

INNOVATION: AN AMERICAN IMPERATIVE

A call to action by American industry, higher education, science, and engineering leaders urging Congress to enact policies and make investments that ensure the United States remains the global innovation leader.

Our nation knows what it takes to innovate: a sustained commitment to scientific research, a world-class workforce, and an economic climate that rewards entrepreneurship and innovation. As the most dynamic and prosperous nation in the world, the United States has long benefitted from policies and investments that have promoted innovation and in turn driven productivity and economic growth, bolstered American trade, ensured our health and national security, and safeguarded the American dream. Our leadership is now at risk because of years of under-prioritizing federal scientific research investments and policies that promote innovation.

Now is not the time to rest on past success. As noted by the American Academy of Arts and Sciences in its 2014 Report *Restoring the Foundation: The Vital Role of Research in Preserving the American Dream*, "There is a deficit between what America is investing and what it should be investing to remain competitive, not only in research but in innovation and job creation." Competitor nations are challenging our leadership by copying our playbook for success. At the same time our nation's support for scientific research and innovation is stagnating. If these trends continue, other countries will soon surpass the United States as the global innovation leader.

We must heed the warnings in the *Restoring the Foundation* report and other salient reports of the past decade and act decisively. In particular, Congress must:

Renew the federal commitment to scientific discovery

by ending sequestration's deep cuts to discretionary spending caps and providing steady and sustained real growth in funding of at least four percent for basic scientific research at: the National Science Foundation, the National Institutes of Health, the Department of Energy's Office of Science, the Department of Defense, NASA, the National Institute of Standards and Technology, USDA, and NOAA;

Make permanent a strengthened federal R&D tax credit

as a part of comprehensive tax reform to encourage more private-sector innovation investment here in America instead of in competitor countries;

Improve student achievement in science, technology, engineering, mathematics (STEM)

through increased funding of proven programs and incentives for science and math teacher recruitment and professional development;

Reform U.S. visa policy

to welcome and keep highly educated international professionals, particularly those holding STEM degrees from U.S. universities;

Take steps to streamline or eliminate costly and inefficient regulations

and practices governing federally funded research to help unburden researchers to focus more time on conducting research and training the next generation of scientists, engineers, health care professionals, and business leaders;

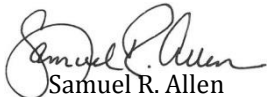
Reaffirm merit-based peer review

as the primary mechanism major federal agencies should employ in making competitive scientific research grants to ensure the most effective use of taxpayer dollars; and

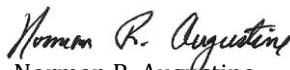
Stimulate further improvements in advanced manufacturing

through support for programs aimed at accelerating manufacturing innovation and new federal-industry-academic partnerships.

We, the signatories, urge support for these actions to keep the United States the global innovation leader. We stand ready to do our part.



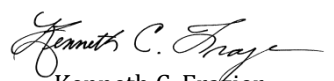
Samuel R. Allen
Chairman & CEO
John Deere



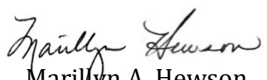
Norman R. Augustine
Co-Chair
Restoring the Foundation



Wes Bush
Chairman, President & CEO
Northrop Grumman



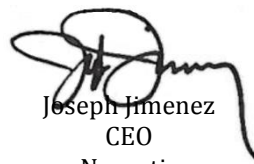
Kenneth C. Frazier
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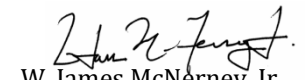
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Royal Dutch Shell plc



