GOOD SCIENCE ISN'T A LUXURY; IT'S A NECESSITY.

August 18, 2025

Dear Director Kratsios,

America's future hinges on a simple truth: I**nvesting in good science isn't a luxury; it's a necessity.** From breakthroughs in medicine to technological advancements that drive our economy, rigorous, unbiased scientific inquiry has always been the bedrock of our progress. As members of the diverse scientific, research, public health, academic communities and organizations representing individuals and their families, we are keenly interested in the recent Executive Order «Restoring the Gold Standard in Science.» We share the overarching goal of ensuring that science serving the public good is of the highest quality, integrity, and utility.

However, we must underscore a vital point: **The gold standard for science exists**, and its success is demonstrated in every facet of American life—from the development of life-saving vaccines and the journey to the moon to the technological revolution that powers our modern economy. It's built on established norms and values that have, for centuries, guided the global scientific enterprise. We urge policymakers to recognize that any efforts to strengthen scientific integrity must build upon, rather than undermine, these foundational pillars. Directives that bypass the expert judgment of the established scientific community, or impose rigid, personally motivated criteria on scientific evaluation, will stifle innovation, discourage crucial research, and ultimately erode public trust. While scientific progress depends on rigorous debate and challenging existing ideas, this process is not a matter of opinion. It requires that all claims, especially dissenting ones, be backed by verifiable evidence and withstand the same level of scrutiny as the ideas they challenge.

This "gold standard" is a methodological, evidence-based foundation from which we can build reliable knowledge and strengthen the future of scientific exploration and discovery. We must continue to strive for a community-driven enterprise where ideas are rigorously tested, subjected to the scrutiny of peers, and continuously refined or corrected in the face of new evidence. Inherent in this process are core values that include:

Empirical Rigor: A relentless commitment to evidence-based discovery through meticulous observation, experimentation, and data analysis.

Objectivity and Impartiality: A steadfast pursuit of truth, free from political, ideological, or commercial interference.

Transparency and Open Inquiry: The open sharing of methods, data (where appropriate and ethical), and findings to enable scrutiny, replication, and the building of cumulative knowledge.

Peer Review: The cornerstone of quality control, where proposed research and findings are rigorously evaluated by independent experts before dissemination.

Reproducibility and Replicability: The ability to obtain the same findings when repeating procedures, and the expectation that experiments can be independently recreated by others with consistent scientific results.

Continuous Self-Correction: The inherent capacity of science to revise understanding in light of new evidence gathered using rigorous scientific methods.

Range of Thought and Experience: Gathering input from researchers of varied backgrounds, disciplines, and perspectives is essential for challenging assumptions, preventing groupthink, identifying and reducing errors, and fostering more creative and robust solutions to complex problems."

These values are not abstract ideals but are actively fostered through the following key practices that govern scientific work:

Scientific Training and Education: The meticulous process of educating future scientists instills critical thinking, ethical conduct, and methodological expertise.

Research Methodology: The development and application of sound research methodologies, experimental design, and statistical analysis are paramount to ensure valid and robust conclusions.

Publication and Dissemination: The system of scholarly publishing, centered on rigorous peer review in reputable journals, vets research findings for quality and adherence to scientific standards before they enter the public domain.

We stand ready to engage in constructive dialogue with the Executive Office of the President, Congress, and all relevant federal agencies. By supporting and upholding the integrity of our existing scientific ecosystem, we can collectively ensure that federally funded science remains a vital and trusted resource for informing policy, fostering innovation, and addressing the nation's most pressing challenges.

Sincerely,

American Psychological Association
American Psychological Association Services Inc.
Alliance of Nurses for Healthy Environments
American Academy of Allergy, Asthma & Immunology
American Academy of Hospice and Palliative Medicine
American Association for Anatomy
American Association for Dental, Oral, and Craniofacial Research
American Association of Immunologists
American Association of Physicists in Medicine
American Association on Health and Disability
American Astronomical Society
American College of Chest Physicians
American College of Medical Genetics and Genomics
American Educational Research Association
American Foundation for Suicide Prevention
American Geophysical Union
American Industrial Hygiene Association
American Institute of Biological Sciences
American Medical Informatics Association (AMIA)
American Oil Chemists' Society (AOCS)
American Physiological Society
American Political Science Association
American Psychiatric Association
American Society for Biochemistry and Molecular Biology
American Society for Clinical Pharmacology & Therapeutics
American Society for Microbiology
American Society for Pharmacology and Experimental Therapeutics (ASPET)
American Society of Agronomy
American Society of Civil Engineers
American Society of Tropical Medicine and Hygiene
American Speech-Language-Hearing Association
American Thoracic Society
Americans for Medical Progress
Association for Psychological Science
Association for the Sciences of Limnology and Oceanography
Association of Environmental Engineering and Science Professors
Association of Population Centers
Asthma and Allergy Foundation of America
Bigelow Laboratory for Ocean Sciences
Biophysical Society
Botanical Society of America
CFHA: The Integrated Care Association
Climate Psychiatry Alliance
Coalition for Academic Scientific Computation
Coalition for the Advancement and Application of Clinical Science
Coastal and Estuarine Research Federation
Columbia University Vagelos College of Physicians & Surgeons
Consortium of Social Science Associations
Council of Graduate Departments of Psychology (COGDOP)
Council on Undergraduate Research
Crop Science Society of America
Endocrine Society
Entomological Society of America
Federation of American Societies for Experimental Biology
Federation of Associations in Behavioral and Brain Sciences
Foundation for Sarcoidosis Research (FSR)
Gerontological Society of America
ICWUC Center for Worker Health and Safety Education
International OCD Foundation
International Society for Stem Cell Research
International Society of Psychiatric-Mental Health Nurses
Lakeshore Foundation
Massachusetts Association for Mental Health
National Alliance on Mental Illness
National Association of Environmental Professionals
National Association of Pediatric Nurse Practitioners
National Postdoctoral Association
Organization of Biological Field Stations
Physicians for Social Responsibility
Population Association of America
Psychological Clinical Science Accreditation System
Psychonomic Society
Social & Affective Neuroscience Society (SANS)
Society for Behavioral Neuroendocrinology
Society for Freshwater Science
Society for Industrial and Organizational Psychology
Society for Personality and Social Psychology
Society for Public Health Education
Society for Research in Child Development (SRCD)
Society for the Psychological Study of Social Issues (SPSSI)
Society of Behavioral Medicine
Society of Environmental Toxicology and Chemistry of North America (SETAC North America)
Society of General Physiologists
Soil Science Society of America
SPIE, the international society for optics and photonics
The Association for Research in Vision and Ophthalmology (ARVO)
The Protein Society
The Wildlife Society
Treatment Advocacy Center
United States Pharmacopeia
Vision Sciences Society
Woodwell Climate Research Center

CC:
National Science Foundation (NSF)
National Institutes of Health (NIH)
Agency for Healthcare Research and Quality (AHRQ)
Advanced Research Projects Agency for Health (ARPA-H)
Defense Advanced Research Projects Agency (DARPA)
Department of Energy Office of Science (DOE)
Environmental Protection Agency (EPA)
National Aeronautics and Space Administration (NASA)
National Institute of Justice (NIJ)
National Institute for Occupational Safety and Health (NIOSH)
Department of Agriculture (USDA)
House Committee on Science Space & Tech
Senate Committee on Commerce, Science, and Transportation
House Committee on Energy and Commerce
Senate Committee on Health, Education, Labor, and Pensions
House Committee on Appropriations
Senate Committee on Appropriations
House Committee on Agriculture
Senate Committee on Agriculture, Nutrition, and Forestry