Clinical research. One area where Varmus has come in for criticism is his perceived bias toward molecular biology rather than clinical research. His tried-and-true response has been to create a panel to look into clinical researchers' needs, but this community wonders, as one lobbyist says, whether the effort is merely "cosmetic." In the words of one panel member—Herbert Pardes, dean of Columbia University's College of Physicians and Surgeons—Varmus is "approaching it the right way," but "the committee hasn't done anything yet."

Embryo research. Although Varmus has been quick to implement proposals from outside committees, one exception is research on human embryos. Just over a year ago, a blue-ribbon panel recommended guidelines under which NIH should fund embryo research, but President Clinton intervened in the face of a mounting conservative protest. He ruled that no embryos would be created in the lab for research, and the committee's other recommendations have been tabled for now. Varmus failed to anticipate the backlash this review would ignite and now views it as "one of the things I regret." He thinks it might have helped if he'd called it a review of fertilization (not embryo) research.

Money troubles

While Varmus has been praised for making changes in NIH's intramural program, extramural researchers worry about the big cloud hanging over their future: How will they afford to keep pace with the increasing cost of research? The NIH staff, of course, doesn't control congressional appropriations, and NIH is being forced to cut costs, like most federal agencies. But this is a new experience for NIH, and it is not clear how Varmus and his top staff intend to allocate the pain over the long term. So far, NIH has been trimming on many fronts and allowing administrative and intramural staff to shrink. A bolder plan may be needed soon, but none has yet been discussed.

Earlier this year, Varmus warned in a major lecture that biomedical research could be trapped in a "steady-state" economy for some time. That forecast is being borne out. The president's 1996 budget request for NIH aimed to increase funding at the biomedical inflationary rate of 4.2%, with little growth in the future. Republican budget committees in Congress went the other way, proposing to cut NIH and other agencies by 10%. This caused panic.

According to several Capitol Hill aides and biomedical lobbyists who spoke to *Science* on condition of anonymity, Varmus reached out first to Senator Edward Kennedy (MA), the once-powerful Democrat, for help. The new Republican appropriations chief in the Senate, Mark Hatfield (OR), was offended. But Republicans later came to NIH's rescue—Hatfield, by leading a surprisingly successful effort to spare NIH from the sweeping cut, and Representative John Porter (IL), by pushing a 5.7% increase for NIH

through two committees and the full House.

Since then, however, Congress has been mired in partisan disputes, creating a stalemate that has actually reduced NIH spending to a rate below that of 1994. "If we had the budget that everybody seems to want to give us, namely a 4.2% increase," says Varmus, "we could do quite a few new things." But lacking it, NIH may have to postpone its most exciting new projects. Among those likely to be hit: a plan to start large-scale sequencing of the human genome.

Like other government executives, Varmus has the tricky task of campaigning for his constituency without appearing to do so. To this end, Varmus has been working more closely with NIH's Republican friends on Capitol Hill. In October, for example, NIH staffers report, he made a special effort to include Porter at an exclusive dinner and strategy meeting with NIH's institute chiefs. Recently, Varmus and other institute directors have been running a "minimed school" on the Hill, educating members of Congress.

In the end, though, Varmus's strategy for promoting NIH is quite simple: "Go back to the science," he says. When it comes to soliciting funds, the appeal "that will finally win the day" for NIH, Varmus believes, is first, "the intense desire of everybody to have better health," and second, "the excitement that's generated by biomedical discoveries." And those are the themes he will continue to stress.

-Eliot Marshall

RUSSIA_

Antarctic Research Ship Narrowly Saved

MOSCOW—Russia narrowly averted losing its foremost Antarctic research ship—the Akademik Fyodorov—earlier this month. At the eleventh hour, Russia's finance ministry came up with \$3.2 million to pay off a German shipyard that was threatening to sell the ship to pay for repairs to it and another research vessel. Although the ministry has agreed to fork over another \$1.3 million to complete the repairs to the \$25 million Akademik Fyodorov, the several weeks of delay already incurred because the shipyard impounded the vessel while it was waiting for payment may make it necessary to temporarily shut down Russia's Vostok research station.

Both ships are the property of the Arctic and Antarctic Research Institute in St. Petersburg, but the German shipyard, Motorenwerke Bremerhaven in Bremen, charged Russia's Federal Service for Hydrometeorology and Environment Monitoring for the work because it pays for the annual Antarctic cruise. Anatoly Yakovlev of the Federal Service told Science that the Akademik Fyodorov docked at the shipyard on 11 July for repairs, followed on 25 July by another of its vessels, the

Mikhail Somov, which required maintenance.

The Federal Service did not have the money to pay the usual 50% deposit for the work because it had not yet received this year's funding from the finance ministry for its Antarctic campaigns. So Federal Service officials persuaded the shipyard to repair one ship on credit, and a month later the *Mikhail Somov* left the shipyard. The Federal Service was still unable to pay its debt, however, and Motorenwerke Bremerhaven set a deadline of 10 November, after which the *Akademik Fyodorov* would be sold at auction to cover all repairs and the shipyard's financial expenses.

On 19 October, with the finance ministry ignoring their pleas, says Petr Nikitin, head of the Federal Service's Arctic, Antarctic, and Maritime Department, service officials appealed to Prime Minister Viktor Chernomyrdin for help in saving the ship. Chernomyrdin sent an official letter to the ministry ordering it to transfer the funds, but the ministry left it until the first week of November before relenting. "I don't understand the position of the finance minister," says Nikitin. "Being a member of the Cabinet he

has to obey the prime minister."

The sum paid covers only the cost of the repairs of the Somov and the 50% deposit for repairs to the Fyodorov. Although the risk of losing the ship is now gone, Nikitin says, the delay is putting the service's Antarctic research in jeopardy. The Fyodorov was due to depart for the Vostok station at the end of last month, says Yakovlev, but completing the repairs and sailing the ship back to St. Petersburg to load stores will take another 40 days. This may make it impossible to carry out essential work on the station before next winter. "It may be very dangerous for the research team to work in the Antarctic, and in this case we will simply have to rescue the researchers," Nikitin says.

The Vostok station is sited near the southern geomagnetic pole and specializes mostly in paleo-glaceology. Researchers there have spent the past few years extracting a core from an ice layer 3.7 kilometers thick. They had hoped to bore the last 500 meters in the coming year. Now they may have to put their plans on ice.

-Andrey Allakhverdov

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