

CITIZENS AND SCIENTISTS MUST STAND UP FOR U.S. SCIENCE

Even if not all readers of this website follow in detail the attitude of the current Administration towards science, it is hard to avoid the realization that scientific expertise is not highly valued by those now in high level positions of the Federal Government.

In response to this, I, and two colleagues who are fellow members of the National Academy of Sciences, wrote an Editorial with the title above. It was submitted to the highly regarded Mercury-News (formerly the San Jose Mercury), a paper with a circulation of over a half million.

Our Editorial was published on Wednesday, January 3rd. I am reproducing the text below, but you may also see the Mercury-News online version here:

<https://www.mercurynews.com/2018/01/03/opinion-trump-administrations-attacks-on-science-are-taking-a-grim-toll/>. If you access this site you will note that the Editors changed our title, though we prefer the title above.

I hope everyone will take to heart the importance of advocating for science in as many ways as they can, and I would ask that you circulate the editorial as widely as possible. I would especially like to call attention to the quote from Neil DeGrasse Tyson with which we close our Editorial: *“For lawmakers to not heed the advice of esteemed scientists on matters of science, in this the 21st century, signals the beginning of the end of an informed democracy.”*

Herewith the text of the Editorial:

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A new Federal Administration was installed less than a year ago. Since then, we have seen a March for Science and eloquent opinion pieces urging protection of the scientific enterprise. But the devaluing of science and harassment of scientists have only increased in severity. This should not stand.

Scientific input is crucial to analysis and formulation of policy. The dismissal of scientific understanding by the current Administration has affected the physical, biological, social, and medical sciences. This anti-science perspective is manifest in numerous ways. Informative summaries of well-established science are removed from Federal websites. Government scientists are abruptly transferred from jobs requiring their expertise to jobs that do not. Scientific advisory groups are disbanded. Severe budgetary cuts are proposed for government agencies performing important research. Unqualified individuals are appointed to government positions where scientific qualifications are essential. Key science positions at government agencies remain unfilled.

The most egregious attacks have been on climate science. U.S. withdrawal from the Paris Accord leaves the U.S. isolated from the international community – the only U.N. member declining to participate in the Accord. Climate scientists have been prevented from speaking at

scientific conferences. Some are forbidden from using phrases affirming the reality and seriousness of human-induced climate change, or from speaking to the press about matters directly related to their research.

A serious current concern is the stated intention of EPA head Scott Pruitt to assemble a “Red Team/Blue Team” exercise to re-litigate all aspects of climate science. This call for a “do-over” ignores many previous assessments of climate science by highly qualified experts. These assessments have consistently acknowledged the reality and dangers of anthropogenic climate change. By calling for a new “Red Team/Blue Team” process, Mr. Pruitt is implicitly questioning the legitimacy of all previous assessments, and seeks to foster the erroneous impression of deep uncertainty. A similar strategy was used by the tobacco industry in challenging links between smoking and cancer.

How should all citizens – not just scientists – behave in this new Age of Unreason? One perspective is that we should simply continue with our normal lives. There may have been merit in this at the beginning of the Administration, when it was not clear how campaign rhetoric would translate into governance. Today, the time for strategic patience is over. Silence is complicity.

Scientists have a special responsibility to defend scientific understanding, and to advocate for the use of sound science in public policymaking. Citizens have responsibilities, too. We are not powerless. We can contact our Congressional representatives. Write letters to newspapers. Become active on social media. Speak publicly about the dangers of embracing scientific ignorance. Enlist our friends and neighbors to speak out in defense of science.

Beyond individual actions, we see a pressing need for leading scientific institutions to use their voices. Among the goals of the American Association for the Advancement of Science is to “Promote and defend the integrity of science and its use.” It is important to support the AAAS and other organizations that share this objective. As members of the National Academy of Sciences, we particularly support the NAS mission to provide “independent, objective advice to the nation on matters related to science and technology.”

In fall 2016 two of us, and two others, organized an Open Letter pointing out the serious consequences of U.S. withdrawal from the Paris Accord. It was signed by 377 members of the NAS. Commenting on the Open Letter, Neil DeGrasse Tyson said: “For lawmakers to not heed the advice of esteemed scientists on matters of science, in this the 21st century, signals the beginning of the end of an informed democracy.”

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