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ARNOLD ZANN/PNI

Cash injection. Biomedical research funding is on the rise.

Green Light for NIH

The president's 1999 budget proposal won't be released until February, but the U.S. research community is already buzzing with delight. Administration officials say it will highlight basic research, including sharp increases for the National Institutes of Health (NIH) over the next 5 years and a healthy boost for the National Science Foundation (NSF).

Biomedical research will top President Bill Clinton's R&D wish list for Congress, followed by efforts to develop faster computers, global climate change research, and energy-saving technologies, they say. R&D advocates are ecstatic. One biomedical research lobbyist says he's convinced that a rise in NIH funding "will be the leading edge of a massive expansion of the federal investment in science and technology" this year.

The White House, sources say, is prepared to boost NIH's request to as high as $14.6 billion—a 7.4% increase over this year. The Administration is tired of letting Congress grab the credit for annual hefty increases for NIH—often at the expense of other Clinton priorities. "We're telling Congress it can fund all our priorities," says one source. Some of that funding could come from the massive settlement that tobacco companies recently made to avoid litigation. To show that its R&D policy is not lopsided, the Administration also plans to request an increase of about 9% for NSF that would benefit both research and education programs.

As *Science* went to press, a collection of more than 300 advocacy groups known as the Ad Hoc Group for Medical Research Funding was planning to meet in Washington, D.C., on 14 January to formulate a lobbying strategy for the new year. One observer predicted it would set a goal of increasing NIH's budget by 15% in 1999, a target that insiders say has also been adopted by the Federation of American Societies for Experimental Biology.

EU Database Directive Raises Hackles

Controversial European legislation aimed at protecting the rights of database owners went into effect last week, and scientists around the world are worried that publishers will use it to make access to data too expensive for cash-strapped academics. The European Union (EU) directive gives publishers exclusive property rights to their own electronic databases. Plans to adopt a global treaty based on this principle remain on hold (*Science*, 15 November 1996, p. 1074).

But Emanuella Giavarra, legal adviser to the European Bureau of Library Information Documentation Associations, notes that the rule allows exemptions for groups that want to access data for scientific research or education. So far, says Giavarra, this exemption has been included in all the European national legislation she has seen enacted.

Scientific leaders remain worried. "The fear," says Ferris Webster, who chaired a working group of the International Council of Scientific Unions (ICSU) that explored the issue, "is that the directive will impair scientists' ability to build global databases." ICSU argues that such databases are essential research tools, particularly for work in meteorology and climate change.

Critics also fault the EU directive for stating that only countries with equivalent database protection on their statute books will be protected in Europe. Webster, a University of Delaware oceanographer, says this gives European groups "a hunting license" to raid unprotected databases, including those in the United States. But observers on both sides of the Atlantic doubt that Europeans will do so because of fears such a move could spark a trade war.

Sensenbrenner's Hot Ticket

Representative James Sensenbrenner (R–WI) probably could live without the $250,000 he won in the D.C. Lottery this week. The chair of the House Science Committee is worth about $8 million and is the 22nd richest member of Congress. After taxes, the take-home pot is a mere $150,000. But if he were feeling very generous, Sensenbrenner could play Santa to researchers who are short on grant money.

For the physicist who had been good all year, the lawmaker could purchase three state-of-the-art digital oscilloscopes, seven network spectrum impedance analyzers, four tunable Fabrey-Perot lasers, or 1071 handheld GPS receivers. For the deserving doctor, Sensenbrenner could spring for a dozen digital thermometers, a blood chemistry analyzer, and a couple of centrifuges and still have money left over for 348,000 test tubes. Alternatively, the windfall would buy 90 kilometers of fiber-optic cable, more than enough to wire the House and Senate for the terabyte future. But don't count on a privately financed flight in orbit: A space suit alone runs $10 million.

Ultimately, Sensenbrenner might conclude that bestowing gifts on any single researcher or discipline might provoke more squabbling than thanks. Instead, he might brace for the impending Year 2000 computer crisis by trading the lucky ticket for three state-of-the-art cesium clocks to tick away the final picoseconds of the millennium.

Teams Compete on Cosmic IR Discovery

New evidence shows that the universe is giving off a warm glow, but the same can't be said for the two scientific teams claiming credit for the finding. The competition focuses on cosmic infrared background radiation, a sort of fossil radiation thought to have been emitted during the earliest surge of star and galaxy formation.

Unlike the cosmic microwave background, the infrared radiation was given off after formation of stars and galaxies had begun. New results have been obtained by two groups of astronomers who drew data from an experiment aboard NASA's Cosmic Background Explorer Satellite. When they meticulously subtracted emissions from bright, patchy sources in the Milky Way, background radiation emerged. It "just popped out of the analysis," says Marc Davis of the University of California, Berkeley, who, with David Schlegel of the University of Durham, U.K., and Berkeley's Doug Finkbeiner, submitted their calculations last October to *The Astrophysical Journal*.

Davis agreed to discuss the work after learning that another team was releasing similar results on 9 January at an American Astronomical Society meeting in Washington, D.C. The second group planned to submit a paper to the same journal just before the press conference, according to its leader, Michael Hauser of the Space Telescope Science Institute in Baltimore. "Marc and his colleagues didn't build the instrument" and so weren't able to make as clean an analysis as his group did, Hauser said.

Davis shoots back that "the only thing they have that we don't is [their] public-relations machine." He adds that his team's results indicate that about twice as much light resides in the infrared radiation as in the optical background. The results, Davis says, are roughly consistent with previous estimates.