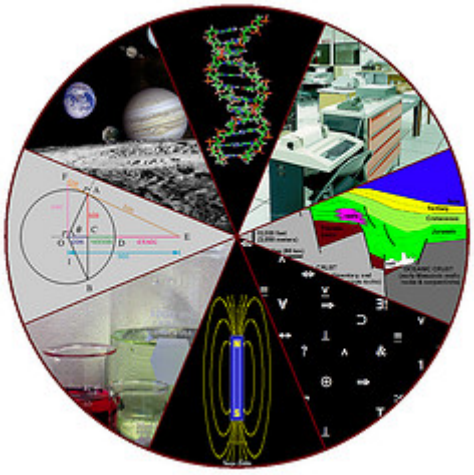
SCIENCE IN THE ‘NATIONAL INTEREST’: WHAT ABOUT EVERYTHING ELSE? [UPDATE]



The Republican-led House Committee on Science, Space and Technology, chaired by Rep. Lamar Smith (TX-21), wants the National Science Foundation’s grants to be evaluated based on the “national interest.”

Bring it, boneheads. By all means let’s try that standard against EVERYTHING on which we spend federal money.

How many television and radio stations, licensing publicly-owned airwaves, are granted licenses under which they are supposed to serve the “public interest, convenience, or necessity”? Because apart from emergency broadcast signal testing, most of them don’t actually do that any longer, suggesting we really need to re-evaluate broadcasters’ licenses. Let’s put the FCC’s licensing under the microscope. If broadcasters aren’t truly serving “national interest” in the manner parallel to a House Science Committee discussion draft – proposed criteria being “economic competitiveness, health and welfare, scientific literacy, partnerships between academia and industry, promotion of scientific progress and national defence” – the least they could do is pay us adequately for a license to abuse our

publicly-owned assets as well as our sensibilities. There's probably something in the defunct Fairness Doctrine about broadcasting and the nation's interests…unless, of course, "public" does not mean "nation." Perhaps Rep. Smith believes "national interest" = "business interest," which opens up a massive can of definition worms.

How about banks and insurance companies? How many of them were in one way or another not merely affected by the financial meltdown of 2008, but direct contributors to the cataclysm because their standards of operation were shoddy – specifically, with regard to subprime mortgages. Why not put their regulation under the same lens: are these financial institutions serving the "nation's interest"? The financial industry's business practices and the regulatory framework existing in early 2008 certainly didn't defend this nation's economic competitiveness, damaging the ability to obtain credit as liquidity was threatened. Jeepers, wasn't that the intent of defunct Glass-Steagall Act after the Great Depression, to assure that commercial and investment banking acted in a secure manner consistent with the nation's interests?

We could go on and on across the breadth of departments and regulatory bodies which either issue funds or licenses, putting them all to the same test. Do they serve the "national interest"?

The problem here isn't that the NSF in particular isn't validating grants as to whether they serve the "national interest." The NSF already uses criteria to evaluate proposal submissions for their alignment with the nation's aims.

The real problem is that Rep. Lamar Smith is not qualified to lead with regard to assessing the value of science. He's a lawyer with some business background – he does not have an education strong in science, technology, engineering, and math (STEM). Ditto the other 14

out of 22 total Republican members who are mainly lawyers and accountants, not previously educated or employed in STEM-related fields.

Nor do Rep. Smith and his majority of the overall science committee appear to understand the NSF's grant-making process. The approximately 40,000 annual research proposals covering non-medical science and engineering are "reviews are carried out by panels of independent scientists, engineers and educators who are experts in the relevant fields of study, and who are selected by the NSF with particular attention to avoiding conflicts of interest." Only 25% of proposals evaluated receive awards. What will the NSF reviewers do differently than they have already been doing in their assessments?

If the point is to ensure that overall proposal funding is reduced, Rep. Smith should just cut to the chase and say that, because changes to the review process may simply add more bureaucracy without adding any value, and potentially allow gaming of the system if non-STEM criteria and reviewers are eventually added who have no idea as to the value of the proposals they are evaluating.

There's also the question of funding proposals that may receive financial support from no other venue and may not yield immediate return on investment. Is it in the nation's interest to fund certain projects that corporations won't fund? Is it in the nation's interest to fund proposals that corporations should be funding? And are advances in science in general in the nation's interest?

Ultimately, this entire proposal to assess science investment for fit with "national interest" is rather flippant: what do Rep. Smith and the rest of the House Science Committee Republicans think socialism is, but a "co-operative management of the economy"? Wouldn't putting science funding through a "nation's interest" assessment encourage a more socialistic, co-operative approach to our

nation’s investment in science?

Not that this is a problem; we could have used more of that approach in the financial sector, for starters, to prevent debacles like the crash of 2008. But I’m betting Republicans really don’t want government to take a more socialized stance.

7:00 pm 08-NOV-2013 – Update –

Long-time community member Valley Girl brings a little more perspective to this issue, of particular note given her deep background in science as a career.

> I’ve been poking around the NSF site trying to find more data. When wiki says 10,000 of 40,000 proposals are funded, I started wondering about this. NSF has grant programs that cover a whole range of things- not just research grants (as normally understood by the scientific community, but NSF pre- and post-doctoral grants to individuals, etc. I don’t know what the funding rates are for their different programs, and I can’t find this information. But, my recollection having served on NSF research grant review panels is that the funding level (% wise) is (or at least was) around 10% research grants being funded. At the time, the odds of getting an NSF research grant were lower than getting a research grant from NIH= National Institutes of Health (=HHS in various tables I looked at). And, the dollar amount of these individual grants was (probably still is) small compared with NIH. Tiny.
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> Here is one page I found that gives an idea of the $ cost of NSF compared with other agencies
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> http://www.nsf.gov/statistics/infbrief/nsf13336/
>
> Look at Table 2 for example, which

> includes research and development. There are two sets of columns, one for current dollars, and one for 2005 equivalent dollars. Following is from first set of columns $ for DOD, HHS (NIH) and NSF, projected 2013 spending. Note that these are “Current $millions”, meaning get out your million $ multiplier.
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> Total 136,472
> DOD 73,725 ~54%
> HHS 30,853 ~23%
> NSF 5,423 ~4%
>
> NSF is the only agency that supports “ecology” i.e. studies that might track global warming, so I think previous suggestions re: motives are spot on.