



The Obama Administration's Commercialization Memoranda

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Will the Obama administration's recently issued memoranda have a noticeable effect on technology transfer, IP commercialization and small business growth?

With his Jobs Bill still pending in Congress, on October 28th President Obama announced a series of measures and instructions to the federal government and its agencies to try and help stimulate the economy. The measures were outlined in two presidential memoranda: "Accelerating Technology Transfer and Commercialization of Federal Research in Support of High-Growth Businesses" (Memoranda 1) and "Making it Easier for America's Small Businesses and America's Exporters to Access Government Services to Help Them Grow and Hire" (Memoranda 2).

To view Memoranda 1 click on the below link:

<http://www.whitehouse.gov/the-press-office/2011/10/28/presidential-memorandum-accelerating-technology-transfer-and-commerciali>

To view Memoranda 2 click on the below link:

<http://www.whitehouse.gov/the-press-office/2011/10/28/presidential-memorandum-making-it-easier-americas-small-businesses-and-a>

Aims and scope

Memoranda 1 seeks to accelerate the transfer and commercialization of technologies and research from federal institutions to the market place. It includes a number of administrative components:

- an overhaul and revamp of existing tech transfer and grant making procedures and guidelines with the ultimate aim of streamlining and improving agency efficiency;
- federal agencies involved in tech transfer should establish goals and metrics to measure performance over a 5-year period ending in 2017;
- agencies taking part in the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs should seek to reduce processing and grant award times to the greatest extent possible; and
- a push for greater interaction with the private sector and, where possible, closer physical proximity to business parks etc.



Memoranda 2 seeks to improve government accessibility for small businesses and exporters by centralizing federal (and where possible) local and state government services into a one-stop administrative center on a new governmental website, BusinessUSA. In addition, this memo seeks to establish and promote a "No Wrong Door" policy whereby all parts of the Federal Government are encouraged to assist and re-direct public and business enquiries even if the query is outside their agencies remit.

This briefing note will focus on Memoranda 1.

Technology transfer in the US: an overview

Since the mid 1980s and the passage of the Patent and Trademark Amendment Act of 1984 and 1986 (Bayh-Dole act), the Stevenson-Wydler Technology Innovation Act and their subsequent amended acts (Federal Technology Transfer Act of 1986 and Technology Transfer Commercialization Act of 2000) American universities and federal research bodies have been allowed to commercialize and utilize the intellectual property created through their research efforts.

For the commercialization of university research this legislation has been a huge success with the US becoming a global model of technology transfer and the commercialization of knowledge. A number of academic and industry studies show how Bayh-Dole has had a tremendous impact on university patenting activity.¹ For example, a decade after passage patenting activity by universities exploded with the campuses of the University of California surpassing biomedical giant Merck and becoming the top recipient of biotechnology patents in the US. Even under the current adverse economic conditions the positive effects of Bayh Dole are being felt. In 2010 university related patenting, licensing, and start-ups were still strong with close to 19,000 patent applications filed, over 4,000 licenses executed, and 650 start-ups formed.²

In contrast, patenting and licensing activity by federal laboratories and research institutes has often not been as successful as within higher education. A 2007 Congressional Research Service report suggests that levels of technology transfer based on federal research has been and remains low.³ Nevertheless, there are some agencies that are, and have been, successful in their technology transfer activities. For example the National Institutes of Health (NIH) has over the past decade (2000-2009) signed between 80-120 new cooperative research and development agreements (CRADAs) with industry per year. Significantly, the proportion of these annual CRADAs that are material CRADAs – that is agreements that are used for the transfer of research tools –

¹ See for example M Pugatch et al , *Measuring Technology Transfer Performance in Public - Private Partnerships: A Discussion Paper*, Stockholm Network, London, 2007.

² AUTM, 2010 Licensing Survey,

http://www.autm.net/AM/Template.cfm?Section=FY_2010_Licensing_Survey&Template=/CM/ContentDisplay.cfm&ContentID=6872 (Accessed November 17 2011)

³ <http://www.fas.org/sgp/crs/misc/RL33527.pdf>



has remained roughly the same over this time period.⁴ Yet, by and large, the NIH is an exception in its success.

Clearly, the discrepancy between the effect of existing technology transfer legislation on publicly funded universities and federal research bodies is substantial. Whether or not the administration's recent announcements will have a discernable effect depends on one's analysis of the root cause of the problem as to why federal research is not being commercialized to a greater extent.

Federal research – what and who for?

To begin with it is worth pointing out that the majority of all federal research is for and by the Department of Defense (DOD). Due to various reasons (including national security interests) it is not clear that much of this research can be commercialized in the private market.

Similarly, federal research bodies are not always designed or charged with finding a commercial application for their output. A recent 2011 study by the Institute for Defense Analysis (IDA) identified 9 separate factors that affect the technology transfer and commercialization of federal research.⁵ Among the most notable were:

- **Laboratory mission:** Federal laboratories have different missions based on the missions of their parent agencies. Some labs' research is therefore more commercial because it is closer to the goals of the parent agency. To change this culture/output you would have to change the mission of the relevant parent agencies; this may, or may not, be desirable.
- **Type of lab:** Government-Owned, Government-Operated (GOGO) labs face more regulations and rules that can inhibit technology transfer whereas Government-Owned, Contractor-Operated (GOCO) laboratories are often explicitly tasked with encouraging and seeking out opportunities for technology transfer.
- **Government-Industry interaction:** Governmental regulations make it difficult for agencies and industry to interact; the effect is industry being largely unaware of opportunities to commercialize governmental research.

Conclusion

In sum, while the administration's attempt to promote greater technology transfer and administrative efficiency among governmental agencies should be applauded, it is doubtful that the introduction of new tech transfer metrics or goals will substantially raise rates of technology transfer and the commercialization of federal research. From some of the more recent literature on the topic it would seem that what is needed for more federal research to be commercialized is:

⁴ MM Gottesman and H Beckerman Jaffe, "A delicate balance: weighing the effects of conflict-of-interest rules on intramural research at the National Institutes of Health", *Academic Medicine*, Vol 85, No 11, November 2010

⁵ ME Hughes et al, *Technology Transfer and Commercialization Landscape of the Federal Laboratories*, June 2011, IDA, Science and Technology Policy Institute.



- i) a clear demand for a type of research conducted by the federal government (see for example the NIH), or
- ii) a cultural and sometimes regulatory and legal change of the mandates and rules guiding the behavior of many of the parent agencies in which federal research is carried out.