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"But aren't they in it just for the Money?" (Last edit: January 24, 2017)

In my most recent previous essay I discussed the very high degree of scientific consensus among research climate scientists to the following statement:

"The rapid accumulation of energy in the Earth's climate system, and the associated changes in the Earth's climate, during the last half century, are primarily human-driven." (<u>http://www.centralcoastclimatescience.org/uploads/5/3/8/</u> <u>1/53812733/consensus.pdf</u>

Responses to almost every discussion of this consensus are fairly predictable. They are typified by the following quote from former Texas Governor, Rick Perry, now the nominee to be Secretary of the Department of Energy:

"There are a substantial number of scientists who have manipulated data so that they will have dollars [from grants] rolling into their projects."

Not only is there no evidence to back up this claim, but it doesn't make any sense. A slightly less cynical claim is that climate scientists who found scientific reasons for disagreeing with this consensus could not get their work published, would not risk their careers to do so, or could not receive grants to continue their work.

I can do no better in response to these assertions than to reproduce here a two-part essay by Prof. Scott Mandia, which first appeared in his excellent blog "Global Warming: Man or Myth?". For brevity, I have omitted some of the comments made to these posts, but links to the original two posts are given at the end. Many thanks to Prof. Mandia for permission to post his two essays.

Taking the Money for Grant(ed) – Part I

Two of the more dubious claims related to climate research funding are:

1) Scientists are getting rich from research grants!

2) Scientists holding an anti-AGW viewpoint cannot get funding!

The first question can be answered by asking another question:

How many climate scientists are driving a <u>Mercedes sports coupe</u> or other \$100,000+ car into a three car garage in a posh gated neighborhood?

Not convinced? I will delve deeper into claim #1 later in this post and also in a future post (Part II).

The second question is easier to answer. There are a few publishing scientists that strongly disagree with the established consensus that humans are the primary drivers of modern climate change and yet they seem to find funding without much difficulty. These include, among others, <u>Dr. Richard S. Lindzen (MIT)</u>, <u>Dr. John R. Christy (UAH)</u>, <u>Dr. Roy Spencer</u> (UAH/NASA), and <u>Dr. William M. Gray</u> (CSU). Wikipedia hosts a <u>list of others</u> and many of those scientists appear to be funded.

Fossil fuel companies such as ExxonMobil stand to lose revenue if carbon emissions are restricted so they certainly would dole out money to any scientist that was working on a landmark anti-AGW paper. Over the years, ExxonMobil alone has kicked in millions and millions of dollars to deny the <u>science</u>. Surely a company that <u>showed a net profit of \$45 billion in 2008</u> has a few dollars to spend on real anti-AGW research that has a much higher credibility rating than the anti-science information campaign that they have bankrolled since the mid-1990s.

Claim #2 is just plain nonsense!

Getting back to claim #1. Are scientists getting rich from grant funding? I will use myself as a case study in this post and, in Part II, I will write about others' experiences.

I recall a lecture I gave on climate change back in April 2009. After I was finished, a gentleman told me that he thought the whole thing was a hoax so that we scientists could get rich from funding. Before I even had a chance to reply, a voice from the crowd (my wife) yelled out, "Trust me, I can tell you, he isn't making any money from this. Nada. Zip. Zilch. Nothing!" The truth hurts, doesn't it?

I am currently listed as a co-investigator (co-I) on a NASA grant proposal that is to be submitted this month. The principal investigator (PI) is a colleague of mine who I will call Prof. X and the grant budget is requesting \$437,232.67 over a three-year period. Funding from the proposal will be used to create a learning institute to educate secondary education teachers about climate change. These teachers will be trained to use climate data from NASA in order to incorporate the latest climate change science and data into their curricula. Essentially, NASA will be using some of its funds so that our children will become more informed.

