Science and the Public Interest

An Open Letter to President-Elect Trump and the 115th Congress

Scientific knowledge has played a critical role in making the United States a powerful and prosperous nation and improving the health and well-being of Americans and people around the world. From disease outbreaks to climate change to national security to technology innovation, people benefit when our nation's policies are informed by science unfettered by inappropriate political or corporate influence.

To build on this legacy and extend the benefits of science to all people, including Americans who have been left behind, the federal government must support and rely on science as a key input for crafting public policy. Policy makers and the public alike require access to high-quality scientific information to serve the public interest. There are several actions Congress and the Trump administration should take to strengthen the role that science plays in policy making.

First, creating a strong and open culture of science begins at the top. Federal agencies should be led by officials with demonstrated track records of respecting science as a critical component of decision making. Further, recognizing that diversity makes science stronger, administration officials should welcome and encourage all scientists regardless of religious background, race, gender, or sexual orientation.

Second, Congress and the Trump administration should ensure our nation's bedrock public health and environmental laws—such as the Clean Air Act and the Endangered Species Act—retain a strong scientific foundation, and that agencies are able to freely collect and draw upon scientific data to effectively carry out statutory responsibilities established by these laws. They should also safeguard the independence of those outside the government who provide scientific advice.

Third, Congress and the Trump administration should adhere to high standards of scientific integrity and independence in responding to current and emerging public health and environmental threats. Decision makers and the public need to know what the best-available scientific evidence is, not what vested interests might wish it to be. Federally funded scientists must be able to develop and share their findings free from censorship or manipulation based on politics or ideology. These scientists should, without fear of reprisal or retaliation, have the freedom and responsibility to:

- conduct their work without political or private-sector interference;
- candidly communicate their findings to Congress, the public, and their scientific peers;
- publish their work and participate meaningfully in the scientific community;
- disclose misrepresentation, censorship, and other abuses of science; and
- ensure that scientific and technical information coming from the government is accurate.

Finally, Congress and the Trump administration should provide adequate resources to enable scientists to conduct research in the public interest and effectively and transparently carry out their agencies' missions. The consequences are real: without this investment, children will be more vulnerable to lead poisoning, more people will be exposed to unsafe drugs and medical devices, and we will be less prepared to limit the impacts of increasing extreme weather and rising seas.

These steps are necessary to create a thriving scientific enterprise that will strengthen our democracy and bring the full fruits of science to all Americans and the world. The scientific community is fully prepared to constructively engage with and closely monitor the actions of the Trump administration and Congress. We will continue to champion efforts that strengthen the role of science in policy making and stand ready to hold accountable any who might seek to undermine it.

Signatories

*Nobel Prize †National Medal of Science

Andreas Acrivos† *Stanford University*

Peter Agre* *Johns Hopkins University*

Jeffrey H. Altschul Statistical Research, Inc.

Kenneth J. Arrow*† *Stanford University*

Francisco J. Ayala* University of California, Irvine

David Baltimore† *California Institute of Technology*

Mark A. Barteau University of Michigan

Georges C. BenjaminAmerican Public Health Association

R. Stephen Berry University of Chicago

Lewis M. Branscomb University of California, San Diego

Ken Caldeira Carnegie Institution for Science

Mark A. Cane Columbia University

F. Stuart Chapin III University of Alaska

Eric Chivian*

Harvard Medical School

Robert W. Corell *Global Science Associates*

Gretchen C. Daily *Stanford University*

Ruth DeFriesColumbia University

Johann Deisenhofer* *University of Texas Southwestern Medical Center*

Rodolfo Dirzo Stanford University

Philip R. DuffyWoods Hole Research Center

Paul R. EhrlichStanford University

Kerry Emanuel *Massachusetts Institute of Technology*

James A. Estes *University of California, Santa Cruz*

Christopher B. FieldStanford University

Edmond H. Fischer* *University of Washington*

Charles A. FrancisUniversity of Nebraska-Lincoln

Richard Garwin†
IBM Fellow Emeritus

Peter GentNational Center for Atmospheric Research

Sheldon Glashow* *Boston University*

Peter H. Gleick *Pacific Institute*

Affiliations are listed for identification purposes only.

Kurt Gottfried

Cornell University

Carol W. Greider*

Johns Hopkins University

Roger Guillemin*

The Salk Institute for Biological Studies

James E. Hansen

Columbia University

James S. Harris

Stanford University

Oliver Hart*

Harvard University

Geoffrey M. Heal

Columbia University

Dudley R. Herschbach*

Texas A&M University

Roald Hoffmann*+

Cornell University

Alice S. Huang

California Institute of Technology

Kathy Jacobs

University of Arizona

Daniel H. Janzen

University of Pennsylvania

Daniel M. Kammen

University of California, Berkeley

Anne R. Kapuscinski

Dartmouth College

David Keith

Harvard University

Kenneth H. Keller

John Hopkins University

Wolfgang Ketterle*

Massachusetts Institute of Technology

Daniel Kleppner+

Massachusetts Institute of Technology

Lawrence M. Krauss

Arizona State University

Neal F. Lane

Rice University

Anthony Leggett*

University of Illinois at Urbana-Champaign

Anders Levermann

Columbia University

Simon A. Levin+

Princeton University

Michael C. MacCracken

Climate Institute

Eric S. Maskin*

Harvard University

James J. McCarthy

Harvard University

Bonnie McCay

Rutgers University

Jerry M. Melillo

Marine Biological Laboratory

James Merchant

University of Iowa

Matthew S. Meselson

Harvard University

William E. Moerner*

Stanford University

Mario J. Molina*

University of California, San Diego

William Moomaw

Tufts University

Harold A. Mooney

Stanford University

Affiliations are listed for identification purposes only.

K.M. Venkat Narayan

Emory University

Michael Oppenheimer

Princeton University

Jonathan Overpeck

University of Arizona

Stephen Pacala

Princeton University

C. Kumar Patel†

University of California, Los Angeles

Stuart L. Pimm

Duke University

Thomas Dean Pollard

Yale University

G. Carleton Ray

University of Virginia

John P. Reganold

Washington State University

Linda Rosenstock

University of California, Los Angeles

Liane B. Russell

Oak Ridge National Laboratory

Benjamin Santer

Member, National Academy of Sciences

Randy Schekman*

University of California, Berkeley

William H. Schlesinger

Duke University

Matt Schwartz

Harvard University

Robert J. Shiller*

Yale University

Charles Sing

University of Michigan

Susan Solomon+

Massachusetts Institute of Technology

Thomas A. Steitz*

Yale University

Karel Svoboda

Howard Hughes Medical Institute

Max Tegmark

Massachusetts Institute of Technology

Kevin E. Trenberth

National Center for Atmospheric Research

Harold E. Varmus*+

Weill Cornell Medical College

Steven Weinburg*+

University of Texas at Austin

Zena Werb

University of California, San Francisco

Eric F. Wieschaus*

Princeton University

Frank Wilczek*

Massachusetts Institute of Technology

Robert Woodrow Wilson

Harvard-Smithsonian Center for Astrophysics

Steven C. Wofsy

Harvard University

George M. Woodwell

Woods Hole Research Center

Melinda A. Zeder

Smithsonian National Museum of Natural History