

TO: **DR. RICK SCHUHMAN, MATTHEW GOLOJUCH**

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SUBJECT: **JUDGMENT PAPER**

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## Introduction

This memorandum serves to answer fundamental questions concerning the global warming controversy. To answer these questions, the team systematically read and analyzed the articles for reliability and validation. The questions answer the following:

1. Is all peer reviewed literature reliable?
2. Is there a scientific consensus regarding anthropogenic climate change?
3. Did climate scientists, including Dr. Mann at Penn State, engage in an unethical “trick” in order to hide an actual global trend in declining temperature as implied by Fox News?
4. Are Senator James Inhofe’s “top climate scientists” reliable?
5. How do you feel after completing this assignment?

## Is all peer reviewed literature reliable?

The *Journal of American Physicians and Surgeons* (JPandS), until 2003 named the *Medical Sentinel*, is the official journal of the Association of American Physicians and Surgeons (AAPS), a politically-affiliated, conservative non-profit organization founded in 1943<sup>1</sup>. It is an open access journal and a member of the Directory of Open Access Journals. However it is not listed in the major literature databases of MEDLINE/PubMed or the Web of Science.

Upon research into the journal and its content, the team established that the subjects of the articles associated strictly with the medical profession. This instantaneously raises the question of the reliability of an article refuting climate change published in this journal. Even the medicine related articles published in this journal have previously generated controversy in the medical field (Taibbi,

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<sup>1</sup> <http://www.aapsonline.org/>

2010). This journal has also been the subject of criticism in various scientific blogs (Orac, 2009) and its individual articles have been criticized on the inaccuracy of their information, lack of proof, and errors by various experts (MacCracken, 2008).

Therefore, the team concluded that the Journal of American Physicians and Surgeons cannot be considered a credible source for the topic of climate change.

The next question that arises is ‘how recognized is the scientific institution that these scientists are affiliated with?’ The authors of the paper represent the Oregon Institute of Science and Medicine (OISM), which describes itself as a “non-profit research institute established in 1980 to conduct basic and applied research in subjects immediately applicable to increasing the quality, quantity, and length of human life” (Oregon Institute of Science and Medicine).

Arthur B. Robinson, a scientist with a history decorated of controversial research, heads the OISM. According to the OISM website, “The Institute currently has six faculty members, several regular volunteers, and a larger number of other volunteers who work on occasional projects.” (Oregon Institute of Science and Medicine) It lists 8 people as faculty (two of whom are deceased), and the institute totes neither classrooms nor a student body.

These examples illustrate the rising epidemic of “puppet journals” that self-apply the label of “peer reviewed” journals. This epidemic of fraudulent claims in journals has run rampant in countries such as India and especially China, according to The Economist’s take on scientific integrity of these countries (The Economist, 2010). Popular scientific publisher, Elsevier, was guilty of publishing such fake journals because they looked like peer-reviewed medical journals. Because of occurrences such as these, inspection of the reputability of the journal and articles cited is essential.

## **Is there a scientific consensus regarding anthropogenic climate change?**

In the article, “Beyond the Ivory Tower, the Scientific Consensus on Climate Change”, Professor Oreskes’ class found 928 abstracts in their *Web of Science* search. Of the 928 abstracts, zero contradicted the general consensus that there has been observed warming of the Earth’s climate over the last fifty years. Also, zero contradicted the research that greenhouse gases are accumulating in Earth’s atmosphere as a result of human activities, and that most of the observed warming of the last fifty years is due to this increase in greenhouse gas concentrations.

Our team then performed a search on *Web of Science* through Penn State’s University Libraries website database search. Our search on the topic of “Climate Change” in the time period 2005-2010 yielded 34,331 results. When we searched, “Anthropogenic” AND “climate change” OR “global warming”, we ended up with 2127 results.

The website [www.populartechnology.net](http://www.populartechnology.net) claims that it has documented 800 peer-reviewed papers alleging to contradict anthropogenic global warming. Out of these 446 papers were published between 2005 and 2010. The raw ratio of alleged contrarian papers to total papers is  $446/2127 = 0.21$  (or 21%).

We found six peer-reviewed papers that unambiguously contradict anthropogenic climate change. The discrepancy can be described because the website contains many duplicate articles and considers “responses” and “comments” as entire separate articles. This illustrates the website’s biased choice of 800 articles as evidence against anthropogenic global warming. Articles with many comments disputing its claims are also not valid sources, because the disagreement in the field about that specific topic has yet to settle on an indisputable truth. Journals that did not appear on Web of Science were immediately discounted in our search, and also if a specific article did not appear on Web of Science it was not included as “valid.”

