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The National Science and Technology Council (NSTC) was established by Executive Order on November 23, 1993. This cabinet-level council is the principal means for the President to coordinate science, space, and technology policies across the Federal Government. NSTC acts as a virtual agency for science and technology (S&T). The President chairs the NSTC. Membership consists of the Vice President, Assistant to the President for Science and Technology, Cabinet Secretaries and Agency Heads with significant S&T responsibilities, and other White House officials. Through the NSTC, Federal departments and agencies work cooperatively to ensure that Federal science and technology investments support national goals. NSTC Committees prepare R&D strategies that are coordinated across the Federal government to form a comprehensive investment package.

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Note: This document does not represent the final determination in an overall Administration budget decision-making process. The programs presented in this report will have to compete for resources against many other high-priority Federal programs. If these programs compete successfully, they will be reflected in future Administration budgets.

Photo reproduction permissions: Membrane transport functions identified by analysis of coding regions in five complete microbial genomes (*Mycoplasma genitalium*, *Methanococcus jannaschii*, *Synechocystis PCC6803*, *Haemophilus influenzae*, and *Saccharomyces cerevisiae*), reprinted by permission from Nature 387:459-462 copyright 1997 Macmillan Magazines Ltd. Electron micrograph of *Ruminococcus albus* and a schematic representation of the extracellular cellulosome associated with *R. albus* in animal rumens that aids in the digestion of cellulose, provided courtesy of Mark Morrison at Ohio State University and Ed Bayer at the Weizmann Institute, respectively. Electron micrograph of a salt-sensitive soil bacterium, S34, provided courtesy of the American Society for Microbiology.

The Microbe Project Report

January 2001

National Science and Technology Council
Committee on Science
Subcommittee on Biotechnology

Interagency Working Group on Microbial Genomics

EXECUTIVE OFFICE OF THE PRESIDENT
NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

WASHINGTON, D. C. 20502

January 2001

Dear Colleague:

The attached report provides a rationale and interagency plan for the Microbe Project, a coordinated Federal effort in microbial genomics. While it is clear that microbial genomics research offers unprecedented opportunities, a 1999 inventory of Federal programs showed that there are major areas of research as yet untouched that would increase our understanding of the broader microbial world, its diversity, and its potential applications. The National Science and Technology Council, Committee on Science, Subcommittee on Biotechnology's Microbe Project Interagency Working Group was charged with developing a coordinated plan to address research, infrastructure and human resource gaps, which is described within. Implementation of this plan will greatly advance discoveries based on microbial genomics research, leading to exciting new opportunities in the basic sciences, biotechnology, agriculture, human health, energy, and the environment. The private sector and international community are moving forward aggressively in this area; a vigorous public sector program will help support these efforts and ensure that microbial genomic data and resources are open and accessible to all scientists. This is essential to promote future scientific breakthroughs and new practical applications.

We thank the Interagency Working Group and the many individuals who contributed to the development of this report. The Microbe Project will contribute to the scientific enterprise that provides a high quality of life for us and for future generations.

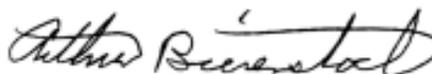
Sincerely,



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Director
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