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XXXIII**

**RESEARCH AND
DEVELOPMENT
FY 2009**

Intersociety
Working
Group

AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE
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Intersociety Working Group

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Preface

Scientific research and development (R&D) continue to be of vital importance to the United States in the 21st century. The federal government supports a significant proportion of the nation's R&D, and its policies profoundly affect the institutions in which this work is carried out. The President's annual budget submission and the congressional debate that ensues are the mechanisms through which policies and priorities for R&D are set. Since 1976, AAAS has published an annual report analyzing R&D in the proposed federal budget in order to make available to the scientific and engineering communities and to policymakers timely and objective information about the Administration's plans for the coming fiscal year.

This year marks the 33rd in the series of AAAS R&D Reports. The effort was begun in 1976 in-house at AAAS, under the auspices of the Committee on Science, Engineering and Public Policy (Appendix 4). Shortly thereafter, it became a collaborative effort, and it now involves contributors from two dozen scientific, engineering, higher education, and industrial associations known collectively as the Intersociety Working Group (see the Directory at the end of this report for contact information for each association). This volume is one of several publications and activities of the AAAS R&D Budget and Policy Program. In addition to functioning as a stand-alone document, the report serves as background for the 33rd Annual AAAS Forum on Science and Technology Policy, held in Washington, DC (May 8-9, 2008). This publication is supplemented by R&D Funding Updates on the AAAS R&D Web site (www.aaas.org/spp/rd), which provide regularly updated information on R&D in the budget.

The overall structure of this report parallels that of recent editions. Part I, the overview, includes discussions of R&D's place in the federal budget, the political context of FY 2009 R&D proposals, analysis of major funding trends for FY 2009, and analyses of funding for research. A chapter on funding for science, engineering, and mathematics education is also included in Part I. A set of overview tables appears at the end of this section.

The chapters in Part II examine the proposed R&D budgets of major federal agencies and departments. Tables detailing those budgets and the budgets of several smaller agencies and departments not featured in the chapters are included at the end of Part II. Finally, Part III consists of a set of cross-cutting analyses that look at the budget in terms of disciplines and areas of research.

Readers should be aware that the chapters in this report have been prepared largely independently of one another and under extremely tight deadline pressure. Although every effort has been made to assure a high quality product, some overlap and inconsistencies among the chapters are, unfortunately, inevitable.

On behalf of the members of the Intersociety Working Group, we would like to express our appreciation to the officers, members, and staffs of the participating organizations for their support and assistance in preparing this report. Our thanks also to the AAAS Committee on Science, Engineering and Public Policy (Appendix 4), which initiated the R&D Program and periodically reviews it and provides guidance to it. We are very grateful to individuals in the Office of Management and Budget, other federal agencies, on congressional staffs, and elsewhere who aided us in collecting the information and advised us on its interpretation.

Kei Koizumi
April 2008