For the Baby Boomers, born under the halo of victory in World War II, and into the 1950s, one of the key themes was the promise of Science. Electrical power—courtesy of splitting the atom—would be so plentiful that consumers would simply pay a flat monthly fee, and the discovery of the structure of DNA meant (somehow, although this was never fully explained) that a cure for cancer was just beyond the horizon. The successful rollout of the Salk/Sabin polio vaccines would further demonstrate the great humanitarian power of Science, and its unblemished search for Truth.

However, as the 1960s played out and the public’s respect for all manner of once-cherished institutions began to crumble, Science too was put under scrutiny. Its great promise and past accomplishments now forgotten the accounting was done, and on the bottom line were frightful weapons systems, nuclear waste, and napalm. Notably, confidence in Science continues to erode, even though more money than ever is being spent on it.

So, what went wrong?

A succinct answer would be to quote St. Paul: “For the love of money is the root of all evils, and some people in their desire for it have strayed from the faith and have pierced themselves with many pains.” (1 Timothy 6:10)

Under the rubrics of LBJ’s Great Society, federal spending started to increase…dramatically. Not left out of this seemingly endless fountain of money was scientific research. Colleges—public and private—were re-christened “research universities,” and the quest for federal dollars was on. Science would soon be transformed from the search for truth to the search for funding.

The besieged granting agencies needed some means to work through all the requests, and human
nature being what it is, tended to favor projects that were timely, or as researchers would put it—"sexy." Thus, it should come as no surprise that in the mid-1980s UCLA would obtain one of the biggest grants it ever received for the Multicenter AIDS Cohort Study (MACS). Bear in mind that as frightening and tragic as AIDS may be, it was never even remotely a leading cause of death in the US.

Given the sheer amount of research being performed, more scholarly journals would arise to publish the findings. Before long, the overall quality of work would diminish—and the “publish or perish” dynamic would reverse itself. Instead of nervous academics calling the journals to see if their submitted works will be accepted for publication, the journals were now calling the researchers desperately looking for articles to publish!

Meanwhile, science editors of popular media, acting as if the world of big-time science had not changed, were still dutifully summarizing the latest findings published in the peer-reviewed literature, apparently believing that these so-called “peers” were unaffected by how the entire process had been corrupted. More than that, over-hyping of these results—well beyond the findings of the cited papers—would become far too common. Sadly, the over-hyping would spill back into the technical journals themselves, whereby conclusions would be drawn that were not supported by the data presented. This is a working definition of “junk science.”

No doubt, this unholy alliance between the popular media and scholarly publications spawned the never-ending flow of sensationalistic results, especially those pertaining to human health effects. As such, a bizarre codependency was created between greedy researchers, technical journals, the popular media, and all sorts of fear entrepreneurial fund-raising groups.

Now, all that was needed was a method to produce “sexy” results without having to engage in actual empirical science—you know, the kind that requires real experiments with real observations, and real measurements. In college, we used to call this “dry-labbing” but now the academic scientists call it “modeling.” In modeling, you start off with a few measurements and then extrapolate these into some sort of (usually) sensationalistic finding. Full marks if you figured out that the model can easily be tweaked to produce the results you desire.

Climate change polemics, of course, are derived from such “science,” as are all sorts of health scares such as the famous “15,000 people die each year because of secondhand smoke.”

You’d think that some true scientist, somewhere would speak out about this abuse. And they will…just as soon as they finish their next grant application.

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