A Fight Worth Fighting

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"Anything that doesn't fit into the political appointees' ideological, theological, or political agenda is ignored, marginalized, or simply buried," said former Surgeon General, Dr. Richard Carmona, as quoted in the Baltimore Sun. Three past surgeons general, including Carmona, C. Everett Koop, and David Satcher testified before Congress that they had each encountered political interference against medical positions on morally-sensitive issues. Reports of similar complaints by other scientists are numerous.

Granted that some of these issues, such as sexuality, drug use, and global warming can evoke heated responses and varied positions, but unless government officials are willing to assert that their experiences and qualifications are more than equal to those whom they select for high office based upon their lifetime careers in medical, scientific, or engineering careers, then government officials should defer to the opinions and judgments of those appointees. A surgeon general, for instance, is the nation's physician, and, as such, is concerned with the physical health and well-being of the populace. Moral judgments are not part of this field. Often, as a matter of fact, physicians must appear to be amoral in order to be effective with their primary responsibility.

The Union of Concerned Scientists (UCS) recently surveyed 1,586 Environmental Protection Agency (EPA) scientists. Of the anonymous survey respondents, 889 reported that they had been subjected to political interference in at least one instance. EPA

regional administrator Mary Gade was fired because she requested a chemical industry cleanup of a dioxin-contaminated site in Michigan (IST, 2008).

There was a time when science and science advisors were respected by government officials and whose counsel was highly regarded. Vannevar Bush during World War II was one of President Franklin Roosevelt's closest advisors. When the Soviet Union launched Sputnik in 1957, President Dwight Eisenhower quickly established the President's Science Advisory Committee (PSAC) with James Killian at its head (Mahoney, 2008). The relationship between the President and his science advisors was very close, and this relationship continued under President John Kennedy.

President Lyndon Johnson came into conflict with PSAC advice over antiballistic missiles, supersonic transports, and the conduct of the Vietnam War. Donald Hornig, science advisor to Lyndon Johnson, wrote "There is nothing sadder than an advisor whose advice isn't wanted". President Richard Nixon abolished the PSAC, but it was restored later in modified form by President Gerald Ford. Since then, presidential science advisors have advised, but have been largely relegated to the sidelines of policy formulation.

Because of the authority they represent, governmental positions are often readily accepted as truth. Because of the access that government has to its citizens, it has the advantage of information dissemination. Dissenting scientists and engineers are severely disadvantaged, even if they have the weight of proven, sound scientific evidence on their side. They may never be heard by a great portion of the citizenry.

As much as scientists have been ignored by political leaders, we have not before seen actual large-scale interference with conclusions based upon scientific facts. The situation existing at present is reprehensible and deeply disturbing.

In his new book, *True Enough: Learning to Live in a Post-Fact Society*, Farhad Manjoo has shone a spotlight on spin. Different news organizations present the same news in different ways, and the result is that the public has formed vastly different impressions of factuality. Our public these days believes what it wants to believe, and the facts be damned! So, there is no scientific evidence that cannot be refuted by a pseudoscientist, and there is no scientific evidence that cannot be overcome by personal belief. Sad, isn't it?

When asked about the governmental policies that most need attention, many of us would answer with some issue related to funding of science and engineering research.

Although funding is very important, I think political interference is much more important.

Many of us have been so accustomed to academic freedom that we have perhaps forgotten just how precious it is. Taking for granted the ability to present facts, accept evidence, and conclude based upon the evidence, and the failure to defend against assaults to this freedom, may ultimately result in its loss. Freedom should trump funding.

BMES members, and the BMES organization as a whole, should be deeply disturbed about governmental interference in issues related to medical, scientific, or engineering information and its dissemination. We simply cannot accept scientific truth based on investigational evidence and at the same time tolerate positions either not based on evidence, or, in some cases, completely ignoring evidence.

With the new governmental administration in place, we can hope that political interference in policies related to scientific evidence will no longer continue. Given recent past history, however, it would be wise for all of us to keep watch, that such interference does not happen again. We need to monitor the government, and we need to take every opportunity to educate the public about sound science, and what sound science means. It is the public, after all, that allowed this interference to continue.

References:

IST, 2008, Possible Political Interference at the EPA Investigated, *Issues in Science and Technology* 24(4): 17-18 (Summer).

Mahoney, M., 2008, Having the President's Ear, Technology Review 111(5): 112 (Sept).