## **Did climate scientists, including Dr. Mann at PSU, engage in an unethical “trick” in order to hide an actual global trend in declining temperature as implied by Fox News?**

### **What is a “trick”?**

The interpretation of the word "trick" hinges on the context of the word in the sentence. The word trick in the context of science, mathematics, and computers usually refers to a quick method of obtaining the true result. For instance, a calculus trick such as L'Hospital's rule makes for quick derivative checks in a shorter, easier method than traditional derivative evaluations.

### **Understanding the “trick” in Context**

Similarly, Dr. Michael Mann used the word "trick" to describe a clever operation performed on the data to obtain the sought-after graphical output for his collected data. Mann's trick clearly evidenced to the observer that the instrumentally recorded data in comparison to the reconstructed data proves the clear warming in recent times. *Fox News* argues that the scientific evidence of a warming trend is only substantiated by the logical fallacy of argument by selective observation by Dr. Mann. However, *Fox News* fallaciously attempted to refute all evidence of global warming by selectively observing only short clips of emails to disprove many studies independent of Mann’s that all concluded similar results as Mann et al. (Lott, 2009)

The use of this "trick" did not unethically manipulate numbers, but instead included a better relative context to viewers of the actual warming that has occurred. The emails in question were obtained unethically, and reported to slander Mann's report, that's conclusion was obtained by others who did not use the same "trick" but obtained similar results. This is similar to derivatives taken via L'Hospital's rule or by traditional derivative methods, as both yield similar results with a similar input.

Dr. Mann's "trick" may have been a poor choice of wording that was thought little of as it was placed in the context of a personal email. The use of the word "hide" of the decline is better understood in context of Briffa's own acknowledgement of the tree-ring data's inaccuracy past 1961, which is why Mann "hides" this portion of the data. Not reconstructing, or "hiding", this previously refuted inaccurate portion of Briffa's data could have been harmful to Mann's study, and Mann took this into account. This sentence cut out of context can look to an ignorant eye as obvious fraudulent manipulation. Though, to those addressed in the personal email this sentence fit well within their understanding of Briffa's findings, and supports Mann's choice to truncate a portion of the data. (RealClimate, 2008)

The graphs of Mann's observed data versus other independent studies and observations serve to purport the conclusion that a trend of global cooling is not trying to be withheld from public awareness, but the actual trend in the deviation from predicted temperatures is greatly spiking positively. There is no irrefutable evidence of the opposite of these many studies, only oppositions to these studies' validity through fallacious findings such as those of *Fox News*.

## **Are Senator James Inhofe's "top climate scientists" reliable?**

Jim Inhofe's stance against global warming research results ground in very untrustworthy evidence he chooses to rely on. An important note previously untouched upon is Inhofe's campaign funding chart available in Appendix 1, where the funding of fossil fuels interest groups pushed him into his current role as a senior senator in the United States' Congress.

Notably, not only the evidence Inhofe cites, but also the lack of verifiable, scientific, reviewed evidence the Web of Science failed to yield go on to make Inhofe's judgments seem less analytical and more economical from his position. Inhofe relies on professional science dispute generator Dr. Frederick Seitz, who has already refuted confirmable data of the health risks of tobacco smoking in his past (Hevesi, 2008), to create doubt in the rising amount of verifiable evidence that global warming is occurring. Inhofe's leadership as the Chairman of the Senate Committee on Environment and Public Works serves not to extract the most accurate information, but to serve those who serve him. This, in turn, means refuting evidence of global warming to serve those fossil fuel companies who promote his

reelection, and contribute most to the overall effects that reports such as Mann's indicate. Senator Inhofe currently ranked 45th in the Senate in earmark sponsorship (Open Secrets: Center for Responsive Politics, Fiscal Year 2009), placing him in the upper-half of the senate and a senator who may make decisions based on the financial ramifications of beneficiaries who endorse his campaigns for reelection.

Leadership of the United States environmental and public works policy should not be indicative of the will of oil, gas, and coal conglomerates, but indicative of the true good of the people who reside under the laws made by the governing body that is the United States Congress. Senator Inhofe has made me comfortable in assuming his choices shall fall in accord with the sentiment of economic superpowers such as ExxonMobil, and not with the science that is repeatable and imminent. Senator Inhofe's reliance on the anecdotes of Dr. Lubos Motl on his own committee's national website (Morano, 2007) are even in fallacy as Dr. Motl's background is only extensive in the study of string theory and hosts his publications on an unedited, free *Blogspot* account (Motl, 2007). Inhofe selectively chooses research to fit his own ideals, as an alternative for discerning the authentic truth to this global dilemma. Inhofe's actions reflect his deficiency of ethical leadership understanding, and reflect poorly on American ideals to countries internationally searching for the answers to the global warming debate. In a position where Inhofe could leverage power and policy to drive social and economic reform, he instead chooses to deflect reviewed, verified, and repeatable experiments by disproving them by unverified opinions, which were reviewed by scientists with questionable environmental backgrounds.

