Capitol Connection

Funding science today may lead to the next iPhone

July 30, 2013 | Author: Summer Allen, Graduate and Postdoc, Brown University

Tax dollars dedicated to research and development were integral to many of the features in today's iPhones. (Image: Renato Mitra via Flickr user renatomitra)

The current economic climate in Washington is causing tighter scrutiny of government spending. Few would argue against analyzing where our tax dollars can be put to best use. But in conducting this analysis, we should keep in mind what history shows us: that investing in basic research can plant seeds for economic growth.

As many others have pointed out, some of the greatest scientific discoveries were the unexpected results of research driven by brilliant minds, not the expected results of research driven by funding priorities. This is not to say that scientific agencies shouldn't have funding priorities, but that politicians and lay people need become more aware of the role that serendipity plays in the scientific process (and perhaps we as scientists need to do a better job of communicating this).

Sometimes seemingly esoteric projects—even those with large upfront costs—can have a tremendous economic impact down the road. Take the Human Genome Project, which cost taxpayers $2.7 billion dollars. It has returned an estimated $1 trillion dollars to the U.S. economy (and you can see how genomics research is helping public health in your state here). The Internet, Google, and the iPhone in your pocket all had their starts with help from government funds. In fact, "of the roughly 100 most important innovations from 1971 to 2006, as identified by R&D Magazine, almost 90 percent depended heavily on federal research support."

As we consider spending federal dollars on brain-mapping initiatives and an eventual manned mission to Mars, we should keep all this in mind. After all, who knows what fascinating – and useful – discoveries scientists are making at this very moment?

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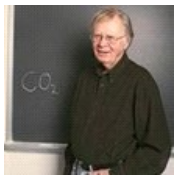

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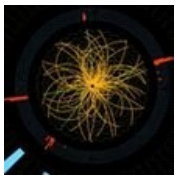

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