R\&D Expenditures 1997
R\&D/GDP 1997

Industry
Government
Higher Education

World Share of Publications 1996
33.53\%

Share of Co-authorship with
Canada 1996
Canda
36.57\%
211.9 billion \$US purchasing power parities
2.71\%

R\&D Performed 1997
74.3\%
8.2\%
14.4\%

R\&D Funded 1997
64.3\%
31.9\%
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## 1. Overview of Science and Technology in the USA

During the second half of the $20^{\text {oh }}$ Century the US was largely self sufficient in technology and trade. However, initially through travel and communication (particularly in the scientific area), the arts and culture, and now the internationalization of commerce, the United States has become increasingly linked with the global community. A completely domestic U.S. economy has ceased to exist. U.S. technology development, its economy and many US companies are truly international and intensely interdependent globally. E-business and fast/low cost communications networks have created an international market, not only for conventional products but also for industrial research, and educational services.

US federal support for R\&D continues to flourish in the new era of federal budget surpluses, at least for the most favored prionties. Most areas of federal support of R\&D receive moderate increases in FY 2000, even after a last-minute across-the-board cut in all discretionary spending, while selected high-priority areas in defense and health $\mathrm{R} \& \mathrm{D}$ receive substantial increases. Total federal support for R\&D in FY 2000 increases substantially to $\$ 83.3$ billion, $\$ 4.0$ billion or $5 \%$ more than FY 1999, primarily because of large increases for the Department of Defense (DOD) and the National Institutes of Health (NIH). There are increases in R\&D funding for most agencies, but some receive increases less than the rate of inflation or even small cuts in their R\&D programs.

Health-related R\&D ( $\$ 18.7$ billion, up 14.1\%) and energy R\&D ( $\$ 1.3$ billion, up $9.3 \%$ ) are clear priorities in the FY 2000 budget. Non-defense R\&D totals $\$ 40.9$ billion, an increase of $7.1 \%$. Excluding NIH funding of $\$ 17.8$ billion (up $\$ 2.2$ billion or $14.3 \%$ ), however, non-defense R\&D rises only $2.4 \%$ to $\$ 23.7$ billion, barely ahead of the expected inflation rate of $2 \%$. Funding for non-defense R\&D in FY 2000 is $12.1 \%$ higher than the FY 1994 level in inflation-adjusted terms, but this is due to increases for NIH. If NIH is excluded, non-defense R\&D is $4.4 \%$ below the FY 1994 level in inflation-adjusted terms.