## **How do you feel after completing this assignment?**

Due to extensive exploration into the credibility of the presented articles, our team understands the importance of verifying the validity of our sources. Of the accessible evidence that one could research, a significant amount of the content is potentially unreliable. The unreliability derives from many circumstances, but primarily from reliability of the journal in which it is published. Next, the reliability how many times the article is cited amongst other similar articles, and the reliability of those citing this information. Some of the journals' "peer review processes" are less than reliable and biased. Also, many of the articles are written on topics of interest to climate change but do not explicitly refute the concept of anthropogenic global warming.

This coincides with Senator Inhofe's choices for his "top climate scientists" and how credible they are. For example, it is disturbing to know that Inhofe relies on Dr. Seitz who previously refuted confirmable data of the health risks of tobacco. Senator Inhofe's reliance on faulty information derives not from his lack of fact checking, and more likely Senator Inhofe leverages his power to please though

who contribute to his reelection fund. Inhofe's motivation for taking a position against global warming seems to be for economic means more than it is for analytical or environmental purposes.

It is interesting to note the lack of evidence, whether it is published papers or scientific debates, that refutes the general scientific consensus that there has been observed warming of the earth climate over the last 50 years. There is also a lack of substantiation contradicting the concept that greenhouse gases (GHG) are accumulating in Earth's atmosphere as a result of human activities and most of the observed warming of the last 50 years is due to the increase in GHG concentrations.

In conclusion, this assignment illustrated the importance of understanding your responsibilities as an ethical leader. Senator James Inhofe relied on faulty scientific information to make slanderous statements to the American public about climate science research, and from this his ethical responsibilities as a leader were illustrated publically to be corrupted. As aspiring leaders this assignment gave our team a powerful look into the validity of sources and of information before making statements challenging verified scientific research.

## Works Cited

- RealClimate: Myth vs. Fact Regarding the "Hockey Stick"*. (2004, December 4). Retrieved October 20, 2010, from RealClimate: <http://www.realclimate.org/index.php/archives/2004/12/myths-vs-fact-regarding-the-hockey-stick/>
- RealClimate*. (2008, September 3). Retrieved from [www.realclimate.org](http://www.realclimate.org):  
<http://www.realclimate.org/index.php/archives/2008/09/progress-in-millennial-reconstructions/>
- RealClimate: The CRU Hack*. (2009, November 20). Retrieved October 20, 2010, from RealClimate: <http://www.realclimate.org/index.php/archives/2009/11/the-cru-hack/>
- The Economist*. (2010, October 7). Retrieved from [www.economist.com](http://www.economist.com):  
<http://www.economist.com/node/17199386>
- AAPS - Association of American Physicians and Surgeons*. (n.d.). Retrieved October 24, 2010, from AAPS - Association of American Physicians and Surgeons: <http://www.aapsonline.org/>
- ExxonSecrets.org*. (n.d.). *ExxonSecrets Factsheet: Frederick Seitz*. Retrieved October 19, 2010, from ExxonSecrets.org: <http://www.exxonsecrets.org/html/personfactsheet.php?id=6>
- Open Secrets: Center for Responsive Politics*. (Fiscal Year 2009). Retrieved from [www.opensecrets.org](http://www.opensecrets.org):  
<http://www.opensecrets.org/politicians/earmarks.php?fy=FY09&cid=N00005582&cycle=2010>
- Hevesi, D. (2008, March 6). *The New York Times*. Retrieved from [www.nytimes.com](http://www.nytimes.com):  
<http://www.nytimes.com/2008/03/06/us/06seitz.html>
- Lott, J. (2009, November 24). *Fox News*. Retrieved from [www.foxnews.com](http://www.foxnews.com):  
<http://www.foxnews.com/opinion/2009/11/24/john-lott-climate-change-emails-copenhagen/>
- MacCracken, M. (2008, July 22). *Michael MacCracken's analysis of errors in Robinson, Robinson, and Soon 2007 contrarian article*. Retrieved October 24, 2010, from Climate Science Watch:  
<http://www.climatewatch.org/2008/07/25/michael-maccracken%E2%80%99s-analysis-of-errors-in-robinson-robinson-and-soon-2007-contrarian-article/>
- Morano, M. (2007, August 20). *U.S. Senate Committee on Environment and Public Works*. Retrieved from <http://epw.senate.gov>:

[http://epw.senate.gov/public/index.cfm?FuseAction=Minority.Blogs&ContentRecord\\_id=84E9E44A-802A-23AD-493A-B35D0842FED8](http://epw.senate.gov/public/index.cfm?FuseAction=Minority.Blogs&ContentRecord_id=84E9E44A-802A-23AD-493A-B35D0842FED8)

