

**Open letter to the Utah Public Utilities and Technology Interim Committee,  
Governor, U.S. Senators and Congressmen:**

As Earth scientists in Utah, we are writing to express concern about the manner in which members of the Utah State Legislature have recently dealt with scientific testimony concerning climate change. We encourage our legislators to consider separating the science from the policy issues. Questions about the timing, extent, and causes of climate change are inherently scientific. Substantial scientific evidence supports the following conclusions: first, that climate is changing; second, climate is significantly influenced by human activity; and third, that these changes pose risks to humanity and many other forms of life. Decisions about what to do in response to concerns about climate change, however, must draw not only on scientific input, but also economic, moral, and political considerations. It is unrealistic to expect all of these factors to unambiguously push in the same direction. Therefore, we feel it is irresponsible for some of our legislators to attempt to manipulate the scientific evidence in order to support a political agenda.

Recently the Public Utilities and Technology Interim Committee of the Utah Legislature invited testimony from Jim Steenburgh, chair of the Atmospheric Sciences Department at the University of Utah, to comment about climate change. Specifically, they asked him to share the findings of a panel of scientists convened by Gov. Jon Huntsman, Jr. Professor Steenburgh is a reputable scientist, knowledgeable about the subject, who attempted to give the best available information. The committee also invited one of the few climate scientists who has come to a different conclusion to address them. When Steenburgh was questioned about whether there really was a consensus among scientists in the field about the causes of climate change, he noted that well over 90% of active climate scientists agree that human activity is a significant contributor to global warming. Several of the legislators and other participants attacked the consensus conclusion, saying that scientists had neglected to consider natural causes for climate change, and accused climate scientists of jumping on the climate change bandwagon for prestige and monetary gain. One legislator even went so far as to paint the movement to address global warming as “the new religion to replace Communism.” In contrast, other legislators asked very insightful questions, including how to weigh the uncertainties associated with climate science.

Science done well can still be confrontational and will have some level of uncertainty associated with it. Skeptics rightfully demand factual support for scientific assertions and the associated uncertainties. We do not, therefore, object to the legislative committee inviting testimony from someone representing the minority view of climate science. But given our experience as scientists, we consider it preposterous to claim that over 90% of any large body of scientists would agree on any point that is not backed up by a considerable body of evidence. We believe that if a legislative committee—

composed entirely of non-specialists in the relevant fields—entertains testimony from someone representing the scientific minority, the responsible course of action would be to give considerable weight to an overwhelming scientific consensus, and treat fringe positions with respectful skepticism.

Consider the following claims made by the minority during the course of the debate. First, as a concluding remark, it was claimed that the Intergovernmental Panel on Climate Change (IPCC) ignored the possibility that natural climate cycles are responsible for most of the climate change evident over the past century. This is patently false. The scientific community has **extensively** investigated natural climate cycles. For example, the IPCC reports have several chapters dealing with natural climate variability, including the Pacific Decadal Oscillation, El Niño Oscillation, variation in solar radiation, volcanic eruptions, and so on. Second, it was claimed that climate scientists have ignored the hypothesis that the Pacific Decadal Oscillation, a natural mode of climate variability, could be responsible for climate change over the last century. The inaccuracy of this claim can also be readily demonstrated. A database search on our university library system, prompted by this claim, uncovered more than 600 peer-reviewed, scientific articles addressing the relationship of the Pacific Decadal Oscillation with climate change on many timescales, published within just the last five years alone. Both of these minority claims are inaccurate and are flatly contradicted by easily checked facts. Indeed, there were a number of other problems with the minority testimony. When members of the legislature give this kind of testimony too much weight, it puts all of us at risk by promoting poorly informed decisions.

As part of an arid continental interior, Utah may sustain serious damage due to a warming climate, and Utah's climate scientists are a valuable resource to help public officials decide how to respond to the threat. Collectively, Utah scientists have spent many decades trying to unravel the relevant issues in the context of this region. It is irresponsible to alienate them by setting aside their testimony in favor of easily debunked fringe science. We urge our public officials to base decisions regarding the effects of climate change in Utah upon the best scientific evidence available.

We, the undersigned scientists, agree with the consensus view - that climate is changing and is significantly influenced by human activity. We note, in closing, that the undersigned represent a number of political persuasions (Republicans, Democrats, and Independents,) and disagree with one another about how society ought to respond to the threats posed by a warming climate. We have no specific political agenda to support, but agree that whatever action is taken, it should be informed by the best available scientific evidence. We encourage our legislators not to manipulate the scientific evidence to suit any political agenda. (We note that the opinions expressed here do not necessarily reflect the position of our sponsoring institution, Brigham Young University. We submit this letter as concerned scientists and citizens.)

Sincerely,

Summer Rupper, Ph.D.



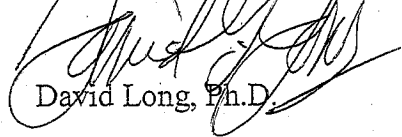
Barry Bickmore, Ph.D.



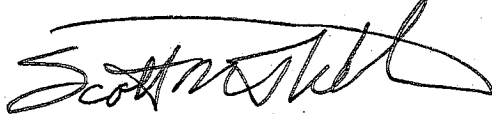
Rick Gill, Ph.D.



David Long, Ph.D.



Scott Ritter, Ph.D.

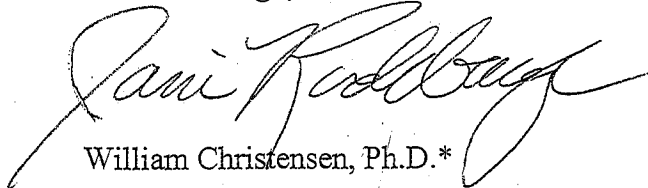


Sam St. Clair, Ph.D.\*

Steve Nelson, Ph.D.

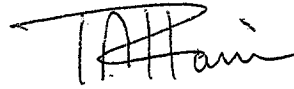


Jani Radebaugh, Ph.D.



William Christensen, Ph.D.\*

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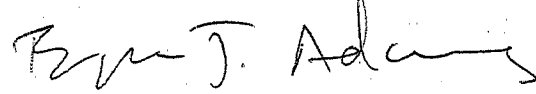
Tom Morris, Ph.D.



Adam Rupper, Ph.D.



Byron Adams, Ph.D.



Matthew Bekker, Ph.D.



Eric Christiansen

Eric Christiansen, Ph.D.

Michael Dorais, Ph.D.



\*Some of the scientists were out of town during the time of signing. There are email documentations of their official signatures on file.