

The union and the owners became strange bedfellows in the coalition which lobbied for passage of the Coal Act and now is fighting any change in the Reachback Tax.

This legislation has cost American taxpayers tens of millions of dollars.

Reachback companies made no promises to provide lifetime healthcare benefits to members of the UMW and should not be subjected to a retroactive, unfair, unjust and perhaps illegal federally-mandated tax and taxpayer-subsidized straightjacket to pay for those benefits.

Hundreds of innocent private businesses and hundreds of thousands of innocent Americans have wilted because of the poison sprayed on them by the ill-conceived Reachback Tax.

Even if we in the Congress were to enact remedial legislation this week, where would these companies, their employees, managers and shareholders go to recoup the tens of millions of dollars in premiums already dumped into their fund, as well as their lost incomes, lost wages and lost expenses?

M.I.T. PRESIDENT CHARLES M. VEST—IN SEARCH OF MEDIOCRITY: IS AMERICA LOSING ITS WILL TO EXCEL

Mr. KENNEDY. Mr. President, as the budget process continues, Congress is required to define priorities and make difficult choices about funding, particularly funding that will affect educational opportunities for our students, the strength of our research base, and the Nation's competitiveness in the global economy in the years ahead. In a recent address to the National Press Club, Charles M. Vest, president of Massachusetts Institute of Technology, described in compelling terms the need to maintain our strong, bipartisan commitment to funding university-based research. I believe that his address entitled, "In search of Mediocrity: Is America Losing its Will to Excel?" will be of interest to all of us in Congress concerned with these priorities, and I ask unanimous consent that his remarks be printed in the RECORD.

There being no objection, the remarks were ordered to be printed in the RECORD, as follows:

[From the National Press Club, July 18, 1995]

IN SEARCH OF MEDIOCRITY: IS AMERICA LOSING ITS WILL TO EXCEL?

(By Charles M. Vest)

I appreciate the opportunity to talk with you this afternoon. I note that the company of speakers I join includes, among others, both movie actors and movie subjects. Next week, this Club will hear from Jim Lovell, the astronaut who commanded the Apollo 13 mission. The Apollo 13 drama reminds us that science and technology are an essential part of the human adventure.

But science and technology are not just activities for astronauts and academics.

Science and technology affect our lives every day and they create immense benefits and opportunities for all of us. Their progress over the past few decades has been as dramatic as the movie that Americans are flocking to see.

What are some of these benefits?

You would expect me, as a university president, to have a catechism to recite. But listen instead to what the CEOs of 16 major

U.S. corporations said recently. In an unprecedented joint statement entitled *A Moment of Truth for America*, they said:

"Imagine life without polio vaccines and heart pacemakers. Or digital computers. Or municipal water purification systems. Or space-based weather forecasting. Or advanced cancer therapies. Or jet airlines. Or disease-resisting grains and vegetables. Or cardiopulmonary resuscitation."

That . . . and much, much, more . . . is what science and technology—and our nation's universities—have made possible.

But today, rather than building upon this success, we are about to undermine it.

The Congressional budget resolution proposes to reduce the budget for civilian research and development by over 30 percent. The long-term outlook is no better in the Administration's new budget proposal.

Do we know what that will mean for the advancement of the knowledge that fuels the American economy and creates a better quality of life? Our budget choices would be simpler if we had such wisdom and foresight!

We live in an age in which knowledge holds the key to our security, welfare, and standard of living . . . an age in which technological leadership will determine who wins the next round of global competition . . . and the jobs and profits that come from it . . . an age in which events move so rapidly that almost 80 percent of the computer industry's revenues come from products that did not even exist just two years ago.

The cornerstone of our era—the information age—is education. Today, America's system of higher education and research is the best in the world. Period. But will it be the world's standard of excellence ten years from now? If the nation is to be preeminent a decade hence, if we are not only to compete but lead, then we must sustain these unique American institutions.

Why? What is so special about our research universities?

First, the weaving together of teaching and research in a single organization gives us excellent research, and it gives us superior education. Universities combine research and teaching to create vital learning communities—open communities of scholars that advance our understanding and introduce fresh and innovative young minds into the creation of knowledge * * * thereby educating the next generation of scientists and engineers.

