

Description

Since the recession of 2009, research funding in the United States has become increasingly partisan and risk averse. As a result, funding for basic research (also known as *pure* or *foundational* research) has begun to fall precipitously.

Media-friendly campaigns of fiscal responsibility that capture pork barrel spending on projects such as \$1 million to study why people don't ride bikes to work, certainly play well during re-election campaigns, but basic research funding is getting caught in the same nets.

Any research project that isn't promising marketable results within 3–5 years is now at risk of losing its funding, and most basic research projects can run for a decade or more.

Turning to Private Donors

The history of private wealth and research has long been established. Most of the large research buildings on Ivy League campuses are named for the wealthy families that donated the funds for construction and the endowment to support it for the future.

However, in most cases the support was linked to a personal cause—finding the cure for a disease that took or afflicted one of the family members, for example. As our knowledge of those diseases has grown into effective treatments, and in some cases, cures, private funding has been used to develop increasingly effective applications built on the basic research that those original private donations funded decades ago.

The Value of Basic Research

It is that trend, combined with declining federal funding that is putting basic research, and arguably, scientific research as a whole, into jeopardy. Without the <u>basic research</u> projects that can last for decades, there is no foundation upon which the applied research studies can build, and it is here that billionaire donors can do so much good with their charitable donations.

As businessmen and women, they are still likely and entitled to expect maximum productivity and efficiency from their donated funds, but there is a growing realization that many of the worlds' problems require solutions on the kind of massive scale that warrants basic research projects that are expected to deliver results in years rather than months.

Beggars Can't Be Choosers



Critics complain that allowing <u>private donations to dominate research funding</u> will ultimately skew the direction of research in the future but with no apparent increase in federal funding on the horizon, that seems like a risk we should be willing to take. Yes there are going to be "pet projects" like cloning deceased dogs for grieving wealthy owners, but there is increasing evidence that billionaire donors are willing to fund longer-term pursuits of grander scale topics.

Paul Allen, the co-founder of Microsoft, founded the Allen Institute for Brain Science in 2003, and has supported it to the tune of \$500 million to date. The expertise of the Institute was recognized in 2014 with the award of a \$4.75 million contract from the <u>BRAIN Initiative</u> for cell-type classifications in mouse brains.

Google's Executive Chairman, Eric Schmidt and his wife have donated \$100 million to Marine Science; Oracle's Larry Ellison has donated \$500 million to the Ellison Medical Foundation to support research in molecular biology, and Hedge Fund Manager James Simons donated over \$1.1 billion to math and science research, including \$375 million for autism research.

While these amounts may seem astronomical as individual donations, the harsh reality is that in comparison to the overall <u>funding need for research on a national scale</u>, they are still merely drops in a very large bucket. On that basis, the risk of skewed research seems well worth taking.

Category

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Date Created 2016/03/16 Author daveishan