

NASA Mission to Saturn in Jeopardy

The universe should come into sharper focus now that the Hubble Telescope has been repaired, but our own solar system may become a fuzzy astronomical backwater if the space program continues to be trimmed. Budget cuts now threaten the National Aeronautics and Space Administration's (NASA) most expensive planetary probe, the Cassini mission to Saturn, planned for launch in 1997.

This year has been tough for planetary science. NASA lost contact with the Mars Observer in August, and later in the month NASA administrator Daniel Goldin ordered agency scientists to cut dramatically costs of a planned mission to Pluto—or else, he said, the project could be killed (*Science*, 12 November, p. 979).

But the news on Earth is get-



ting worse. In October, Senator Barbara Mikulski (D-MD) and Representative Louis Stokes (D-OH)—chairs, respectively, of the Senate and House appropriations subcommittees that oversee NASA's budget—wrote a letter to Goldin urging him to brace the agency for a 1995 budget of less than \$14 billion, \$550 million poorer than in 1994. Because much of NASA's budget consists of fixed costs such as the space station and the shuttle program the \$4.5 billion Cassini

Desperately seeking Saturn. NASA's budget woes may kill the Cassini mission.

mission—planned to reach Saturn in 2004—is a likely target for cuts, warns a top NASA official.

More than U.S. pride may suffer if

Cassini gets axed. The European Space Agency is building Cassini's probe to explore Titan, one of Saturn's moons, and the Italians are building its communications system. "U.S. reliability [abroad] is at stake," says Planetary Society head Louis Friedman.

Friedman's fears could yet be averted. NASA and White House officials plan to spend the next several weeks wrangling over a NASA budget—with or without Cassini—before releasing it early next year.

PHS Hit Hard By Federal Streamlining

The tight job market for biomedical scientists has just become tighter: The Public Health Service (PHS)—which includes the National Institutes of Health (NIH), the Centers for Disease Control and Prevention, and the Food and Drug Administration (FDA)—has begun a hiring freeze.

PHS sources expect the freeze, announced in an 8 December memo to agency heads, to last at least 60 days. Observers expect it will slow some NIH intramural research projects due to begin early in 1994, and crimp FDA's plans to hire additional drug application reviewers.

The memo, from PHS head Philip R. Lee, explains that the freeze will enable PHS to analyze staff levels for the next 2 years in response to Vice President Al Gore's streamlining efforts under the National Performance Review. NIH's Clinical Center was exempted from the freeze.

Hiring practices at PHS may never be the same. After the freeze is lifted, Lee states, the "absolute employment restrictions will be modified to give you as much flexibility as possible within the overall limitations on PHS."

EMBL Seeks to Spread Its Wings...

Greek developmental biologist Fotis Kafatos plans to broaden the geographic reach of the Heidelberg, Germany-based European Molecular Biology Laboratory (EMBL) by establishing "regional EMBL groups" at research centers across the continent.

In the past, EMBL members in southern Europe have complained that too few of their scientists were invited to work at the lab. Kafatos promised to change the status quo when he took charge of the lab last spring. His solution is to create EMBL satellite groups that would consist of a leader with a 5-year term, a postdoc, a graduate student, and a technician. He pitched the new program, which resembles the research network of the U.S.'s Howard Hughes Medical Institute, at an EMBL meeting last week.

EMBL's 15 member nations "approved in principle" a plan to spend about \$1.4 million to launch four groups in Italy—which has threatened to withdraw from EMBL—and one in Spain. But it's uncertain who will foot the

bill. While Italy stands to benefit the most, Italian delegates refused to agree to an EMBL budget increase to pay for the groups. Kafatos says he's optimistic the budget debate won't kill the plan; he expects to resolve the issue at an EMBL meeting in February.

Beyond 1995, Kafatos says he envisions a "pan-European system" of about 50 groups. Going from a pipedream to reality, observers say, will require massive funds from the European Community, foundations, and industry.

...as Europe's Research Budget Constricts

Many U.S. research agencies have grown used to scaling back their ambitions, as federal budget rules put ever tighter limits on spending. The European Community (EC), which has boasted one of Europe's fastest-growing research budgets, is facing similar pressure: Its members have decided to spend \$10.6 billion on research in the coming 5 years, \$1 billion less than researchers had anticipated.

The debate over the EC's budget now heads to the European Parliament, which has said it

wants a \$12.1 billion budget. If Parliament and the EC member governments fail to reach a compromise—for now the governments have promised to add an extra \$880 million at a later date—the EC's research program could face lengthy delays.

Strong Medicine Urged for Academic Ills

After spending a year collecting comments from the field, a distinguished panel of experts last week offered preliminary thoughts on how to fix up the research universities—only to be told by one of the Administration's technology czars that their draft report is far too meek and that those putting it together should propose some crisp new ideas.

The report, which examines why morale among academic scientists is low in spite of continued growth in research funding, is being sponsored by the National Academy of Sciences' Government-University-Industry Research Roundtable (GUIRR) and the National Science Board (NSB), overseer of the National Science Foundation.

The group's preliminary findings—which focused on such things as obtaining interim funding for researchers between federal grants—were too bland for several officials at last week's meeting, among them chemist Mary Good, undersecretary for technology in the Commerce Department and a former NSB chair. "What I see in your report is an attempt to maintain the status quo," she told meeting participants. "But the status quo is not going to be maintained, and your only hope is to get out there with a vision of the future, not a justification of the past."

Good urged the panel to examine several issues unmentioned in the report, such as rising tuition and the lack of good jobs for recent grads. "Society pays for the services it needs," she warned them, "and if you don't satisfy the public, they won't pay." Panel members say they will weigh Good's comments before issuing a final report in the spring.