And second, research universities are the foundation of our entire national research infrastructure. Supporting the advancement of scientific and technical knowledge is an investment. It is an investment in the future of our human capital—people and their ideas. It is an investment in the future quality of life, health, and welfare of the American people.

This two-part rationale was articulated 50 years ago this month in a report to President Truman entitled *Science—The Endless Frontier*. It presented the vision of Vannevar Bush, who had directed the nation's wartime science effort. That vision set a confident America on a search for excellence. And America has benefited beyond measure from this quest.

Under current budget scenarios, however, we are in danger of disinvesting in our future. The cost of doing so * * * and of drifting toward mediocrity in science, technology, and advanced education is simply too great to pay.

We must regain our vision, our confidence, and our will to excel.

The Federal government is rightly concerned about the budget deficit. It is making hard choices. We all have to make hard choices. But these decisions have to be based on a vision of the future and on an understanding of what hangs in the balance.

Is a one-third reduction in civilian research and development really a savings? Or is it a body blow to our national innovation system, our future competitiveness, and our leadership?

In the current debate, many seem unwilling or unable to retain, let alone enhance, our national excellence in science and advanced education. Instead of pursuing our endless opportunities, we are in danger of drifting toward mediocrity.

This need not be the case. It must not be the case.

It used to be that universities and the federal government—in the White House and on Capitol Hill—and the voting public—had a broadly shared sense of the benefits to be derived from investing in education and research . . . and a shared commitment to the future.

This commitment is rapidly fading. Although leaders in both parties and in both branches of government are struggling to retain it, it is fading.

Today, the future has no organized political constituency.

Since the 1980s, when I began my career as a senior university administrator, I have seen an unraveling of a once fruitful partnership between universities and the government. Its fabric has been frayed by a steady onslaught of policy and budget instability, rule changes, investigations, and deepening distrust.

Congressional hearings and media exposés on the reimbursement of the costs of federally sponsored research have tarnished the image of universities. Most of the real issues have long since been addressed, but a residue of misunderstanding and cynicism remains.

At the same time, the federal government has steadily asked the universities to take on added missions and requirements without providing the resources to meet them.

It is in this strained environment that the nation is now debating the future federal role and responsibility for university research and education in science and technology.

The issue before us transcends partisan politics. The issue is whether Washington budgeteers and decision-makers have the political will and the vision to serve society's long-term need for new knowledge, new technologies, and, above all, for superbly educated young men and women.

Sometimes the debate sounds strange to the ears of this academic. During an important recent mark-up session, for example, a Congressman actually commented: "I don't give a damn about the science, but I sure love the politics!"

There are those of us who would like to see those sentiments reversed! And this includes the American public. Recent polls show that nearly 70 percent of the American public thinks it is very important for the government to support research, and nine out of ten want the country to maintain its position as a leader in medical research. In fact, 73 percent are willing to pay higher taxes to support more medical research.

What we need now is not a partisan political debate. What we need to come together again in the best interests of the next generation.

We are all facing pressures to cut costs and become more effective and efficient—in government, academia, and industry.

Industry is doing its part . . . by producing better, more competitive products, improving processes, reducing cycle times, improving quality, and meeting environmental challenges. The same intense competitive pressures that stimulated these changes, however, have increasingly focused industrial R&D on short-term objectives. Appropriately so. But research of more general and

longer term value has been scaled back tremendously.

Industry's nearly total R&D focus on rapidly commercializing products, when combined with growing constraints on support of university research, could devastate our national innovation system. It could well leave us without a shared, evolving base of new scientific knowledge and new technology. It could destroy the primary source of tomorrow's products, jobs, and health.

Many Americans have long been concerned that we were mortgaging our children's future with ever-increasing federal budget deficits. Rightly so. We must not, however, foreclose on their future by failing to invest in their education . . . and in the research that will be the basis of their progress.

We must be wise enough to balance our priorities, with both the present and the future in mind. Such a balance clearly requires our research universities to transform with the times.

