## NIH Leaves Gene Therapy Rules as Is

A proposal to change the current NIH guidelines governing future research in human gene therapy has been turned down. At its 29 September meeting, the Recombinant DNA Advisory Committee (RAC) accepted a recommendation from its gene therapy subcommittee to reject changes offered by the Committee for Responsible Genetics (CRG), an activist group based in Boston. The CRG argued that certain prohibitions, such as one against germline alteration, should be made permanently binding. RAC and the subcommittee preferred to let present strictures stand as guidelines under which research proposals must be evaluated. As written, current guidelines are quite stringent and inclusive (Science, 26 September, p. 1378). BARBARA J. CULLITON

## Rhinos Pushed to the Brink for Trinkets and Medicines

Hollywood often portrays the rhinoceros in films as a fierce and invincible beast with no predators. But the carnage that has taken place in Africa and Asia during the past 15 years reveals how vulnerable the animal is to human predation. Since 1970, more than 58,000 rhinos from five species have died. The animals mostly have been slaughtered for their horns, which are shaped into handles for ornamental knives in North Yemen and are used for medicinal purposes in parts of Asia.

Today fewer than 11,500 rhinoceroses survive worldwide, and they could be virtually extinct within a decade if poaching continues unabated. The most dramatic drop in population has occurred among black rhinos (*Diceros bicornis*), which numbered 65,000 in 1970. The remaining 4500 are scattered in unstable pockets, says Esmond Bradley Martin, a geographer based in Kenya, who has worked for 8 years to save the rhinoceros.

"In not one country of tropical Africa is the black rhino safe," Martin noted recently at a House science and technology subcommittee hearing on the fate of the world's rhinos. Although an estimated 1 million black rhinos inhabited all of sub-Saharan Africa in 1900, he says, in the past 6 years they have been wiped out in Angola, Chad, Ethiopia, Mozambique, Rwanda, Somalia, Sudan, Uganda, and Zaire. With populations in other African nations heavily depleted, the rhino may never reclaim its historic range. The situation in Asia is equally dismal. The International Union for Conservation of Nature and Natural Resources estimates that only 1700 Indian, 750 Sumatran, and 65 Javan rhinos remain.

Control of trade in rhino products, says Martin, is the key to stopping poaching. The Convention on International Trade in Endangered Species of World Fauna and Flora (CITES) has been signed by most countries. But North Yemen and Singapore have yet to embrace the treaty, and it is through these two countries that most trade in rhino products is conducted. Efforts by conservation groups and American government officials to get the two countries to halt imports of rhino horn and carcass parts have been unsuccessful so far.

There are signs, however, that the United States may take a tougher stand on the issue. The Interior Department's Fish and Wildlife Service, exercising authority under the CITES treaty and under the Endangered Species Act, is blocking all imports of animals and animal products from Singapore. Members of the House subcommittee on natural resources, agriculture, and environment are demanding that the departments of State and Interior "lean" on Singapore and North Yemen. Chairman James Scheuer (D-NY) and ranking minority member Claudine Schneider (R-RI) say it may be necessary to attach restrictions on trade with Singapore and on economic aid provided to North Yemen if the two countries do not take action within 6 months.



Even if that occurs, the survival of rhino populations will not be assured. Poaching is sure to continue at least until the trade pipeline is shutdown, a process that depends on governments in Africa and Asia taking strong enforcement actions, says Thomas Schneider, chairman of Rhino Rescue USA. The Washington, D.C., conservation group is seeking to establish a \$2.5-million capital fund to help support the operation of rhino reserves in Africa and Asia. The government of Kenya already operates one reserve and three private reserves also exist. Each cost about \$500,000 to establish. Without such reserves, the preservation of several rhino species may be impossible. Poaching and fragmentation of rhino ranges have scattered the populations, thereby diminishing the chances for the animals to meet and mate, observes Martin. If the remnants of these dwindling populations can be gathered into refuges that are fenced and patrolled, however, the rhinoceros could again become a common sight in parts of Africa and Asia. **■** MARK CRAWFORD

## Education Statistics Found to Be Inadequate

How reliable are federal statistics on precollege education? A National Academy of Sciences study says that much of the basic data, which are crucial for analyzing trends and future needs, are in a sorry state. The problem, says the Academy's National Research Council (NRC), is the result of years of neglect by the Department of Education, its predecessors, and Congress.

The Center for Statistics, known until October 1985 as the National Center for Education Statistics, is responsible for collecting and disseminating basic data about public elementary and secondary schools. Besides assembling core data on issues ranging from class size to school financing, the center also conducts a number of surveys on matters such as private schools and longitudinal studies to track what happens to high school graduates.

But much of the data collected by the agency suffers from poor quality and lack of timeliness, says the NRC in its report, *Creating A Center for Education Statistics: A Time For Action.* The data are flawed because of the way they are collected and aggregated, and written standards to assure consistency are lacking, says the NRC panel. The review, which was chaired by Vincent Barabba, executive director of market research for General Motors Corporation, also found that the problems were not unique to just a portion of the center, but to the entire operation.

In the case of the Vocational Education Data System (VEDS), which was mandated by Congress in 1976, only once in 5 years was the statistical agency able to assemble all the required data. By 1984, the center acknowledged that the VEDS data were unusable. In another instance, the NRC learned that it was common to have less than half the 50 states report data for elementary and secondary schools on time. No procedures existed for an organized follow-up to assure timely reporting, the report notes.