

## Shooting Ourselves in the Foot

## Written by Joseph Allen

## Allen & Associates

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Obviously, the universe enjoys irony. How else to explain the simultaneous issuance of the President’s Council on Jobs and Competitiveness [**interim report**](http://files.jobs-council.com/jobscouncil/files/2011/10/JobsCouncil_InterimReport_Oct11.pdf) (see pages 21-22) with recommendations that would wreak havoc on university technology transfer, and an article in the Wall Street Journal crediting the same system as one of the [***Three Policies That Gave Us the Jobs Economy***](http://online.wsj.com/article/SB10001424052970203914304576628900383779840.html?mod=googlenews_wsj).

When asked how he felt about a blunder made by one of his politically appointed generals, President Lincoln said “It hurts too much to laugh, and I’m too big to cry.”  When considering these recommendations of the report, it’s easy to feel the same way.  If adopted, they undermine the Bayh-Dole Act, which allows universities and small companies to own and manage inventions they make with federal funds.  There is considerable evidence of the harm such an action would do to the US economy, undercutting the very objectives of the Council.

Perhaps most troubling is the acceptance of the idea by the Jobs Council that the US university technology transfer system is broken.  Beyond general statements, there is no evidence presented supporting this contention.

The Jobs Council presented its report to President Obama last week.  As the name implies, its focus is on reviving an economy mired in the doldrums with one creating high value jobs.  While it contains many thoughtful proposals, when it comes to commercializing federally funded R&D, someone slipped a joker in the deck.

Here are two of the recommendations to “help spur renewed entrepreneurship”:

* *Lastly, the Administration should test an “open source” approach to tech transfer and commercialization.*
* *America’s colleges and universities, funded with federal dollars, have produced many of the great breakthroughs in clean energy, information technology, biotechnology and nanotechnology that have led to new industries and jobs across the country.  However, all too often potentially groundbreaking research that could find market success lingers in university labs. The Council recommends allowing research that is funded with federal dollars to be presented to* ***any*** *university technology transfer office (not just the ones in which the research has taken place).*

For a President hanging on by his fingernails over voter unhappiness with a stagnant economy, recommendations like these are not doing him any favors.

There are many reasons why these suggestions are misguided:

* They are fundamentally contradictory.  The open source model is based on the premise that intellectual property is a barrier to innovation.  Conversely, the university “free agent” theory believes academic inventions are undervalued, licensed too cheaply, or not often enough.
* The open source theory seeks to impose a software development model on all technologies. In the life sciences (where most university licensing occurs) strong patent positions are critical.  A survey of their member companies by BIO underscored the high value that is placed on exclusive licensing, particularly by start up’s.   Every state hopes to develop a thriving biotech industry from university research to grow its economy: for the Jobs Council to tout open source licensing is puzzling.
* The Administration has recently issued new financial disclosure guidelines for HHS/NIH intra-mural and extra-mural research aimed at reducing conflicts of interest. Putting university inventors in charge of deciding who manages their federally funded discoveries is conflict of interest on steroids.
* The university professors as free agents theory directly violates the Bayh-Dole Act which gives ownership and management of federally funded inventions (and the responsibility to insure they are managed in conformity with the law) to the university receiving the federal grant.  The recent Stanford v Roche case did not change this. It merely reinforced the need to have researchers sign invention assignment agreements to the school to trigger the law.
* University technology transfer offices rely on having good working relationships with on campus researchers and their departments.  When patents are successfully licensed, the law mandates that the inventors, their departments, and the university all share in the royalties.  Putting just the inventors in charge of determining how a technology is licensed turns the system on its head.
* Many, if not most, licensed university inventions have multiple inventors. The recommendation seems to assume a sole inventor paradigm that no longer exists.  It does not address the inevitable problems that will arise when inventors disagree as to who should license their patent.
* University researchers are fully engaged conducting research, securing new grants, teaching students, and writing scientific papers. Asking  them to also shop their inventions around the country on their own time and expense hoping to find another school to license their inventions is highly naive.
* Studies have shown that the experience of other countries with faculty management of inventions has been dismal.  The clear trend internationally is adopting the US model for university tech transfer.
* University technology transfer offices are working at full capacity and have no interest in taking on extra work from other schools.  In a letter to the Department of Commerce, technology transfer leaders at MIT, the Wisconsin Alumni Research Foundation, and Stanford said: “It would be inappropriate for us to handle inventions from inventors outside our own institutions, and we would have no interest in doing so.”