I certainly recognize this. Our unique qualities do not exempt us from change. We cannot expect a 1945 policy to be applied unchanged in 1995. Nor can we expect to be exempted from intense budgetary pressures. But there are enduring principles that must be sustained. We must strike the right balance between holding to fundamentals and reforming ourselves if we are to continue our journey toward that "endless frontier."

How are we to do this?

First, each member of the education and research partnership must learn how to be efficient, productive and excellent. Industry has learned how to add value, improve quality, and become more cost-effective—and is significantly more competitive as a result. Government is struggling to do the same. Research universities must follow suit.

At MIT, we have enlisted private-sector help to reengineer many of our administrative activities in order to improve our effectiveness and reduce our annual costs by \$40 million. There will be a corresponding reduction in our staff. Similar efforts are taking place at universities around the country. We also are exploring exciting ways to use new information technologies, like the World Wide Web, to improve teaching and learning. And radical revisions in our engineering and management curricula to meet the needs of a new era are well underway.

Increasing effectiveness is one thing we can do. Specialization is another.

I believe that each college and university should focus on what it does best. There is not enough money for every institution to do everything. We need institutional differentiation. Each of us—from community colleges to research universities—must focus our attention on where we can make the greatest contribution. Across-the-board reductions may be politically palatable, but they are likely to produce mediocrity.

We need to make tough judgment calls and we need to support the most effective programs. This isn't easy. But government at all levels, and industry, must make the decision to support excellence . . . not to engage America's research universities in a war of attrition. Let's not do to our research universities what we've done to our K-12 school system.

Improving productivity and changing what needs to be changed are only partial answers to our problem. Even more important is adhering to the two basic principles that have guided us to success over the past half-century.

The first principle is understanding that research funding is an investment in our future.

A variety of studies put the return on this investment in the range of 25 to 50 percent. A more dramatic assessment is provided by

my colleague Michael Dertouzos, who is the director of MIT's Laboratory for Computer Science. He points out that over the last three decades, the Department of Defense has funded university research in information technology to the tune of some \$5 billion. These university programs created one-third to one-half of the major breakthroughs for the computer and communications industry. Today, these businesses account for \$500 billion of U.S. Gross Domestic Product. That is a return on the investment of at least 3,000 percent.

Another measure of return on the investment in university research is jobs. A 1989 study by the Bank of Boston found that MIT graduates and faculty alone had founded over 600 companies in Massachusetts. These companies, with annual sales totaling \$40 billion, created jobs for over 300,000 people in the region.

Similarly, the Chase Manhattan Bank identified 225 companies in the Silicon Valley founded by MIT students, alumni, and faculty. These companies recorded revenues in excess of \$22 billion, accounting for over 150,000 jobs.

Similar stories can be told by public and private universities all across the country. Remember this return on investment when you hear talk about the cost of research and education in the national budget debate.

In the budget debate, it is important to remember a second principle that also has served us extremely well: federal dollars for university research do double duty. They support the conduct of research and they educate the next generation.

Here is how it works: Most graduate students in science and engineering are supported by federal grants and contracts that pay their tuition and enable them to attend the university. In return for this investment in their future, these students perform much of the actual research. And let me tell you, the lights in their laboratories burn late into the night. They are working to pay for their education.

Student involvement in research is not confined to the graduate level. At MIT, for example, nearly 80 percent of our undergraduates join faculty research teams. Their learning experience and their substantive contributions to research are simply astounding.

This blending of teaching and research is at the heart of America's research universities. For when you think about it, research is the ultimate form of teaching and learning. Fred Terman, a great leader of Stanford University, and a driver in the creation of Silicon Valley, was once asked whether he wanted his university to emphasize teaching or research. Terman's reply was: "I want this to be a learning university." He captured the essence of our institutions.

Now, however, this integration of teaching and research is at risk. Why? Because government agencies are paying less and less of the actual costs of the research they sponsor. In order to make up the difference, universities are being forced to tap scarce resources that are not intended for this purpose. This creates enormous pressures to increase tuition—precisely what we do not want to do.