Assuming the grant is approved, it would be easy for somebody doing a cursory scan of NASA grants to shout out that "*Prof. X received a grant for* \$437,232. *He is getting rich from research funding! No wonder he claims that humans are causing global warming. He is in it for the money!*" Sound familiar? It is often the case where a climate scientist receives a large grant and then there are cries of outrage from those that have no idea of how the money gets spent.

Here is how the \$437,232,67 from my grant will be spent over three years:

- 1. Participant/Trainee Support Costs = \$152,678.50 (135 teachers will participate over three years)
- 2. Consulting Services = \$4000 (To assess the curricula developed)

- 3. Indirect Costs: \$76,064.25 (Administrative fees and other fees that are not collected by those named on the grant)
- 4. Direct Labor = \$204,489.92

\$204,489.92 is what the investigators on the grant are paid over three years. There are six (6) of us working on this grant. Three of us, including the PI, will receive the majority of that amount. I will receive \$48,264.75 over three years (\$16,088.25 per year). The PI will receive \$49,175.31 over three years.

Imagine that! What appeared to be a grant for Prof. X for \$437,232.67 really nets him \$16,391.77 per year.

But, even that is very misleading. At Suffolk County Community College (SCCC) and many other institutions, grant money can only **REPLACE** teaching load. **Grant money does not add to our salaries.** For me, \$16,088.25 per year equates to 11.8 credit hours of overload teaching. (Overload hours are those that go above the base salary of fifteen credit hours per semester. I typically teach 20 overload hours per year which is four classes.) Rounding to 12 hours, I will give up 2.5 classes per year in order to participate in this grant endeavor.

Bottom line: If the grant proposal is accepted, my W-2 will not change for year 2010. Instead of all of my salary coming from SCCC, most will come from SCCC and some will come from NASA. Unfortunately, the Mercedes will have to wait a little longer. **Claim #1 is also nonsense!** (Too bad for me.)

Part II will examine how grant budgets work at other institutions.

Taking the Money for Grant(ed) – Part II

with 15 comments

In Part I, I addressed the following two claims:

- 1) Scientists are getting rich from research grants!
- 2) Scientists holding an anti-AGW viewpoint cannot get funding!

I then asked scientists from around the world to relate their experiences and if they were getting rich from grant funding. Since Part I, I also did a little more digging and came up with some important information. That information as well as a few examples from those that commented appear below.

Scientists holding an anti-AGW viewpoint cannot get funding!

In <u>Part I</u>, I listed the names of several prominent anti-AGW scientists that have no difficulty getting funding. Thanks to <u>Bart Verheggen</u> for directing me to <u>this statement</u> by <u>Dr. Bas van Geel, UvA</u> :

Professor Begemann's claim that on universities it is not possible to present a different opinion about climate change in any case isn't true for the University of Amsterdam. In my professional environment so far there nobody has ever tried to correct me (a skeptic with an opinion based on strong arguments) In the past 10 years, neither did I ever have a problem with finding funding for research on the role of the sun on climate changes in the past. It is (also) because of this research I started having an alternative opinion on what's going on with the present-day climate: I still believe that natural variability is much more important than changes caused by mankind.

I also wish to thank commenter <u>Jay</u>, for this contribution:

Will your analysis consider the implications (in terms of advancement, criticism by peers, etc.) of professors that are pro, neutral or con the agw theory? Judith Curry comes to mind – it will be interesting to see where she goes now that she has moved towards the center.

Now THAT is a very good question for which I do not have an answer. This post is to rebut the money claim which is easy to do. I would never state that scientists are not human so there are always politics. I imagine that holding a strong opposing view might make one's career path more difficult. However, as pointed out several times already, many anti-AGW scientists appear to have little difficulty obtaining funding.

Scientists are getting rich from research grants!

I have personally heard this statement from several people and do see this statement from time to time in various blogs. Thank to J Bowers for

providing some examples. More examples can be found <u>here</u>, <u>here</u>, <u>here</u>, <u>here</u>, <u>here</u>, and <u>here</u>, etc. There are many more!

