the current tension between these activists and some researchers (including several institute directors).—***Jon Cohen***

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Multiregional Evolution

Under Corrections and Clarifications of 17 September (p. 1508), it is noted that reference 4 in the article "Demic expansions and human evolution" by L. L. Cavalli-Sforza *et al.* (29 Jan., p. 639) was incorrect. The corrected reference is given as "F. Weidenreich, *Evolution* **1**, 221 (1947); C. Coon, *The Living Races of Man* (Knopf, New York, 1965). . . ."

If only one of Coon's books were to be cited, the correct one would surely be *The Origin of Races* (*1*), not *The Living Races of Man*. The earlier work dealt explicitly and extensively with Coon's theories about the origin and evolution of what he considered to

be the living human races. In his introduction, Coon described his intellectual debt to Franz Weidenreich; in the bibliography 12 of Weidenreich's publications were cited, and the index listed 20 references to Weidenreich in the text or notes. Weidenreich is not referred to in the introduction, bibliography, or index of *The Living Races of Man*.

However, the references made by Cavalli-Sforza *et al.* to the work of Weidenreich are no more accurate as corrected. The concept of multiregional evolution (2) follows from, although it is not identical to, that which Weidenreich referred to as his polycentric theory of human origins. However, the Weidenreich paper cited by Cavalli-Sforza *et al.* (as corrected) did not deal with this subject. Of Weidenreich's publications that did treat the matter, the most readily available is his popular book *Apes, Giants, and Man* (3), which includes (figure 30, p. 30) Weidenreich's schematic diagram of hominid evolution that still is misrepresented by most later writers on the subject (4). However, the term "polycentric theory" was used as early as 1938 (6), and the concept of regional continuity in lineages reconstructed from fossil material occurred even earlier (5).

The corrected references also do nothing to dispel the substantively erroneous impression left by Cavalli-Sforza *et al.* that we, like Weidenreich, advocate a hypothesis of "parallel local evolution in many continents. . . ." Coon did, but Weidenreich did not and we do not. The multiregional model, like Weidenreich's polycentric theory that preceded it, is designed to fit a substantial body of empirical evidence documenting continuity as well as differentiation among human populations distributed across wide reaches of time and space. Our working hypothesis is that these complex morphological patterns reflect underlying genetic phenomena that also were complex, involving amounts and patterns not only of gene flow (or migration in the terminology of Cavalli-Sforza *et al.*) but also of mutation, drift, and selection operating over hundreds of thousands of years. We are aware of prodigious amounts of data that are consistent with the multiregional hypothesis and none that require its rejection.

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1. C. Coon, *The Origin of Races* (Knopf, New York, 1962).
2. A. G. Thorne and M. H. Wolpoff, *Am. J. Phys. Anthropol.* **55**, 337 (1981); M. H. Wolpoff, W. Xinzhi, A. G. Thorne, in *The Origins of Modern Humans: A World Survey of the Fossil Evidence*, F. H. Smith and F. Spencer, Eds. (Liss, New York, 1984), pp. 411–483.
3. F. Weidenreich, *Apes, Giants, and Man* (Univ. of Chicago Press, Chicago, IL, 1946).
4. W. W. Howells, *Getting Here* (Compass, Washington, DC, 1993).
5. F. Weidenreich, *Congr. Int. Sci. Anthropol. Ethnol., Zieme Ses. Copenhagen* (Sect. A), 107 (1938); *Bull. Geol. Soc. China* **19**, 1 (1938).
6. ———, *Peking Nat. Hist. Bull.* **10**, 281 (1936).

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"Collaboratory" Principles

William A. Wulf's Perspective on computer-based interpersonal communication systems (Computing in Science, 13 Aug., p. 854) omits important history preceding the "collaboratory" concept. In 1980, the National Aeronautics and Space Administration (NASA) demonstrated the ability of investigators to remotely operate a major scientific satellite (the International Ultraviolet Explorer) and to communicate with each other by electronic means. In 1985, NASA's Task Force on Scientific Uses of Space Station strongly supported the concept of "telescience" to enable ground-based investigators to collaborate with each other by electronic means in the use of space-station instruments and communications to space-based astronauts. NASA later studied telescience concepts with a group of universities, creating a network of individuals who developed software and modalities for collaboration groups. The Massachusett Institute of Technology's "Investigator in a Box" was a product of this NASA telescience activity, as was the original concept of operating the National Science Foundation's Sondrestrom radar remotely with collaboration technologies. Thus, from a historical perspective, the principles of the "collaboratory" have been appreciated in practical form for more than a decade. Labels aside, such types of electronic group interactions are growing rapidly and offer a more profitable means of interaction for scientific research than is afforded by such electronic means as bulletin boards and electronic mail.

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