Few matters threaten the integrity of science more than scientists not being allowed to warn the public about legitimate hazards uncovered in the course of scientific research. Yet, this month, the issue was raised twice in the United States.

One instance involves the ~300-fold increase in earthquakes in Oklahoma since 2008, making it America’s earthquake capital. Early on, investigations by the United States Geological Survey and academic scientists linked this departure from background levels to oil and gas industry activities, a position that the Oklahoma Geological Survey (OGS) had appeared to be willing to support in 2013. However, the position of the OGS took an about-face, coinciding with the state seismologist being called into the president’s office at the University of Oklahoma (where the Survey is housed) for a pivotal meeting with billionaire oil man Harold Hamm, a major donor to the school. E-mails associated with the meeting, just recently released through Oklahoma’s Open Records Act, have prompted speculation that the OGS dialed back its willingness to link the seismicity to human activity because of potential impacts on the oil and gas industry.

The other instance involves a claim by employees at the Florida Department of Environmental Protection (DEP) that an “unwritten” policy, dating from the appointment of Herschel Vinyard Jr. as DEP director, forbids use of the terms “climate change,” “global warming,” and “sustainability” in any communications from the DEP. Vinyard was appointed in 2011 by Florida Governor Rick Scott, a climate change denier. My quick scan of the DEP website for documents with the term “climate change” came up with more than 1600 hits, almost all dating from before Governor Scott’s election to office in 2011. Only a small percentage of more recent documents mention climate change, such as a call for proposals to a federal-state partnership program (involving the U.S. National Oceanic and Atmospheric Administration) for resilient coastal communities (yes, Florida is the state with the lowest elevation). Although Governor Scott denies that such an unwritten policy exists, there is no scientific reason why climate change suddenly ceased to be an important issue for the DEP with Governor Scott’s election.

In the mid-2000s, the U.S. Department of Interior Deputy Assistant Secretary Julie MacDonald, and other Interior Department officials with oversight of the U.S. Fish and Wildlife Service, repeatedly pressured agency scientists to alter their findings to circumvent the Endangered Species Act. The Union of Concerned Scientists and other groups demanded that integrity be restored to federal government research. In response, in 2009 President Obama issued a memorandum asking all federal agencies to reform their scientific integrity policies such that they would apply to all agency personnel, including political appointees, contractors, and nonscientists. These policies are now in place, including whistleblower protections, mechanisms for lodging complaints, and dispute resolution. While no policy is perfect, these policies do provide federal scientists clear recourse if they are urged to suppress or alter their scientific findings for political, economic, ideological, or other nonscientific reasons. However, these policies apply only to federal scientists.

Presidents of universities and research institutions should uphold the scientific integrity of their researchers, including those in affiliated state agencies, and ensure that they are not subjected to pressure from political, economic, or other interests in the conduct and reporting of their science. Governors should defend the integrity of all scientists in state agencies, universities, and research institutions. The incidents raised this month illustrate that the reality does not measure up to this ideal. I suggest that states should follow the federal example and enact integrity policies that protect state workers from interference in the conduct and reporting of scientific findings.

Marcia McNutt
Editor-in-Chief
Science

“states should...enact integrity policies that protect...reporting of scientific findings.”
Integrity—not just a federal issue
Marcia McNutt

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