In the United States, it is essentially impossible to get rich from public funding for research because there are rules that forbid institutions from allowing that to happen.

According to the <u>U.S. Office of Management & Budget CIRCULAR A-21</u> (Revised 8/8/00) Cost Principles for Educational Institutions:

d. Salary rates for faculty members.

(1) Salary rates for academic year. Charges for work performed on sponsored agreements by faculty members during the academic year will be based on the individual faculty member's regular compensation for the continuous period which, under the policy of the institution concerned, constitutes the basis of his salary. Charges for work performed on sponsored agreements during all or any portion of such period are allowable at the base salary rate. In no event will charges to sponsored agreements, irrespective of the basis of computation, exceed the proportionate share of the base salary for that period. This principle applies to all members of the faculty at an institution. Since intra-university consulting is assumed to be undertaken as a university obligation requiring no compensation in addition to full-time base salary, the principle also applies to faculty members who function as consultants or otherwise contribute to a sponsored agreement conducted by another faculty member of the same institution. However, in unusual cases where consultation is across departmental lines or involves a separate or remote operation, and the work performed by the consultant is in addition to his regular departmental load, any charges for such work representing extra compensation above the base salary are allowable provided that such consulting arrangements are specifically provided for in the agreement or approved in writing by the sponsoring agency.

(2) Periods outside the academic year.

(a) Except as otherwise specified for teaching activity in subsection (b), charges for work performed by faculty members on sponsored agreements during the summer months or other period not included in the base salary period will be determined for each faculty member **at a rate not in excess of the base salary divided by the period to which the base salary relates**,

and will be limited to charges made in accordance with other parts of this section. The base salary period used in computing charges for work performed during the summer months will be the number of months covered by the faculty member's official academic year appointment.

(b) Charges for teaching activities performed by faculty members on sponsored agreements during the summer months or other periods not included in the base salary period will be based on the normal policy of the institution governing compensation to faculty members for teaching assignments during such periods.

According to the National Science Foundation (NSF) in their <u>Grant Proposal</u> <u>Guide Chapter 2 Section C part g (budget)</u>:

"Grant funds may not be used to augment the total salary or rate of salary of faculty members during the period covered by the term of faculty appointment or to reimburse faculty members for consulting or other time in addition to a regular full-time organizational salary covering the same general period of employment."

THESE DOCUMENTS VERY CLEARLY SHOW THAT PUBLIC MONEY CANNOT MAKE FACULTY RICH.

Below are excerpts of a few replies sent by scientists relating their grant funding experience:

University of South Florida:

I am a professor at a major research university (Carnegie top 60 in annual research dollars). My contract for my position is for 19.5 pay periods, each two weeks long. For the remaining 6.5 pay periods, I am paid from other sources, if I get grants. There is some summer teaching available, but not much.

Summer research cannot pay me more than my usual biweekly pay rate times 6.5 pay periods, no matter how many grants I get. That is, my pay maximizes out once I get enough grant dollars for 6.5 pay periods. However, if I am getting Federal grant dollars, I can only be paid for 2 months in the summer, max, again no matter how many grants I get. It is not possible for any research institution that receives Federal research dollars to pay researchers more than their normal biweekly pay during summer, no matter where the actual grant dollars come from. So if NSF gives me five grants with full summer salary in each grant budget, I can't pay myself five times my normal salary.

Research dollars for basic research are very hard to come by. The success rate for grant applications at NSF in the Earth sciences is 5-20%, depending on the division. Mine, hydrology, has a success rate of about 5-10%. Climate change research hasn't really become a separate discipline at the main funding agencies. You submit climate change proposals to the same old agency divisions and compete with non-climate change proposals. The Dept of Energy has put forward some large requests for proposals, but despite the large budgets, the salary restrictions are the same. I partnered with an electrical utility to submit a proposal to conduct a pilot CO2 sequestration study. The total budget was \$6.5 million, but I would not have gotten more than my normal salary. Most of the money went for drilling several deep wells and for subcontracts with oil-drilling service companies to conduct tests on the wells.

