

# 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;

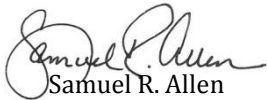
## ***Reaffirm merit-based peer review***

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

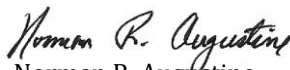
## ***Stimulate further improvements in advanced manufacturing***

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.



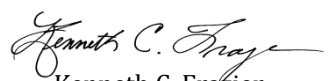
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Chairman & CEO  
John Deere



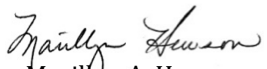
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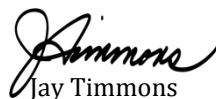
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American Association for the Advancement of Science  
American Association for the Study of Liver Diseases  
American Association of Colleges of Pharmacy  
American Association of Mycobacterial Diseases  
American Association of Petroleum Geologists  
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  
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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  
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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  
University of Notre Dame  
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University of Oregon  
University of Pennsylvania  
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University of South Florida  
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University of Tennessee  
University of Toledo  
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University of Washington  
University of Wisconsin System  
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University of Wisconsin-Milwaukee  
University of Wyoming  
Utah State University  
Vanderbilt University  
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Washington University in St. Louis  
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