- Motl, L. (2007, August 17). *Stephen Schwartz of Brookhaven: climate sensitivity is 1.1 Kelvin*. Retrieved from <http://motls.blogspot.com>: <http://motls.blogspot.com/2007/08/stephen-schwartz-brookhaven-climate.html>
- Nabisco, R., Jr, H. E., & F, S. (1986, July 15). *Letter to Dr. Fred Seitz from RJR Nabisco*. Retrieved October 20, 2010, from Legacy Tobacco Documents Library: <http://legacy.library.ucsf.edu/tid/mvz93d00/pdf>
- Orac. (2009, February 18). *The Journal of American Physicians and Surgeons: Medical "science" as dubious as it gets*. Retrieved October 24, 2010, from ScienceBlogs: [http://scienceblogs.com/insolence/2009/02/the\\_journal\\_of\\_american\\_physicians\\_and\\_s.php](http://scienceblogs.com/insolence/2009/02/the_journal_of_american_physicians_and_s.php)
- Oregon Institute Of Science and Medicine. (n.d.). *Home - Global Warming Petition project*. Retrieved October 24, 2010, from Oregon Institute Of Science and Medicine: <http://www.oism.org/pproject/>
- Oregon Institute of Science and Medicine. (n.d.). *Home - Oregon Institute of Science and Medicine*. Retrieved October 24, 2010, from Oregon Institute of Science and Medicine: <http://www.oism.org/>
- Oreskes, N. (2004). BEYOND THE IVORY TOWER: The Scientific Consensus on Climate Change. *Science*, 1686.
- Popular Technology.net. (2010, July 25). *800 Peer-Reviewed Papers Supporting Skepticism of "Man-Made" Global Warming (AGW) Alarm*. Retrieved October 19, 2010, from Popular Technology.net: <http://www.populartechnology.net/2009/10/peer-reviewed-papers-supporting.html>
- Proctor, R. (2010, September). *Manufactured Ignorance*. Retrieved October 19, 2010, from American Scientist: <http://www.americanscientist.org/bookshelf/pub/manufactured-ignorance>
- Robinson, A. B., Robinson, N. E., & Soon, W. (2007). Environmental Effects of Increased Atmospheric Carbon Dioxide. *Journal of American Physicians and Surgeons*, 79-90.
- Taibbi, M. (2010, September 29). Rand's Medical Group: Obama Hypnotized Voters. *The Rolling Stone*.
- The Rockefeller University. (1985, November). *Biography of Frederick Seitz*. Retrieved October 22, 2010, from Legacy Tobacco Documents Library:



<http://legacy.library.ucsf.edu/tid/bqo21e00/pdf;sessionid=200849227C85D7E74840B11F5F289547>

Timmer, J. (2010, June). *Climate friction: problem papers meet their critics*. Retrieved October 20, 2010, from arstechnica: <http://arstechnica.com/science/news/2010/06/climate-friction-as-past-papers-meet-their-critics.ars>

## Appendices

**Appendix 1:** Senator James Inhofe's campaign finance total by industry according to:  
<http://www.opensecrets.org/politicians/summary.php?cid=N00005582>

<u>Industry</u> ▼	<u>Total</u> ▼	<u>Indivs</u> ▼	<u>PACs</u> ▼
Oil & Gas	\$444,900	\$250,300	\$194,600
Leadership PACs	\$328,368	\$0	\$328,368
Retired	\$302,768	\$302,768	\$0
Electric Utilities	\$221,654	\$31,954	\$189,700
Lobbyists	\$187,983	\$179,654	\$8,329
Republican/Conservative	\$159,425	\$139,925	\$19,500
Lawyers/Law Firms	\$149,018	\$101,018	\$48,000
Building Materials	\$132,395	\$52,950	\$79,445
Misc Finance	\$127,451	\$127,451	\$0
Mining	\$123,950	\$89,450	\$34,500
Real Estate	\$122,263	\$110,763	\$11,500
Health Professionals	\$113,763	\$93,263	\$20,500
General Contractors	\$112,508	\$63,508	\$49,000

<u>Industry</u> ▼	<u>Total</u> ▼	<u>Indivs</u> ▼	<u>PACs</u> ▼
Commercial Banks	\$102,375	\$80,225	\$22,150
Construction Services	\$89,631	\$31,988	\$57,643
Automotive	\$86,050	\$31,050	\$55,000
Misc Energy	\$86,050	\$65,550	\$20,500
Insurance	\$80,050	\$34,050	\$46,000
Crop Production	\$77,390	\$52,540	\$24,850
Pro-Israel	\$64,000	\$23,000	\$41,000

## **Attachments**

Attachment A: Excel Spreadsheet of Evaluated Articles