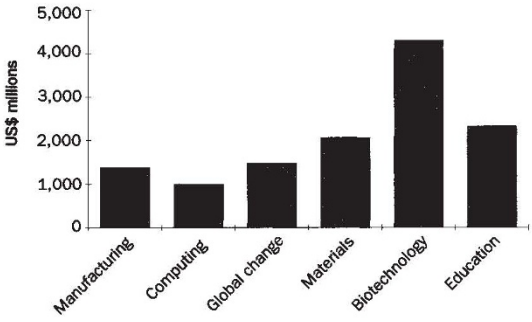
Clinton team wonders if FCCSET is broken

Washington. The Clinton administration is slowly turning its attention to the $14 billion that the US government will spend this year on basic research, conducting a review of six multi-billion-dollar interagency initiatives and convening a panel of senior administrators to draw up programmes for future budgets that correspond to the president's domestic policy goals.

Six research themes in the 1994 budget



The leading players:

Manufacturing:	DOD, DOE, DOC, NSF
Computing	DOD, NSF, DOE, NASA
Global change:	NASA, NSF
Materials:	DOE, DOD, NSF
Biotechnology:	HHS, DOE, NSF, USDA
Education:	NSF, DOD, HHS, ED

DOD: Department of Defense, **USDA**: US Department of Agriculture, **DOC**: Department of Commerce, **DOE**: Department of Energy, **ED**: Department of Education, **HHS**: Health and Human Services, **NASA**: National Aeronautics and Space Administration, **NSF**: National Science Foundation

Despite the political rhetoric about change, the budget that President Bill Clinton proposed on 8 April for fiscal year 1994, which begins on 1 October 1993, makes only minor alterations in the way in which the government invests in basic research. Even the economic stimulus package that Congress defeated last week, which contained nearly half a billion dollars for the National Science Foundation (NSF), the National Institutes of Standards and Technology and other federal research agencies (see right), would at best have strengthened existing programmes rather than charting new directions.

One sign that the administration is beginning to think seriously about basic research is its decision last week to release only partial information on six interagency initiatives that, taken together, will cost $12.5 billion. Previously, each initiative — on advanced materials, manufacturing technology, biotechnology, high-performance computing, global climate change and science education — was described in a pamphlet of a hundred pages or more that included detailed budgets of what each agency planned to spend. This year, in contrast, the White House Office of Science and Technology Policy (OSTP) issued a slim volume containing a four-page summary of each programme.

John Gibbons, the president's science adviser and OSTP director, says that the six FCCSET (pronounced 'fix-it') initiatives, named after the Federal Coordinating Committee on Science, Engineering and Technology that supervises them, are "a dynamic list of topics" that are being reexamined for their contribution to national economic growth. For example, he points out that the four-year-old global change programme began as an attempt to "understand the scientific processes. Now we are trying to shift attention towards its potential impact on the economy."

The search for practical results as well as for good science stems from the administration's desire to use technology to revive the US economy as well as from the fact that the initiatives have grown large enough to attract the attention of Congress. "In the past three years we have provided NSF with $600 million for the high-performance computing initiative", says Kevin Kelly, an aide to Senator Barbara Mikulski (Democrat, Maryland), who is chair of the appropriations subcommittee that controls the budgets of NSF, NASA, the Environmental Protection Agency and several other agencies. "What have we bought with that money? I think that NSF would have a hard time answering that question."

The largest FCCSET initiative, some $4.3 billion for biotechnology, is also the most troubled. Although the initiative includes programmes operated by the agriculture, energy and defence departments as well as by NSF and NASA, more than three-quarters of its budget is controlled by the National Institutes of Health (NIH), which is primarily interested in funding health-related basic research. As a result, efforts to focus attention on environmental issues, for example bioremediation or bioprocessing, have met with limited success. In addition, the administration has requested a 1994 budget for NIH that is essentially flat, leading one NIH official to point out that "if you don't get any more money, then it's superfluous to talk about new initiatives".

Gibbons's predecessor, D. Allan Bromley, believed that the government could carry out no more than five or six major initiatives at once because of the time and resources required to coordinate activities among as many as a dozen agencies. Although Gibbons has not said whether he agrees with that analysis, he has talked about "a rotation" in which new programmes replace older initiatives.

One proposal, in the works for the past two years but delayed by the change in administration, would deal with coastal ocean zones. Officials at the National Oceanic and Atmospheric Administration (NOAA) have already done an inventory of existing research programmes and begun to plan an interdisciplinary, global strategy to address issues ranging from non-point sources of pollution to sustainable development. But a meeting last December was canceled by the outgoing Bush administration, and NOAA officials are waiting to hear if the Clinton administration wants to pursue the matter.

That decision — and many others involving the course of science over the next four years — may rest with a new group of

Research budgets suffer with defeat of stimulus plan

Washington. The defeat of the economic stimulus package proposed by US President Bill Clinton means that the National Science Foundation (NSF) is unlikely to receive anything close to its 1994 budget request. The stimulus plan contained $207 million for NSF in the current year, nearly half of the increase of 15 per cent being sought for fiscal year 1994, which begins on 1 October; without that running start, Congress is extremely unlikely to give NSF such a large increase in the face of pressure to reduce the federal deficit and to fund other domestic programmes.

At the same time, two other research programmes that stood to benefit handsomely from the stimulus plan — the $103 million proposed for the Advanced Technology Program (ATP) within the Department of Commerce and $47 million sought for cooperative research agreements between industry and the national laboratories in the Department of Energy — are expected to remain important priorities for the Clinton administration and to enjoy rising budgets in 1994 despite the temporary setback in Congress. In the short run, ATP officials say they will cancel plans for another round of applications this summer to their programme, which funds proposals from individual companies and industry consortia, while the Energy Department expects to continue its emphasis on funding research projects within the laboratories that also serve the needs of industry. **J.M.**