No one gets rich on climate change research, unless they are getting their dollars as consultants from Exxon or Peabody. If anyone responds to your request and says how to get rich on grant dollars, please forward their ideas, as I don't see how it is possible.

Boston University School of Medicine:

Yes, at academic institutions, salaries are set by the institution. A grant saves the university money, but it does not put money in my pocket. It may help me indirectly–getting grants is good for advancement, which will move me into a higher salary scale, but academic salaries top out at levels that are decent, but still modest compared to what say, corporate executives or lawyers make. Nobody gets wealthy off of grants. Converting grant money to personal use is not easy to do even if you are dishonest, because as far as the university is concerned, that money belongs to them, not you, and you are only administrating it. So they keep pretty close track of where the dollars go. Perhaps you can winkle a couple of meeting junkets a year, or a better computer than you would be able to afford otherwise, but that's about it. Scientists who are wealthy have made their money from patents, or consulting, or they started a successful company.

The State University of New York at Stony Brook:

I did my Ph.D. in a group with several climate scientists, my Ph.D. advisor is noted climate scientist.

And I was financially successful using the skills I learned. As soon as I went to Wall Street.

I retired at 50 and now enjoy teaching part time in Stony Brook University's Quantitative Finance program. If you come across anyone particularly good at climate science who wants a career with significant compensation opportunity, you can advise them to look into programs like ours. Many of the skills from climate science translate pretty well to quantitative finance.

Australia:

ARC grants in Australia are quite prestigious and mostly go to Universities and government research institutions. There are various categories of grants. This page lists the salaries: <u>http://www.arc.gov.au/applicants/salaries.htm</u>.

ARC grants are probably at the more generous end of the scale to grants from other funding bodies, such as industry research funding bodies.

As you can see, the salaries are not exorbitant by any stretch of the imagination and are often/generally below the salaries paid to scientists in government funded positions and private corporations. I don't have a list of comparable salaries paid by government agencies, but job advertisements or public sector/university websites in Australia might be used for comparison.

In Australia, research grants are never paid in addition to normal salary. They are only paid to fund extra positions required for the research, or to fund equipment and sometimes facilities or other capital items.

Government research institutions do not normally permit scientists to earn money outside their salary from work-related activities and most grants are for equipment and additional temporary staff.

Universities used to allow staff to earn extra funding from private activities such as consulting, but most these days either limit personal earnings from such activity or prohibit it. In any case, it has no relationship to research grants.

Where does the money go if not into scientists' pockets?

As shown in Part I grant money is spread out among many budget line items. Some of these include:

- Capital Expenditures (satellites, buildings, labs, field structures, etc.)
- Research Equipment
- Supplies
- Administrative Costs
- Graduate Student Support (tuition reimbursement, stipend, conferences, etc.)

When I was a graduate student at Penn State between the years 1987 and 1990, grant money paid my full tuition, monthly stipend, and all equipment needed to do my research. My officemates and I estimated that about \$100,000 was spent on each of us over three years. At least \$400,000 of the grant we were working under went to graduate student support. These figures must be much higher today due to inflation, especially rising tuition costs.

Marty, in this comment, sums up the reality:

Go to a local public research university. Find the faculty parking lot. Drive around and count the Mercedes and other luxury cars. Count the fuel efficient economy cars. That should give you a good idea of what is really happening.

I drive a Chevrolet Aveo with 140,000 miles on it.

Apparently, the most famous climate scientist on the planet, Dr. James Hansen, is still driving a ten-year old Volvo!

[To keep this post from becoming too long, I have omitted some of the lengthy comments following Scott Mandia's post: I think the point has been well made, but to see them all, here are the links to the full part I and part II posts--Ray W.]

https://profmandia.wordpress.com/2010/03/11/taking-themoney-for-granted---part-i/ https://profmandia.wordpress.com/2010/03/22/taking-themoney-for-granted---part-ii/