In addition, government regulations are increasing—in both magnitude and inflexibility. For example, the latest federal regulations have boosted the cost of our undergraduate research program so dramatically that this innovative educational experience is in jeopardy.

The linkage between education and research, the idea of research as an investment rather than as a cost—these are vital principles which we neglect at our peril.

There are several other principles as well, including accountability for results in re-

search and education; a commitment to access and opportunity; the free and open competition of ideas; and a dedication to excellence.

Those young people with the talent to discover new sources of energy, to unlock the workings of the mind, or to find the cure for AIDS come from all strata of our society. Many require financial assistance. All deserve access to the best education we can provide. Because all of us will depend on their leadership and their innovation in the decades ahead.

Who are these young people who will lead us into the future? Let me introduce two of them from MIT.

First, meet Jennifer Mills. Jennifer is a physics undergraduate from Portland, Oregon. In the summer of her junior year, she wrote much of the computer code that was used to produce the remarkable images from the Hubble Space Telescope that we all saw on television when the Shoemaker/Levy comet collided with the planet Jupiter.

And meet James McLurkin, from Baldwin, New York. James graduated last month with an undergraduate degree in electrical engineering and a minor in mechanical engineering. As a senior, he created a tiny robot that may well revolutionize certain kinds of surgery . . . enabling surgeons, for example, to operate inside the body without touching the patient directly.

These are the kinds of young men and women in whom we, through the Federal government, must invest if we are to embrace excellence rather than mediocrity.

Unfortunately, no organized political constituency protects the interests of our future. No interest groups fund telephone banks and direct mail operations to activate grass roots voters on behalf of investments in tomorrow. No political action committee invests in students like Jennifer or James.

But every citizen will suffer if we are short-sighted in the allocation of resources. If we do not invest in research and advanced education, we will not win the battles against polluted air and water, crumbling bridges and highways, infant mortality, Alzheimer's disease, or hunger in the world, to name just a few.

We all have the responsibility to become trustees and guardians of our future . . . and the future of our daughters and sons.

University faculty must continually enhance the learning process, and we must do a better job of explaining to the public what we do, why we do it, and how it relates to their values and needs.

Industry leaders need to explain the benefits to the economy of research and development . . . and their responsibilities to the entire national innovation system.

Public policy makers need to take the long view . . . and they will do that if we, the public, insist that they do.

And, yes, the media have a critical role to play . . . by discussing the importance of these issues and by elevating the national debate.

In many ways, it has been the end of the Cold War that has brought us to this point . . . a point of uncertainty and opportunity.

We now must have the foresight and wisdom to turn our intellectual powers to solving the problems of a new age. We must have the will to sustain our economic security, eradicate the scourge of disease, create the jobs of tomorrow, lift the shadow of ignorance, and heal the earth's environment.

Meeting these challenges will require vision, confidence, and the will to excel. And it will require us to continue exploring the frontiers of the unknown. For the key to a vibrant future lies more in what we do not know, than in what we do know. We must sustain excellence in research and advanced education.

Thank you very much.

CONCLUSION OF MORNING BUSINESS

The PRESIDING OFFICER. Morning business is now closed.

Mr. DOLE addressed the Chair.

The PRESIDING OFFICER. The Chair recognizes the majority leader.

LEGISLATIVE BRANCH APPROPRIATIONS FOR FISCAL YEAR 1996

Mr. DOLE. Mr. President, I am advised that this request has been cleared by the Democratic leader.

I ask unanimous consent that the Senate now turn to the consideration of H.R. 1854, the legislative branch appropriations bill.

The PRESIDING OFFICER. The clerk will state the bill by title.

The assistant legislative clerk read as follows:

A bill (H.R. 1854) making appropriations for the legislative branch for the fiscal year ending September 30, 1996, and for other purposes.

The PRESIDING OFFICER. Is there objection to the immediate consideration of the bill?

There being no objection, the Senate proceeded to consider the bill which had been reported from the Committee on Appropriations, with amendments, as follows:

(The parts of the bill intended to be stricken are shown in boldface brackets, and the parts of the bill intended to be inserted are shown in italic.)