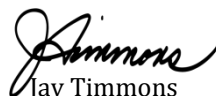
Joseph Jimenez
CEO
Novartis



W. James McNerney, Jr.
Chairman of the Board &
CEO
The Boeing Company



Satya Nadella
CEO
Microsoft



Jay Timmons
President & CEO
National Association of
Manufacturers

Academy of Radiology Research
 Acoustical Society of America
 Ad Hoc Group for Medical Research
 Aerospace Industries Association
 Agricultural & Applied Economics Association
 AMD
 American Academy of Arts & Sciences
 American Anthropological Association
 American Association for Dental Research
 American Association for the Advancement of Science
 American Association for the Study of Liver Diseases
 American Association of Colleges of Pharmacy
 American Association of Mycobacterial Diseases
 American Association of Petroleum Geologists
 American Association of Physical Anthropologists
 American Association of Physicists in Medicine
 American Association of Physics Teachers
 American Association of State Colleges and Universities
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 American Chemical Society
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 American Dairy Science Association
 American Dental Education Association
 American Educational Research Association
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 American Geosciences Institute
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 American Physiological Society
 American Phytopathological Society
 American Political Science Association
 American Psychological Association
 American Society for Engineering Education
 American Society for Microbiology
 American Society for Nutrition
 American Society of Agronomy
 American Society of Animal Science
 American Society of Plant Biologists
 American Sociological Association
 American Veterinary Medical Association
 Archaeological Institute of America
 Arizona Nevada Academy of Science (ANAS)
 ASME
 Association for Information Science and Technology
 Association for Psychological Science
 Association for Women in Mathematics
 Association for Women in Science
 Association of American Geographers
 Association of American Medical Colleges
 Association of American Universities
 Association of American Veterinary Medical Colleges
 Association of Independent Research Institutes
 Association of Public and Land-grant Universities
 Association of Research Libraries
 ASTRA, Alliance for Science & Technology Research in America
 Battelle
 Biophysical Society
 Biotechnology Industry Organization
 Boise State University
 Boston University
 Botanical Society of America
 Business-Higher Education Forum
 California Institute of Technology
 California Polytechnic State University
 Carnegie Mellon University
 Case Western Reserve University
 Center for Policy on Emerging Technologies
 Clemson University
 Coalition for National Science Funding
 Coalition for National Security Research
 Colorado State University
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 Council of Scientific Society Presidents
 Council on Competitiveness
 Crop Science Society of America
 Duke University
 Earthquake Engineering Research Institute
 Ecological Society of America
 EDUCAUSE
 Emory University
 Energy Sciences Coalition
 Entomological Society of America
 EPICenter Memphis
 FASS
 Federation of American Societies for Experimental Biology
 Federation of Associations in Behavioral and Brain Sciences
 Florida State University
 Foundation for Science and Disability
 Genetics Society of America
 Geological Society of America
 Georgia Institute of Technology
 Google
 Greater Madison Chamber of Commerce
 Harvard University
 Human Factors and Ergonomics Society
 IBM
 Idaho Academy of Science and Engineering
 IEEE-USA
 Institute of Food Technologists
 Intel Corporation
 IPC - Association Connecting Electronics Industries
 Jefferson Science Associates LLC
 Kent State University
 Kentucky Academy of Science
 Linguistic Society of America
 Louisiana State University
 Lowell Observatory
 Massachusetts Institute of Technology
 Materials Research Society
 Mathematical Association of America
 Michigan State University
 Michigan Technological University
 MN-SBIR
 National Alliance for Eye and Vision Research
 National Association of Colleges and Employers
 National Association of Geoscience Teachers
 National Association of Graduate-Professional Students
 National Association of Marine Laboratories
 National Center for Science Education
 National Center for Technological Literacy-Museum of Science
 National Coalition for Food and Agricultural Research
 National Council for Science and the Environment
 National Ground Water Association
 National Science Education Leadership Association
 National Science Teachers Association
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 New York University
 North Carolina Academy of Science
 North Dakota State University
 Northeastern University
 Northern Illinois University
 Oklahoma State University
 ON Semiconductor
 ONAMI
 Oregon State University
 Pace University
 Parapsychological Association
 Penn State University
 Phiston Technologies, Inc.
 Population Association of America
 Portland State University
 Poultry Science Association
 Princeton University
 Rensselaer Polytechnic Institute
 Research!America
 Rutgers, the State University of New Jersey
 SAGE
 Semiconductor Equipment & Materials International (SEMI)
 Semiconductor Industry Association
 Semiconductor Research Corporation
 Silicon Valley Leadership Group
 Society for In Vitro Biology
 Society for Industrial and Applied Mathematics
 Society for Industrial and Organizational Psychology
 Society for Neuroscience
 Society of the Study of Evolution
 Society of Toxicology
 Soil Science Society of America
 South Dakota State University
 Southern Illinois University System
 SPIE, the international society for optics and photonics
 SRI International
 SSTI
 Stanford University
 State University of New York
 Stony Brook University
 Supporters of Agricultural Research Foundation
 SURA
 Syracuse University
 Task Force on American Innovation
 TechVision21
 Texas A&M University
 Texas Instruments Incorporated
 Texas Tech University
 The Coalition for the Life Sciences
 The Electrochemical Society
 The Industrial Research Institute
 The Johns Hopkins University
 The New England Council
 The Ohio State University
 The Optical Society
 The Procter & Gamble Company
 The Science Coalition
 The University of Alabama at Birmingham
 Tufts University
 UNAVCO
 United for Medical Research
 Universities Research Association
 University at Buffalo, State University of New York
 University City Science Center
 University Corporation for Atmospheric Research
 University of Arkansas
 University of California System
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 University of Cincinnati
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 University of Louisville
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 University of Michigan
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 University of Mississippi
 University of Missouri System
 University of Nebraska
 University of Nevada, Reno
 University of New Hampshire
 University of New Mexico
 University of North Carolina at Chapel Hill
 University of North Carolina System
 University of North Carolina Wilmington (UNCW)
 University of Notre Dame
 University of Oklahoma
 University of Oregon
 University of Pennsylvania
 University of Pittsburgh
 University of Rochester
 University of South Dakota
 University of South Florida
 University of Southern California
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