Contrary to the tone of the Jobs Council report, US academic technology commercialization made possible by Bayh-Dole is a world- wide recognized success.  The law allowed universities and small companies to own and manage inventions arising from federally supported R&D.  It decentralized technology management from Washington, allowing a market driven system to flourish.  It did not create any new bureaucracy to select winners and losers.  And it works in the hard, cold light of day.

Prior to Bayh-Dole, when the federal government took invention rights away from their creators making them available to all through non-exclusive licensing (similar to the open source model), Congress found that not one drug had been commercialized from NIH funding.  About 28,000 federally funded inventions gathered dust in Washington, benefitting no one. This is not surprising since prior government policies destroyed the intended incentives of the patent system.

Recent studies have documented that 153 new drugs and vaccines based on federally funded research are now protecting public health world-wide because of Bayh-Dole.

Unnoticed by the Jobs Council, more than 6,000 new companies have spun off from universities around the country: recently averaging about two new companies formed each working day of the year. Approximately 5,000 new products are on the market because of Bayh-Dole.  The Act made at least a $187 billion impact on US gross domestic product between 1999 and 2007, while creating 279,000 good paying jobs.

China and India are adopting versions of Bayh-Dole to better compete with us. South Africa recently enacted a Bayh-Dole law so they could build their own technology industries, realizing that university-industry partnerships — and the incentives of the patent system– are vital to compete in today’s economy.

Hopefully, it’s not too late for us to re-learn the same lessons.

Perhaps this explains the tone taken in the Wall Street Journal article on how the US economy made its dramatic turnaround in the 1980’s and 90’s:

*A third factor, and one that ensured the boom would continue, was a law passed in 1980. Sponsored by Sens. Birch Bayh of Indiana and Bob Dole of Kansas, the measure clarified murky intellectual property rights so that universities and professors, especially, knew they owned their own ideas and could sell them. That knowledge gave professors and lab teams an enormous incentive to put to commercial use plans and ideas for inventions that they had long ago shelved in their minds and offices.*

*… New technology (telephones that showed the face of the person you were calling, linked networks of computers) had been around for years, but they languished in those university offices or in museum displays.*

It’s said that those who forget their own history are condemned to re-live it.  Let’s hope we can avoid shooting ourselves in the foot in this case. It’s painful– and takes a long time to get up and back into the race.

**About the Author**

[**Joe Allen**](http://allen-assoc.com/) is a 30-year veteran of national efforts to foster public/private sector commercialization partnerships, and author of numerous articles on technology management for national publications. Joe served as a Professional Staff Member on the U.S. Senate Judiciary Committee with former Senator Birch Bayh (D-IN), and was instrumental in working behind the scenes to ensure passage of the historic Bayh-Dole Act. Joe has served as the Executive Director of Intellectual Property Owners, Inc., a trade association representing major R&D companies, he was involved in the creation of the Court of Appeals for the Federal Circuit, and he also served at the U.S. Department of Commerce as the Director of the Office of Technology Commercialization. From 1992 until 2004, Allen was with the National Technology Transfer Center (NTTC), becoming President in 1997. Clients included NASA, the Department of Defense, EPA, the Department of Veterans Affairs, and the Department of Commerce. Between 2004 until 2007, Allen was the Vice President and General Manager of the West Virginia High Technology Consortium Foundation. In 2008, Joe founded [**Allen & Associates**](http://allen-assoc.com/) to continue to facilitate public/private partnerships between universities, federal laboratories and industry.