H.R. 1854

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the following sums are appropriated, out of any money in the Treasury not otherwise appropriated, for the Legislative Branch for the fiscal year ending September 30, 1996, and for other purposes, namely:

TITLE I—CONGRESSIONAL OPERATIONS SENATE

EXPENSE ALLOWANCES

For expense allowances of the Vice President, \$10,000; the President Pro Tempore of the Senate, \$10,000; Majority Leader of the Senate, \$10,000; Minority Leader of the Senate, \$10,000; Majority Whip of the Senate, \$5,000; Minority Whip of the Senate, \$5,000; and Chairmen of the Majority and Minority Conference Committees, \$3,000 for each Chairman; in all, \$56,000.

REPRESENTATION ALLOWANCES FOR THE MAJORITY AND MINORITY LEADERS

For representation allowances of the Majority and Minority Leaders of the Senate, \$15,000 for each such Leader; in all, \$30,000.

SALARIES, OFFICERS AND EMPLOYEES

For compensation of officers, employees, and others as authorized by law, including agency contributions, \$69,727,000, which shall be paid from this appropriation without regard to the below limitations, as follows:

OFFICE OF THE VICE PRESIDENT

For the Office of the Vice President, \$1,513,000.

OFFICE OF THE PRESIDENT PRO TEMPORE

For the Office of the President Pro Tempore, \$325,000.

OFFICES OF THE MAJORITY AND MINORITY LEADERS

For Offices of the Majority and Minority Leaders, \$2,195,000.

OFFICES OF THE MAJORITY AND MINORITY WHIPS

For Offices of the Majority and Minority Whips, \$656,000.

CONFERENCE COMMITTEES

For the Conference of the Majority and the Conference of the Minority, at rates of compensation to be fixed by the Chairman of each such committee, \$996,000 for each such committee; in all, \$1,992,000.

OFFICES OF THE SECRETARIES OF THE CON- FERENCE OF THE MAJORITY AND THE CON- FERENCE OF THE MINORITY

For Offices of the Secretaries of the Conference of the Majority and the Conference of the Minority, \$360,000.

POLICY COMMITTEES

For salaries of the Majority Policy Committee and the Minority Policy Committee, \$965,000 for each such committee, in all, \$1,930,000.

OFFICE OF THE CHAPLAIN

For Office of the Chaplain, \$192,000.

OFFICE OF THE SECRETARY

For Office of the Secretary, \$12,128,000.

OFFICE OF THE SERGEANT AT ARMS AND DOORKEEPER

For Office of the Sergeant at Arms and Doorkeeper, \$31,889,000.

OFFICES OF THE SECRETARIES FOR THE MAJORITY AND MINORITY

For Offices of the Secretary for the Majority and the Secretary for the Minority, \$1,047,000.

AGENCY CONTRIBUTIONS AND RELATED EXPENSES

For agency contributions for employee benefits, as authorized by law, and related expenses, \$15,500,000.

OFFICE OF THE LEGISLATIVE COUNSEL OF THE SENATE

For salaries and expenses of the Office of the Legislative Counsel of the Senate, \$3,381,000.

OFFICE OF SENATE LEGAL COUNSEL

For salaries and expenses of the Office of Senate Legal Counsel, \$936,000.

EXPENSE ALLOWANCES OF THE SECRETARY OF THE SENATE, SERGEANT AT ARMS AND DOOR- KEEPER OF THE SENATE, AND SECRETARIES FOR THE MAJORITY AND MINORITY OF THE SENATE

For expense allowances of the Secretary of the Senate, \$3,000; Sergeant at Arms and Doorkeeper of the Senate, \$3,000; Secretary for the Majority of the Senate, \$3,000; Secretary for the Minority of the Senate, \$3,000; in all, \$12,000.

CONTINGENT EXPENSES OF THE SENATE

INQUIRIES AND INVESTIGATIONS

For expenses of inquiries and investigations ordered by the Senate, or conducted pursuant to section 134(a) of Public Law 601, Seventy-ninth Congress, as amended, section 112 of Public Law 96-304 and Senate Resolution 281, agreed to March 11, 1980, \$66,395,000.

