



TASK FORCE ON AMERICAN INNOVATION

Advanced Micro Devices, Inc.
Aerospace Industries Association
Agilent Technologies
Alliance for Science & Technology Research in America
American Association for the Advancement of Science
American Association of Agronomy
American Astronomical Society
American Chemical Society
American Geophysical Union
American Institute for Medical and Biological Engineering
American Institute of Physics
American Mathematical Society
American Physical Society
American Society of Agronomy
American Society for Engineering Education
American Statistical Association
Applied Materials, Inc.
ASME
Association for Computing Machinery
Association of American Universities
Association of Public and Land-grant Universities
Association of University Research Parks
Autodesk
The Babcock & Wilcox Company
Battelle
Business Roundtable
Center for Policy on Emerging Technologies
Computing Research Association
Computing Technology Industry Association
Council on Competitiveness
Council for Chemical Research
Council of Graduate Schools
Council on Scientific Society Presidents
Crop Science Society of America
Cray Inc.
Dow Chemical Company
Federation of American Societies for Experimental Biology
The Geological Society of America
Google, Inc.
IBM Corporation
IEEE-USA
IPC - Association Connecting Electronics Industries
Industrial Research Institute
Infineon Technologies
Information Technology Industry Council
Innovation Advocates
Intel Corporation
Kellen Ventures
Luna Innovations, Inc.
Materials Research Society
Microsoft Corporation
National Association of Manufacturers
National Center for Manufacturing Sciences
National Center for Women & Information Technology
Northrop Grumman Corp.
Presidents Council on Competitiveness
Procter & Gamble
Research/America
Qualcomm
SEMI
Semiconductor Industry Association
Semiconductor Research Corporation
Silicon Valley Leadership Group
Society for Industrial and Applied Mathematics
Society for Science at User Research Facilities
Soil Science Society of America
Southeastern Universities Research Association
SPE
TechAmerica
TechNet
Technology CEO Council
Telecommunications Industry Association

January 25, 2021

President Joseph R. Biden, Jr.
The White House
1600 Pennsylvania Ave NW
Washington, DC 20500

Dear President Biden:

The Task Force on American Innovation (TFAI), a coalition of businesses, trade groups, scientific and engineering societies, and university organizations, which supports federally-funded scientific research, congratulates you on your inauguration and looks forward to working with your new administration.

As you assume the reins of American leadership and begin work on your first budget proposal, we urge you to prioritize support for the U.S. scientific research enterprise, an essential step toward our nation's economic recovery and a critical component of our global competitiveness and prosperity. For decades, federal investments in fundamental research have fueled economic expansion, enabling paradigm-shifting discoveries in our laboratories to spawn new, innovative technologies in the marketplace. In addition, research in the physical sciences directly contributes to advances in America's healthcare and national security. For decades, America has been the undisputed global leader in science, technology and innovation.

As you know, the global landscape is extremely competitive, and while our international counterparts have increased their investments in R&D, U.S. federal investments in fundamental research have been relatively flat. For example, the Information Technology and Innovation Foundation notes that over the 15-year period from 2003-2017, the Chinese government increased its R&D funding by 330 percent, from \$23 billion to \$98 billion, while U.S. government R&D grew just 2 percent, from \$121 billion to \$124 billion. Furthermore, the [2020 Perils of Complacency](#) report by the American Academy of Arts and Sciences noted, "At the very moment this report was being written, China was passing the United States in research and development (R&D) investment (at purchasing power parity, PPP)."

Clear indications of the impacts of this increased competition are outlined in a recently released TFAI report entitled, "[Benchmarks 2019: Second Place America? Increasing Challenges to U.S. Scientific Leadership.](#)" The report details America's waning advantage with respect to other leading nations in five key areas: R&D investment, knowledge production, education, workforce and high-tech sectors of the economy.

We applaud your comments regarding the importance of robust investments in science and engineering research: "We're going to invest in science and technology... We're going to make sure that we can compete with the rest of the world and lead the rest of the world." We strongly support your "Innovate in America" plan to invest \$300 billion in research and development to support "breakthrough technologies" in emerging industries and the principles they represent. We are ready to work with you to that end.

In particular, we believe new and renewed investment should be made to support often neglected areas of basic research. Innovation in America is tied strongly to the complex relationship between basic research and new, industry building technologies.

TFAI strongly urges you to prioritize robust investments in such research, particularly through the National Science Foundation (NSF), the Department of Energy (DOE) Office of Science, the Department of Defense (DOD) Basic Research Organizations, NASA, and the Department of Commerce's National Institute of Standards and Technology (NIST). These investments in research would benefit the U.S. academic, scientific, and industrial base, and spur economic growth across the country. We also would encourage your administration to make investments in research infrastructure programs at NSF, DOE, and NIST to keep America at the leading edge of the physical sciences and computing.

The Task Force on American Innovation will look forward to working with your administration on these critical issues in the new year.

Sincerely,

The Task Force on American Innovation