

THE WHITE HOUSE
WASHINGTON

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MEMORANDUM FOR DOUG SOSNIK
KAREN TRAMONTANO
TOM FREEDMAN

FROM: NEAL LANE *neal*

SUBJECT: long-term Strategy for Science and Technology *EW*

I believe that American leadership in science and technology should be among the priorities considered in developing strategy for the next six months. As the President has stated: "We must help to ensure that America continues to lead the revolution in science and technology. Growth is a prerequisite for opportunity, and scientific research is a basic prerequisite for growth."

I. Strategy for Science and Technology

The President has increased the S&T budget in each year of his presidency. The Research Fund for America -- an unprecedented proposal for support of S&T in the FY 1999 budget request -- fared extremely well in Congress. The President has helped to persuade the American people that continued American leadership in the world and a better quality of life for all Americans depend on our enduring commitment to research and to technology. We are following through on that commitment with strong support for research and development appropriations bills and for the specific agenda items and possible Presidential actions that follow.

A. Legislative Agenda

1. IT² Authorization Bill. The President's FY 2000 Budget requests funding for an initiative for Information Technology in the Twenty-First Century (IT²). We are working with the House Science Committee and the Senate Commerce Committee to develop legislation that endorses this strategic initiative in three areas: a) long-term fundamental research in computing, information, and communications; b) increased investment in high-end computing to support particularly challenging research in science and engineering; and c) increased research to identify, understand, anticipate, and address the socioeconomic effects of information technology, including education and workforce issues.
2. Food Safety. The President has been very proactive in addressing the shortcomings of the federal food safety system. On August 25, 1998, the President directed his Council on Food Safety to provide him with an

assessment of a National Academy of Sciences report that called for a major overhaul in federal food safety system. The Council's assessment will be released this week. This is an opportunity for the President to take the initiative once again and call for programmatic consolidation of food safety inspections. This would require legislation to merge the FDA and USDA inspection activities, improving the allocation of resources and consumer protection. Other less ambitious legislative proposals can be developed that address some of the more obvious problems, e.g., overlapping jurisdiction of eggs and egg products.

3. Reauthorization of the Elementary and Secondary Education Act (ESEA). We are working with the Department of Education (ED), DPC, NEC, and OMB on ED's legislative proposal for reauthorizing the ESEA, which authorizes federal educational technology and math/science teacher preparation programs. In educational technology, we are reinforcing a stronger emphasis on integrating technology into the classroom, ensuring that teachers are better prepared to use technology in their instruction, and strengthening research and evaluation around the best uses of educational technology. We are also helping to shape the emerging teacher quality component of the bill, which consolidates the Eisenhower Math and Science Professional Development Grants Program into a larger title, to ensure a continued emphasis on high quality math and science teachers. We expect a proposal from ED in April.
4. International Technology Transfer. We are working with both the House and Senate on legislation that directs a review to improve international technology transfer policies and practices at the Federal laboratories, particularly with respect to cooperative research and development agreements. The purpose is to ensure that defense and economic security issues are appropriately assessed in these international partnerships. The House Bill, H.R. 209 (Technology Transfer Commercialization Act), is expected to begin mark-up in the House Science Committee later in March and the Senate bill is expected to be introduced soon.

B. Possible Presidential Actions

Science and technology underpin all of the major policy areas identified for development of the strategic plan. The following actions (listed in estimated chronological order) often support multiple priorities (which are identified in parentheses).

1. Military and Veterans Health Coordinating Board (S&T; Health; Strong America). The President could **immediately** kick-off the recently established Military and Veterans Health Coordinating Board. The President created this board on Veterans Day by instructing Secretaries West, Shalala, and Cohen to establish it. This Board is designed to heed the lessons learned from the Gulf War. The Board's charter has been approved by the three secretaries, and Board staff will be recruited shortly.

2. Nobel Laureates Letter Supporting CTBT (S&T; Strong America). The American Physical Society is ready to provide this letter to the President for release **anytime** the Administration decides to make a major push on the treaty.
3. Renewing the Federal Government-University Research Partnership for the 21st Century (S&T; Education). The President directed the National Science and Technology Council (NSTC) to produce this report, which will be ready for release in **April**.
4. Presidential Decision Directive on Aviation Safety and Security (S&T; Economy). This PDD, which follows through on the report of the White House Commission, will be ready for announcement in **April**.
5. International Assessment of Ozone (S&T; Environment). This report will be ready for release in **April**. It is an environmental success story that would allow the President to make the point that large, man-made problems can be tackled successfully if there is cooperation among countries, agencies, and the public and private sectors.
6. Federal Policy on Research Misconduct: Protecting the Integrity of the Research Record for Federally Funded Research (S&T; Ethics). This report from the NSTC will be ready for release in **April or May** and underscores the President's emphasis on sustaining public trust in the scientific enterprise.
7. PCAST International Energy Report (S&T; Environment; Economy). Due to the President **May 1**. Will contain recommendations for actions in energy research, development, demonstration, and deployment to promote global economic growth, energy security and environmental quality goals. Can highlight the Administration's position that economic growth and environmental quality can be achieved together, not only domestically, but globally as well. It will also highlight the Administration's position that global environmental and energy issues affect the U.S., and that engaging in trade and technical assistance is a way to both promote domestic goals as well as to encourage global sustainable development.
8. State-Federal-Industry Partnership for K-12 Math and Science Teacher Recruitment (S&T; Education). In **May** we will be ready to announce the pilot program (10 school districts) that will provide core funding for establishing partnerships with local industries to ensure year-round, high-wage employment for math and science teachers.
9. Uniform Guidelines for Research Involving Persons with Mental Disorders (S&T; Health; Ethics). The Federal agencies have begun work in response to a report from the National Bioethics Advisory Commission, and the President could issue a charge to them to adopt uniform guidelines in **May**.
10. Creating the 21st Century U.S. Scientific, Technical, and Engineering Workforce (S&T; Education; Economy). The President directed the NSTC to produce this report, which deals with the participation of women, minorities and the disabled in the science and technology workforce. The report should be ready for release in **May**.

