

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;

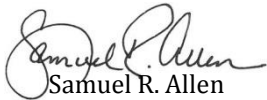
Reaffirm merit-based peer review

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

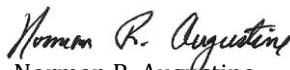
Stimulate further improvements in advanced manufacturing

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.



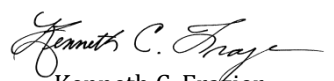
Samuel R. Allen
Chairman & CEO
John Deere



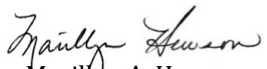
Norman R. Augustine
Co-Chair
Restoring the Foundation



Wes Bush
Chairman, President & CEO
Northrop Grumman



Kenneth C. Frazier
Chairman & CEO
Merck & Co., Inc



Marilyn A. Hewson
Chairman, President, & CEO
Lockheed Martin Corporation



Charles O. Holliday
Chairman
Royal Dutch Shell plc



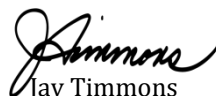
Joseph Jimenez
CEO
Novartis



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
AMD
Agricultural & Applied Economics Association
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
American Astronomical Society
American Chemical Society
American Council on Education
American Dairy Science Association
American Dental Education Association
American Educational Research Association
American Geophysical Union
American Geosciences Institute
American Institute of Aeronautics and Astronautics
American Institute of Chemists
American Institute of Physics
American Mathematical Society
American Meteorological Society
American Physical Society
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
Columbia University
Computing Research Association
Consortium for Ocean Leadership
Consortium of Social Science Associations
Cornell University
Council of Graduate Schools
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
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
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
New Mexico State University
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
Piston 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
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
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
University at Buffalo, State University of New York
University Corporation for Atmospheric Research
University of Arkansas
University of California System
University of California, Berkeley
University of California, Davis
University of California, Irvine
University of California, Los Angeles
University of California, Merced
University of California, Riverside
University of California, San Diego
University of California, Santa Barbara
University of California, Santa Cruz
University of Cincinnati
University of Colorado at Colorado Springs
University of Colorado Boulder
University of Colorado Denver
University of Colorado, Anschutz Medical Campus
University of Delaware
University of Georgia
University of Hawaii
University of Illinois
University of Illinois at Chicago
University of Illinois at Urbana-Champaign
University of Kansas
University of Louisville
University of Maryland
University of Michigan
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
University of Notre Dame
University of Oklahoma
University of Oregon
University of Pennsylvania
University of Pittsburgh
University of Rochester
University of South Florida
University of Southern California
University of Tennessee
University of Toledo
University of Vermont
University of Virginia
University of Washington
University of Wisconsin System
University of Wisconsin-Madison
University of Wisconsin-Milwaukee
University of Wyoming
Utah State University
Vanderbilt University
Vermeer Corporation
Washington State University
Washington University in St. Louis
Wayne State University
West Virginia University
Western Michigan University
Woods Hole Oceanographic Institution