

TASK FORCE ON AMERICAN INNOVATION

Aerospace Industries Association

Agilent Technologies

Alliance for Science & Technology Research

American Association for the Advancement

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 for Engineering Education

American Statistical Association

Applied Materials, Inc.

ASME

Association for Computing Machiner

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 for Chemical Research

Council of Graduate Schools

Council of Scientific Society Presidents

Council on Competitiveness

Crav 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

Jellen Ventures

Luna Innovations, Inc.

Materials Research Society Microsoft Corporation

National Association of Manufacturers

National Center for Manufacturing Sciences

National Center for Women & Information Technology

National User Facility Organization

Northrop Grumman Corp.

Procter & Gamble Company

Qualcomm

SEMI

Semiconductor Industry Association

Semiconductor Research Corporation

Silicon Valley Leadership Group

Society for Industrial and Applied Mathematics

Southeastern Universities Research Association

TechAmerica

TechNet

Technology CEO Council

Telecommunications Industry Association

Texas Instruments Incorporated

December 8, 2016

Mr. Donald J. Trump Office of the President-elect 1800 F Street NW Washington, DC 20006

Dear President-elect Trump:

The Task Force on American Innovation (TFAI), a coalition of businesses, trade groups, scientific and engineering societies, and university organizations, looks forward to working with you, as the 45th President of the United States. As you form your administration, we ask that you make support for federally funded research in science, engineering, and mathematics a top priority for restoring American competitiveness and returning long-term prosperity and job growth to our economy.

America is a world leader in scientific research and innovation. Maintaining our nation's competitive economic advantage is becoming more difficult with each passing year in an increasingly globalized world economy. Innovative, research-dependent industries are critical to our nation's competitiveness. Funding that supports research and makes possible the transfer of discoveries from the laboratory to the market is vital for protecting and enhancing America's industries and the jobs they provide.

Over the second half of the 20th century, our nation's leaders made investments in scientific research a bipartisan priority, recognizing that discoveries achieved through consistent federal support of research often stimulate productivity, drive economic growth, and create jobs for Americans. One example of such research can be found in the field of nuclear physics, where research investments directly contributed to the development of the magnetic resonance imaging, or the MRI.

Unfortunately, the federal investments responsible in part for the explosive growth of the 20th century have been limited in recent years. Per 2016 data from the American Association for the Advancement of Science, the percentage of GDP invested in federal R&D today is at its lowest point since 1976. Approximately 0.78% of GDP was invested in research in 2016, as compared to 1.23% of GDP in 1976. This percentage is projected to decrease further in 2017 to 0.75%. Many agencies can fund only a small fraction of the quality research proposals they receive. This backlog is a direct result of constrained funding.

At the same time, our nation's strongest economic competitors around the world have prioritized long-term research funding to capture the very innovative opportunities our country is now leaving on the table. The independent Information Technology and Innovation Foundation (ITIF) ranks the U.S. only 10th in its global innovation index, largely because our nation underinvests in long-term research. This imbalance threatens to create an innovation deficit, as other nations threaten our global economic leadership.

Simply put, innovation underpins job creation and economic growth, and federally funded research lays the foundation for innovation. We cannot afford to reduce our efforts while other countries threaten our leadership by funding the basic scientific research that is vital to tomorrow's innovation.

Therefore, to support your efforts to put Americans back to work again, as you develop your budget proposals, TFAI strongly urges you to direct your administration to prioritize robust investments in such research, particularly at the National Science Foundation (NSF), the Department of Energy (DOE) Office of Science, the Department of Defense, NASA, and the Department of Commerce's National Institute of Standards and Technology (NIST).

In addition, given your interest in investing in the nation's infrastructure, we would like to discuss the existing infrastructure modernization programs at NSF, DOE, and NIST. If sufficiently funded, these programs would, in short order, create thousands of new jobs in construction and high-tech engineering and manufacturing. These are immediate U.S. job opportunities, and the research conducted using this infrastructure would contribute to real long-term growth as well.

Few federal investments foster both short- and long-term economic growth the way that research does. We call on you to make this investment a cornerstone of your initiatives to drive innovation, job growth, and prosperity in our country.

Once your key advisory staff are in place, TFAI would very much appreciate the opportunity to meet with those in your administration charged with overseeing federal research to discuss these issues and exchange ideas on how we can move forward effectively on funding and related policies. Please do not hesitate to have your staff contact TFAI through our Executive Director, Stewart Young (stewart@corleydc.com), if you have any questions or require any further information.

Sincerely,

The Task Force on American Innovation