11. *Environmental Report Card Interim Report* (S&T; Environment). This report, requested by the Vice-President, will be released in mid-May. Although not the final product, it would be an important step forward in developing a set of "environmental indicators" that would have the same technical credibility and widespread acceptance as the current set of economic indicators.
12. *NSTC Report on Hypoxia in the Gulf of Mexico* (S&T; Environment; Economy). A 1998 statute requires delivery by May. This is a very important topic for economic development in the Gulf and may warrant Presidential attention. National assessments on hypoxia and harmful algal blooms are due in November.
13. Presidential Review Directive on Climate Observations (S&T; Environment). This PRD could mobilize the Federal agencies to work together to address major shortcomings in the climate observations systems that underlie our ability to mitigate and adapt to climate change. This issue, which could be addressed in June, has legacy overtones similar to Kennedy's formation of the world weather watch.
14. Roundtable on Biofuels (S&T; Environment; Economy; Strong America). This June event could highlight the multi-agency initiative that, by 2010, will make electric power, fuels, and chemicals from biomass. This is an important element of the President's Climate Change Technology Initiative that has not yet been announced.
15. *PCAST Report on Contributions of S&T to the New Economy* (S&T; Economy). In July the President's Committee of Advisors on Science and Technology will produce a report that documents the payoff from the Federal investment in science and technology that the President should transmit to Congress and many other audiences.
16. Conference on Enhancing Innovation (S&T; Economy). We are now in the planning stages for an August conference that would convene industry and government leaders to discuss regulatory, educational, tax, and other issues that impede innovation and identify next steps.

C. Republican Agenda and Likely Response

There is broad, bipartisan support for the President's S&T agenda. The Republicans are, in fact, out in front with several legislative proposals to substantially increase research and development spending (e.g., S.296 sponsored by Senators Rockefeller and Frist), and the President can assert some non-confrontational leadership on these issues through cooperation on legislation and through the events described above.

D. Timing and Strategy

The President should undertake some public events supportive of science and technology investments early this Spring to underscore his commitment to his R&D budget request and to indicate strong support for the request at the

beginning of the budget process. He should sustain this level of activity throughout the Summer to ensure that the Republicans do not begin to view the R&D budget as a place to find offsets for their programs and to position the Administration for successful, final negotiations this Fall.

II. Challenges that Require Administration Response

A. Shelby Disclosure Requirement. Legislation to require burdensome disclosure of research data.

1. **Timing:** The comment period on OMB's proposed rule will end in April, and the rule may issue soon after. OMB is considering publishing a summary of the results and possibly posing some specific questions for additional comment.
2. **Responses:** We are coordinating agency responses to OMB and preparing and NSTC response.
3. **Presidential Action:** The President could issue an Executive Memorandum that puts the OMB action on hold, and instead requires OMB and the agencies to report on the current use and disclosure policies, identify the kinds of data that are produced under federal awards, and make recommendations for improved policies that address Senator Shelby's concerns. This memorandum could refer to the language that was in the original Senate Treasury Appropriations bill calling for exactly this type of report, before it was changed in conference.

B. Anti-Stem Cell Research Legislation. Legislation to prohibit Federal funding of research on stem cells.

1. **Timing:** Several members have already raised objections to the HHS finding that current legislation does not restrict such funding. We expect that legislation closing a perceived loophole in the congressional human embryo research ban will be introduced within the month. It is possible that the legislation will be in the form of a rider on the supplemental appropriations bill (which is currently in Subcommittee markup) rather than as a separate bill.
2. **Responses:** The Administration should object to such legislation and draw the opposition to the creation of human embryos specifically for research purposes, in keeping with the Presidential ban.
3. **Presidential Action:** The President will need to issue a statement of the Administration's position if the prohibition is introduced in April.

C. Development of Suitable International Biosafety Protocol under the Convention on Biological Diversity.

1. **Timing:** Over the next year the United States will need to develop effective strategies to forge a scientifically sound protocol that protects our national interests (agricultural exports) while protecting the world's biological diversity from the negligible risks from biotechnology.
2. **Responses:** The Administration will need to work like-minded nations to build a negotiation coalition and work with other nations so that our position is clearly understood. The Administration should use this as an opportunity to push for Senate ratification of the Convention on Biological Diversity, which would improve greatly our negotiating position.

3. Presidential action: Including the topic of the Biosafety Protocol is appropriate in all international forums.

D. The Collections of Information Antipiracy Act.

1. Timing: H.R. 354 has been introduced and includes many of the same problems as H.R. 2652, which imposed large transaction costs on the conduct of research in its effort to create database protections.
2. Responses: We are working on an alternative bill that would codify the traditional common law misappropriations concept without affecting the scientific enterprise.
3. Presidential action: None