

sociation are these two: "Preventing health problems throughout the life-span that have the potential to reduce productivity and satisfaction" and "Designing and developing health care systems that are cost-effective. . . ." Some studies indicate that length of hospital stay (and, therefore, cost) can be related to quality of nursing care and the educational level of nurses. An example of nursing research with a clearly biomedical side to it is a study of premature infants to deter-

mine criteria for early hospital discharge. But by and large, it is hard to pin nursing research down in a way that makes it obvious that it belongs at NIH. However, those who actively support the new institute argue that the very fact nursing research is difficult to define can be traced to the fact it has lacked a place in the NIH mainstream. "If you look at the other institutes, you see that having an institute in itself helps develop research," Heller says.

NIH officials, for their part, are against the nursing institute, just as they have been opposed to the creation of other new institutes. NIH director James B. Wyngaarden is unhappy that the House held no public hearings on the proposal and that the Administration's views were not sought. Furthermore, he is not sure that NIH is the best place for the bulk of research projects nurses have in mind. "Those who want to conduct biomedically related studies can apply

Broad Public Support Found for R & D

Scientists who complain about lack of public support for science and technology will be surprised to know that 68 percent of the American public believes that government funds for basic research should be increased by a sizable amount—even in this era of tight federal budgets and soaring deficits. They may be even more surprised to learn that 70 percent of members of Congress and their top aides apparently agree.

This public enthusiasm for basic research was revealed in an opinion survey, conducted by Louis Harris and Associates, which provides one of the most comprehensive pictures yet painted of public attitudes toward science and technology.

In general, the picture is rosy. An overwhelming majority of Americans believes that recent developments, such as computers, genetic engineering, and lasers will improve the quality of their lives. Seventy percent of those polled even said they thought permanent space stations would benefit them personally, but they did not say how.

But, as might be expected, this enthusiasm is tinged with a great deal of apprehension. "Lying in wait out there as people contemplate the future in the information age are a whole series of wrenches, apprehensions, dislocations, and downright potential horrors that they feel are part and parcel of the baggage of the new times that are fast coming upon us as a society," said Harris when he released the findings at a press conference on 7 December.

The poll, paid for by Southern New England Telephone, was in part an attempt to see whether, on the eve of 1984, the American public believes we are heading toward the society conjured up by novelist George Orwell. The answer is a qualified "yes." Sixty-nine percent of those questioned said they believe society is at least "somewhat close" to Orwell's 1984, and threats to privacy figured most prominently among public concerns about the spread of computers.

In addition to surveying a random sample of 1256 people, the Harris poll also sought the opinions of members of four "leadership" groups—members of Congress and their top aides, corporate executives, science editors of newspapers and magazines, and superintendents of schools. It found a surprisingly large gap in attitudes toward science and technology between the American public and its leaders.

For example, although 77 percent of the respondents said they were concerned about threats to privacy, only 59 percent of corporate executives shared those fears. Simi-

larly, only 38 percent of congressional leaders and 26 percent of corporate executives feel Orwell's 1984 is close, compared with 69 percent of the general public. "Not for the first time, the American public may be ahead of its leaders," suggested Harris.

Among the survey's other findings were the following:

- By a margin of 83 to 14 percent, Americans believe that science and technology in the past has done more good than harm.
- A startling 45 percent of those surveyed said they know how to use a computer, and one in ten said they own a personal computer.



Louis Harris

"The American public may be ahead of its leaders."

- Eighty-six percent of the general public—and 75 percent of corporate executives—said corporations should increase their donations to higher education for basic research.
- The American public appears to be virtually unanimous in believing that computerization will improve office work. But a bare majority (51 percent) said that the use of robots will make factory work worse. In contrast, 99 percent of corporate executives said they believe robots will improve factory work.
- Eighty-two percent of those polled said that even if it brings no immediate benefits, scientific research is an endeavor worth supporting.—COLIN NORMAN