

## **The Future of Bayh-Dole**

Testimony of Mark A. Lemley, Stanford Law School, before the House Committee on  
Science and Technology

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### Summary of Testimony

The Bayh-Dole Act was enacted in 1980 in order to make it easier for universities to transfer technology to the private sector, and to solve the perceived problem of inventions made in universities languishing there, rather than being deployed to solve real world problems.

Bayh-Dole fundamentally changed the way universities approach technology transfer. Universities obtain 16 times as many patents today as they did in 1980, and their share of all patents is five times greater than it was before Bayh-Dole. They license those patents for upwards of \$1 billion a year in revenue.

The effects of this surge in university patenting have been both good and bad. On the positive side, it seems clear that the Act has achieved its goal of encouraging university inventors to patent those inventions and to license those patents to private companies that can make use of them. Particularly in the biomedical area, these university-private partnerships have been responsible for a number of significant breakthroughs.

On the negative side, universities have too often looked to the short-run bottom line in setting their licensing priorities, granting exclusive rights to breakthrough technologies to businesses that may not be best suited to exploit them for the benefit of society as a whole. Particularly in the information technology (IT) industries, there is a sense that university patents are interfering with rather than promoting the dissemination of technical knowledge to the world at large. The growing number of university-filed and university-sponsored patent lawsuits in the IT industries, many in association with non-practicing entities (or so-called “patent trolls”), has added to the sense in those industries that universities are often adversaries, not partners, in the deployment of technology.

The problem in my view is not with Bayh-Dole per se, but with the way it has sometimes been implemented without sufficient sensitivity to the very different characteristics of different industries. The need for Bayh-Dole is greatest in the biomedical industry, where the FDA approval process and the hundreds of millions of dollars required to develop new drugs means that few will see an idea through to fruition without the promise of exclusivity. By contrast, in a field like computer software, exclusivity not only isn't necessary but may actively interfere with the use of the technology.

Universities should take a broader view of their role in technology transfer. University technology transfer ought to have as its goal maximizing the social impact of technology, not merely maximizing the university's licensing revenue. Sometimes this will mean patenting an invention and granting an exclusive license. Sometimes it will mean granting nonexclusive licenses to all comers. And sometimes it should mean foregoing patent protection altogether. For Bayh-Dole to work as intended, universities must look beyond their short-run profit and think about what is best for society as a whole.

The government has an important oversight role in this process. Bayh-Dole contains various provisions intended to limit the exclusive licensing of federally owned inventions (35 U.S.C. § 209) and to step in to require reasonable licensing of a university-owned invention (35 U.S.C. § 203). To date, those provisions have not been used to exercise effective oversight over university licensing. But they could be. What is required, then, is not new legislation as much as greater vigilance on the part of both universities and federal funding agencies to ensure that university patenting serves its intended purpose and is not misused. Congress should exercise its oversight function to ensure that this happens, but it does not need to change the Act.

If Congress were to rewrite Bayh-Dole, the one change I would encourage is the removal of the provisions (such as 35 U.S.C. § 204) that discriminate against foreign businesses and international trade. They are the product of an earlier era of protectionism, and seem out of place in the global marketplace in which we find ourselves. Doubtless American universities have ample incentive to support local businesses; they should not be precluded from licensing their inventions to whoever can best provide the benefits of those inventions to the American consumer.