

Cancer Stats Attacked as Misleading

Federal statistics give an overly optimistic view of the national fight against cancer, according to a report released last week by the nonpartisan General Accounting Office (GAO), which was asked by a congressional committee chairman to study figures released by the National Cancer Institute (NCI). Cancer researchers at the facility criticized the report for relying too much on interviews with outside investigators and not enough on the different ways to measure success in cancer treatments.

The GAO report charges that survival rates for cancer have been inaccurately portrayed by NCI officials. As outlined in the report, GAO investigators limited their study to 12 forms of cancer and "the attempt to extend the survival time of cancer patients" between 1950 and 1982. Group interviews at national cancer centers across the United States and a review of the scientific literature were used to

test the "accuracy and meaningfulness" of cancer survival rates. While the report generally agrees with the accuracy of the NCI statistics, it finds fault with how the institute interprets those figures when assessing effectiveness in battling cancer.

Following release of the report, NCI issued formal statements by several officials, including NCI Director Vincent T. DeVita Jr., who called the report an "opinion-based analysis." Bruce Chabner, head of NCI's division of cancer treatment, told SCIENCE NEWS that GAO's conclusions were "unfair" and that the manner in which the study was conducted was "unprofessional." He said that while NCI did not disagree with statistics gathered by the federal investigators, there was "an argument about the interpretation" of the GAO data.

Authors of the report conclude that although it is true that the lives of more cancer patients were saved or extended

in 1982 than in 1950, it is difficult to prove advances in cancer when comparing the number saved to the total number of cancer cases. For example, they write that major survival gains have occurred only in leukemia and non-Hodgkin's lymphoma, both accounting for a small percentage of total cancer cases. However, the statement that "it is difficult to find that there has been much progress, but it is also impossible to say that there has been none" leaves the reader to decide.

Any effects the report will have on the institute may be minor. The Department of Health and Human Services, NCI's controlling agency, has accepted GAO's recommendation that survival rates not be used as the single criterion for measuring progress in extending lives. The HHS did, however, criticize the study's methodology and "unduly negative" tone, according to comments published with the report. — D.D. Edwards

U.S.-Soviet space pact signed

The United States and the Soviet Union on April 15 signed an agreement calling for peaceful cooperation in the exploration and use of outer space — a pact whose like has not been in effect for half a decade. A previous agreement, first signed in 1972, the same year as the last of the Apollo manned lunar missions, was renewed in 1977 for a second five-year space, but was allowed to lapse in 1982 by President Reagan as part of the U.S. response to the imposition of martial law in Poland.

U.S. space scientists were objecting to the lapse even before it "took effect" (SN: 3/27/82, p.214), and in 1984 a bill was unanimously passed by both houses of Congress urging the President to "endeavor, at the earliest possible date," to get the agreement going again. Its lack had not actually banned U.S. and Soviet researchers from working together, but it did prohibit government-to-government cooperation, leaving the scientists only with what arrangements could be worked out between individuals and institutions.

Despite that constraint, there were U.S. researchers involved with the Soviet VEGA missions to Comet Halley, for example, but such arrangements were few in number and limited in scale. Finally, last year, U.S. and Soviet negotiators succeeded in settling on the text for a new agreement (SN: 11/8/86, p.293), and last week, after additional fine-tuning, it was signed in Moscow by U.S. Secretary of State George Shultz

and Soviet Foreign Minister Eduard Shevardnadze.

Like the previous pact, this one is to remain in effect for five years, with options for five-year extensions. And like its predecessor, it can also be terminated unilaterally by either side.

There are 16 individual "cooperative projects" listed as part of the document, but pointedly missing are any joint projects such as a bilateral flight of human beings to Mars. "In negotiating the agreement and the initial agreed project list," says a NASA statement, "the U.S. position was that the agreement and initial list should deal only with missions that have already been approved." On the other hand, "there is certainly nothing in the agreement that would preclude discussion in the appropriate joint working group of longer-term projects of a coordinated, cooperative or joint nature." The 16 items cover several different areas of space science, but some may also be characterized by their degree of cooperation, from data exchanges to actual coordination of mission plans:

Mars:

- coordination of the Soviet Phobos and Vesta missions and the U.S. Mars Observer mission, and the exchange of scientific data resulting from them
- utilization of the U.S. Deep Space Network for position tracking of the Phobos and Vesta landers and subsequent exchange of scientific data

- invitation, by mutual agreement, of coinvestigators' and/or interdisciplinary scientists' participation in the Mars Observer and Phobos and Vesta missions

- joint studies to identify the most promising landing sites on Mars

Exchange of scientific data regarding:

- exploration of the Venusian surface
- cosmic dust, meteorites and lunar materials
- radio astronomy
- cosmic gamma ray, X-ray and sub-millimeter astronomy

Coordination of:

- programs and investigations relating to studies of gamma ray bursts
- observations from solar terrestrial physics missions
- the study of global changes of the natural environment

Space biology and medicine:

- cooperation in the Soviet Cosmos biosatellite program
- exchange of appropriate biomedical data from manned space flights
- exchange of data on space-flight-induced changes of metabolism
- feasibility studies of joint fundamental and applied biomedical experiments (including possibilities of extra-terrestrial life) on the ground and in space
- preparation and publication of a second, amplified edition of the joint study, "Fundamentals of Space Biology and Medicine" — J. Eberhart