EXPENSES OF THE UNITED STATES SENATE CAUCUS ON INTERNATIONAL NARCOTICS CONTROL

For expenses of the United States Senate Caucus on International Narcotics Control, \$305,000.

SECRETARY OF THE SENATE

For expenses of the Office of the Secretary of the Senate, \$1,266,000.

SERGEANT AT ARMS AND DOORKEEPER OF THE SENATE

For expenses of the Office of the Sergeant at Arms and Doorkeeper of the Senate, \$61,347,000.

MISCELLANEOUS ITEMS

For miscellaneous items, \$6,644,000.

SENATORS' OFFICIAL PERSONNEL AND OFFICE EXPENSE ACCOUNT

For Senators' Official Personnel and Office Expense Account, \$204,029,000.

OFFICE OF SENATE FAIR EMPLOYMENT PRACTICES

For salaries and expenses of the Office of Senate Fair Employment Practices, \$778,000.

SETTLEMENTS AND AWARDS RESERVE

For expenses for settlements and awards, \$1,000,000, to remain available until expended.

STATIONERY (REVOLVING FUND)

For stationery for the President of the Senate, \$4,500, for officers of the Senate and the Conference of the Majority and Conference of the Minority of the Senate, \$8,500; in all, \$13,000.

OFFICIAL MAIL COSTS

For expenses necessary for official mail costs of the Senate, \$11,000,000.

RESCISSION

Of the funds previously appropriated under the heading "SENATE", \$63,544,724.12 are rescinded.

ADMINISTRATIVE PROVISIONS

SECTION 1. (a) On and after October 1, 1995, no Senator shall receive mileage under section 17 of the Act of July 28, 1866 (2 U.S.C. 43).

(b) On and after October 1, 1995, the President of the Senate shall not receive mileage under the first section of the Act of July 8, 1935 (2 U.S.C. 43a).

SEC. 2. (a) There is established in the Treasury of the United States within the contingent fund of the Senate a revolving fund, to be known as the "Office of the Chaplain Expense Revolving Fund" (hereafter referred to as the "fund"). The fund shall consist of all moneys collected or received with respect to the Office of the Chaplain of the Senate.

(b) The fund shall be available without fiscal year limitation for disbursement by the Secretary of the Senate, not to exceed \$10,000 in any fiscal year, for the payment of official expenses incurred by the Chaplain of the Senate. In addition, moneys in the fund may be used to purchase food or food related items. The fund shall not be available for the payment of salaries.

(c) All moneys (including donated moneys) received or collected with respect to the Office of the Chaplain of the Senate shall be deposited in the fund and shall be available for purposes of this section.

(d) Disbursements from the fund shall be made on vouchers approved by the Chaplain of the Senate.

SEC. 3. Funds appropriated under the heading, "Settlements and Awards Reserve" in Public Law 103-283 shall remain available until expended.

SEC. 4. Section 902 of the Supplemental Appropriations Act, 1983 (2 U.S.C. 88b-6) is amended by striking the second sentence and inserting the following: "The amounts so withheld shall be deposited in the revolving fund, within the contingent fund of the Senate, for the Daniel Webster Senate Page Residence, as established by section 4 of the Legislative Branch Appropriations Act, 1995 (2 U.S.C. 88b-7)."

SEC. 5. (a) Any payment for local and long distance telecommunications service provided to any user by the Sergeant at Arms and Doorkeeper of the Senate shall cover the total invoiced amount, including any amount relating to separately identified toll calls, and shall be charged to the appropriation for the fiscal year in which the underlying base service period covered by the invoice ends.

(b) As used in subsection (a), the term "user" means any Senator, Officer of the Senate, Committee, office, or entity provided telephone equipment and services by the Sergeant at Arms and Doorkeeper of the Senate.

SEC. 6. Section 4(b) of Public Law 103-283 is amended by inserting before "collected" the following: "(including donated moneys)".

SEC. 7. Section 1 of Public Law 101-520 (2 U.S.C. 61g-6a) is amended to read as follows:

"SECTION 1. (a)(1) The Chairman of the Majority or Minority Policy Committee of the Senate may, during any fiscal year, at his or her