

largest share of new funds. Graduate education, which accounts for the largest portion of federal education support (largely thanks to \$203 million spent on military post-graduate schools) receives the smallest boost, but Richard E. Stephens, director of the office of university and science education at the Department of Energy, points out that there will be more support for graduate education coming from proposed increases in research budgets to federal science agencies.

The third initiative in the Administration's budget that bore FCCSET's imprint is the Federal High Performance Computing Program. The 5-year program, put together by the Committee on Physical, Mathematical and Engineering Sciences, would give a big boost to programs in four federal agencies—the Defense Advanced Research Projects Agency, the Department of Energy, NASA, and NSF. The program establishes several "grand challenges" such as aerospace vehicle design and climate modeling that require far more computing power than today's machines can deliver. One key goal over the next 5 years will be to use massively parallel computers to achieve computing speeds of 10^{12} operations per second—about two orders of magnitude faster than current machines. The program will also try to demonstrate the feasibility of a distributed computer network to be known as the National Research and Education Network that will move data around the country at speeds up to a billion bits per second. Eugene Wong, assistant director of OSTP, adds that although the federal role in high-performance computing is limited to technology support, the intention is that it be a catalyst for industry to forge ahead with the next generation of computer products and services.

If Bromley has his way, the three initiatives presented in the Administration's 1992 budget are just a start: "Next year I have every expectation that we will add to that list materials science and technology, biotechnology, and perhaps some other areas." And if this year's FCCSET proposals do as well with Congress as last year's, FCCSET could well become the model for all federal support for interdisciplinary research.

■ JOSEPH PALCA

NIH Budget

A table in last week's issue (p. 618) showing details of budget proposals for the National Institutes of Health included incorrect figures for NIH's total budget. The correct amounts are: 1990: \$7.576 billion, 1991: \$8.277 billion, and proposed 1992: \$8.775 billion. The totals given in the table were for numbers of full-time NIH staff.

Creationist School Lives On

San Diego, California—For the past decade, with the official blessing of the State of California, students at the nation's only creationist graduate school have been earning master of science degrees for thesis research that assumes fossils are the remains of drowned critters left behind by Noah's Ark on a planet that is less than 10,000 years old. The state department of education fought a long battle to revoke the Institute for Creation Research's license, but its effort was recently set back by procedural snafus and a bureaucratic shuffle. As a result, it seems certain that the little institute in Santee, just east of San Diego, will keep handing out M.S. degrees in geology, biology, astrogeophysics, and science education for at least another year. Perhaps even longer: On 19 February, a federal judge will decide whether to hear a suit filed by ICR claiming that it has a constitutional right to award science degrees.

ICR received its license in 1980 when California's standards for licensing non-accredited post-secondary schools were less stringent. In 1984, the legislature tightened the standards, requiring state-licensed schools to be "comparable to and similar in scope" academically to accredited institutions, says department of education attorney Greg Roussere. But the legislature also gave existing schools such as ICR a 3-year grace period before they faced reevaluation.

The department of education—goaded, according to ICR's dean Kenneth B. Cumming, by "evolutionist vigilantes"—dispatched two different teams of reviewers to ICR in the summers of 1988 and 1989. (ICR offers its classes only in the summer.) The five-person teams—mostly academic scientists serving without pay—examined all course offerings, textbooks, exams, labs, and the library; attended lectures; talked to students; and read some two dozen master's theses produced by ICR graduates during the 1980s.

The first team's work was clouded when a scientist flipfopped, voting once to allow license renewal then voting against it. The second team was more decisive: "We spent 3 days immersed in this and found them wanting on every count," recalls Christopher Wills, a professor of biology at the University of California, San Diego, who served on the second team. "The theses were the most egregious. None involved original research. They were argumentative reviews of the literature from a creationist bias. One of them argued away everything in physics from the 20th century."

Last March, state Superintendent of Public Instruction Bill Honig accepted his staff's recommendation to revoke ICR's license. ICR, however, filed suit, first in federal court on constitutional grounds and then in state court on procedural matters. By November, the department of education was forced to cave in on the second suit because technical flaws in its procedures made the license revocation unenforceable.

In the meantime, the legislature intervened again, taking responsibility for licensing decisions away from Honig's department and giving it to a new agency called the Council for Private Post-Secondary and Vocational Education, which opened its doors on 1 January. Honig agreed to restore ICR's license and let the new council inherit the issue. The council must now review 140 nonaccredited schools—ICR among them—and more than 2000 private vocational schools, many suspected of serious abuses of federal student loan programs. Marion Miller, interim director of the new council, says the group must set up its own operating guidelines and regulations before it begins any assessments. The ICR review, along with all the others, will come "within the next 2 to 3 years."

Roussere will ask the federal court in San Diego next week to dismiss ICR's federal suit since its license has been restored and the new council has not yet taken action. The institute could avoid state review altogether, he says, by calling its offering a master's in theology or in creationism rather than science. ICR, however, wants the court to get on with the First Amendment arguments. ICR, Cumming says, is a "traditional school teaching a traditional science curriculum but from a creationist viewpoint."

"Traditional for the 1600s," retorts Kevin Padian, a UC Berkeley biologist who serves on the board of the National Center for Science Education, a group formed to counter creationist influences in education. "It's not a purge we're after. But there shouldn't still be a question whether dinosaurs and humans lived together in the Cretaceous."

■ YVONNE BASKIN

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