

less than \$450 in the then current 1960 dollars [\$1864/(108.5/26)]. However, all of the data for 1960 show per capita incomes at the time of around \$75 for the poorest countries and around \$1500 for the richest (2).

If the stated gap is in dollars of the day, then the earlier "gap" represents about \$7800 in constant 1989 dollars [1864* (108.5/26)]. In this case, the "gap" would have doubled over the 30-year period rather than growing eightfold.

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2. *World Development Report 1980* (World Bank, Washington, DC, 1980), pp. 110-111; B. Russett, *World Handbook of Political and Social Indicators* (Yale Univ. Press, New Haven, CT, 1957), pp. 156-157.

AZT Trial in Thailand

Jon Cohen, in his News & Comment article "Bringing AZT to poor countries" (4 Aug., p. 624), effectively summarizes a dilemma

caused by the success of AIDS clinical group protocol 076 (ACTG 076) in preventing mother-to-child transmission (1). This dilemma, recognized soon after the results of 076 were released, is characterized by several ethical and distributive justice issues (2).

Cohen indicates that our proposal for a study of a shortened course of the drug AZT has been criticized by some because we use a full standard ACTG 076 control arm for comparison to a "short AZT course," rather than a placebo control arm. We firmly believe that it would be unethical to incorporate a placebo arm in our study in Thailand.

The Thai government has already provided AZT to AIDS patients on a limited basis and recently stated its intent to continue to distribute AZT to HIV-infected pregnant women as needed to reduce the chance that they transmit the virus to their infants (3). This may not be the case for other developing countries mentioned by Cohen. Also, the practice of avoiding breast feeding on the part of HIV-infected mothers is feasible in Thailand because milk substitutes and sterile equipment are readily available, but they are probably not feasible in the other countries cited.

When a treatment has been demonstrat-

ed to be effective, especially when the outcome for subjects is death, it is standard practice to use the effective treatment (if this is practical) and not a placebo as the reference in subsequent clinical trials, such as those designed to examine new dosing alternatives and to assess newly proposed therapies. While there is great uncertainty as to how AZT works and which treatment component is most important, all of the co-investigators agree that providing no treatment at all to HIV-infected pregnant women would subject their infants to a considerable risk.

Adding a placebo arm to our study design could provide added reassurance that the 076 regimen is as effective in the Thai population as in the original study and a more definitive estimate of the degree of efficacy of the shortened regimen over no treatment. However, we believe that this scientific justification does not outweigh the ethical imperative to provide all subjects with a treatment that is consistent with current scientific knowledge about the efficacy of AZT in preventing transmission and with the emerging standard of care in the country in which the study is undertaken. Both the Harvard University School of Public Health and the Ministry of Public Health of Thailand

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human subject committees support this interpretation of research ethical standards applied to our study (4).

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Faculty Dismissals in Japan

With respect to the Japanese Ministry of Education (Monbusho) and its campaign to dismiss foreign faculty at national universities (D. Normile, "Universities yank welcome mat for longtime foreign faculty," 7 July, p. 26), several points should be added.

1) In September an advisory committee to Monbusho recommended the elimination of tenure for all faculty at national universities. The fate of this proposal is not yet certain, but it would seem to give the lie to Monbusho's statement that they are not trying to save money by dismissing higher-paid, older instructors. (There are, though, other possible motives, as suggested in an internal memo circulated at one national university—to keep foreigners from exerting influence on policy and to avoid odious comparisons with the often higher productivity of foreign faculty.)

2) These are neither layoffs nor dismissals with cause; instructors whose qualifications are not in question, and who when hired were given no reason to expect non-renewal of their contracts (indeed, were often explicitly assured this would never happen), are being replaced by younger instructors. This is firing without cause, despite the fact that Japanese labor law imposes a burden of proof on the employer to show why a contract that has been renewed should not be renewed again.

3) However strong the legal position of the victims of Monbusho's policy, legal action, especially against the state, is highly unlikely to prove of much use in a country

where lawsuits routinely take 10 or more years, only to be resolved in favor of the state. However, Monbusho and the universities are sensitive to criticism from overseas peers and vulnerable to the glare of publicity. (One instructor who has been active in fighting her university's plans to dismiss her has already been offered her job back, on condition that she keep quiet.) Thus I urge readers to write in protest to the Minister of Education, Yoshinobu Shimamura, Ministry of Education, 3-2-2 Kasumigaseki, Chiyoda-ku, Tokyo 100, Japan.

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Biopolymer Sequence Availability

In his article "On-line archives let biologists interrogate the genome" (*Computers '95: News*, 8 Sept., p. 1356), M. Mitchell Waldrop lists the major sequence archives—GenBank, the Genome Sequence Database, the DNA Data Bank of Japan (DDBJ), and the European Molecular Biology Laboratory (EMBL) database.

Readers should be aware that there are many biopolymer sequences that have never been registered with GenBank, EMBL, or DDBJ. These include sequences from patent records and shorter novel peptide and nucleotide sequences, such as primers, probes, binding sites, and promoter regulatory elements. The CAS Registry file on the Scientific and Technical Information Network (STN), offered by Chemical Abstracts Service (CAS), includes these sequences in addition to the data found in GenBank.

The value of the sequence data available on STN is further enhanced because the Registry file provides complete annotation and useful links to the 190 other STN files and services, such as CAS's CAPLUS; MARPAT, a Markush structure database; and CASREACT, a reaction search service.

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Russian Mathematics

The Random Samples item about the current reorganization of the Euler International Mathematical Institute (EIMI) in St.