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**RED SUN AT MORNING,
SAILORS TAKE WARNING**

Give a man a fish, they say, and he eats for a day. Teach a man to fish, and he eats for a lifetime.

This planet supports so many of us only because of our ability to accumulate learning and act on it. Still, we continue to value the substance yesterday's knowledge brings us—bushels of wheat and barrels of cod, oil and gold—far more than the promise of new learning. "You can't feed ideas to a starving man," say the practical.

The United States is in danger of sacrificing its scientific strength on the altar of the bottom line—of sacrificing its fishermen for the sake of a single day's catch.

Item. The U.S. Office of Management and Budget is still trying to make the National Institutes of Health hold back 1,500 of the 6,526 new competitive grants authorized by Congress for 1985.

Item. The administration proposes cutting NIH's 1986 new-grants budget to \$287 million below 1985 levels—about enough for only 2,500 new competing grants under the OMB funding scheme, according to NIH director James Wyngaarden.

Item. Measured in constant 1972 dollars, U.S. support for all kinds of research has fallen from a high of \$8.7 billion in 1980 to a budgeted \$6.4 billion in 1986. The U.S. research budget has dipped from about 0.6 percent of the gross national product through the end of the '70s to 0.4 percent of the GNP in 1985 and 1986. Measured against the GNP, the NIH's budget, too, is eroding, though slowly.

Item. Over lunch at a recent National Academy of Sciences symposium, pharmaceutical and biotechnology executives lamented an educational system that lets about half of all high school students complete their diplomas without taking enough biology to know a rat from RNA. The exact statistic is suspect, but among these innocents (a friend with a mathematical bias called their malady "innumeracy") are tomorrow's voters and legislators, who will regulate, and allocate money for, tomorrow's technologies. Now, to educate is not necessarily to persuade, but suasion is impossible when the other party cannot begin to understand either one's language or one's standards of discourse.

Item. When T. Boone Pickens tried to buy out Phillips Petroleum, Wall Street applauded. Phillips's stock soared and the stockholders' worth soared with it. Yet to buy Pickens off, Phillips had to damage one of the most interesting and aggressive biotech research programs in the petrochemical industry. Chances are that a new buyer would have sold off or closed units like Phillips's Provesta single-cell protein subsidiary, to help cover the cost of acquisition. Either way, the future loses.

If revolving-door management raises its shortsighted gaze no higher than this year's bottom line; if the government pays lipservice to biotechnological superiority while eviscerating the research budget that has, in Wyngaarden's words, "driven the development of biology in the U.S."; if our educational system turns its students out half-educated, ready marks for health quacks and anti-science demagogues; then we are in deep trouble and the future is already in jeopardy.

Governments can't live forever on credit, any more than individuals can. But our leaders must think much more carefully before they mortgage a field as productive as this. Science is the staple of our strength, not a frill, vanity, or indulgence to be shucked off in the fiscal fasts of our periodic budgetary Lents. Researchers turned out of science cannot easily be recalled; society's tremendous investment in them is lost. Certainly public science is far from the only science. Corporations do good, basic work—no one knows that better than *Bio/Technology*. But corporations do that work for themselves, toward their own goals. And all of that work draws from a common spring of fundamental knowledge freely traded. Are we really going to let an uncaring society poison that spring without protest?

—Douglas McCormick