'75 Thornton failed

see NL's testimony before Thornton

see presentation w/ statistic attached for the Thornton effort

'76 Administrative change

Barry Bevenger 1982 DOC

BD Implemented by OMB

(fed KS) fed. procurement policy
OFPP

grants policy
Grp (NL assigned to)

Loel Weiker's (CT) Staffer

OMB A1-24 NL drafted
(predecessor temp reg. 81-88?)

Ann Sullivan

Office of Advocacy of SBA. Milt Stewart

Small business administration agency

(1) Steve Rosenberg 1992 John Barry
(3) Ambition & the Power 1989
(2) Rising Tide John Barry

CHRON File

Nov. 8 1977 Califano request

Jan 5 1978 Draft of review of HEW's patent policy pp 1–35

Roles played + relevance of messages to today — Wither BD

Shannon 1965

See p2. todays counterpart in biotec

See p.6 "support" as distinct from commercial exploitation

equities of co-sponsors

meaning tech transfer so that the public may benefit

THE CHRONICLE OF HIGHER EDUCATION
Today's News

Tuesday, December 9, 2003

http://chronicle.com/daily/2003/12/2003120902n.htm

University Earnings From Inventions Hit Nearly $1-Billion in 2002, Survey Finds

By GOLDIE BLUMENSTYK

Universities collected nearly $1-billion from the commercialization of their academic inventions in the 2002 fiscal year, according to the latest annual survey by the Association of University Technology Managers. They also executed more than 3,700 licensing deals, filed for more than 6,500 U.S. patents on new inventions, and spent nearly $160-million in legal fees.

The survey, which is being released today, tallies responses from 156 colleges and universities, including 94 of the 100 institutions that spend the most on research.

Although the revenue total is substantial, technology transfer does not necessarily produce big money for most institutions. Of the overall revenue reported for the 2002 fiscal year, two-thirds went to just 13 institutions, which each collected more than $20-million. In 2001, 11 institutions reported revenues of at least $20-million each. In 2000, 14 did. Fiscal years at most colleges run from July 1 to June 30.

While most universities own the rights to the inventions developed by their professors and graduate students, inventors usually receive about one-third of the income that institutions earn from licensing the new technologies. In some cases, the institutions create new companies based on the inventions, and the institutions and inventors receive equity in the start-ups in lieu of, or in addition to, royalty payments.

About 15 percent of the total licensing revenues reported in the survey for 2002, or about $155.6-million, went to a single institution, Columbia University.

Columbia officials would not provide information about the university's 2002 revenue. In the past few years, Columbia has acknowledged that a key genetic-engineering technique that it had patented and licensed widely was the major source of its licensing revenue. Although that patent expired in August 2000, royalty payments could have come in well after that date, and be part of its revenue totals for 2001-2. Columbia is now being sued by a number of companies that accuse the institution of using unlawful means to extend its patent rights on that technique.

The University of California system, which reports results from all nine of its campuses collectively, ranked second, with $82-million.

New York University, which has not historically earned such big amounts from commercializing its inventions, reported licensing income of $62.7-million in 2002, placing it third in the revenue rankings. In 2001, it reported about $25-million in revenue.

Abram M. Goldfinger, executive director of NYU's office of technology transfer, said most of the revenue, and the increase, was attributable to growing sales of the drug Remicade, which is used to treat

rheumatoid arthritis and Crohn's disease, two autoimmune disorders. The drug, which was developed at NYU through a collaboration with the drug company Centocor, has been on the market since 1998. Centocor is a subsidiary of Johnson & Johnson.

A medical invention also proved lucrative for Emory University. Research conducted at the institution in the 1990s became the basis for a widely used anti-AIDS drug, known as Epivir, and the university says that about $25-million of its $29.6-million in 2002 revenue came from the companies that manufacture and sell that drug. Some of the money came as royalty payments. The rest was paid as part of a 2002 settlement of a lawsuit against GlaxoSmithKline and Shire Pharmaceuticals Group, makers of the drug. Emory had 2001 revenue of about $3.6-million.

"We don't think it's just a little blip on the radar screen," said Emory's licensing director, Todd T. Sherer. While the 2002 revenue includes money from that one-time settlement payment, he said Emory expects to continue its strong earnings from Epivir and a new anti-AIDS drug, Emtriva. Gilead Sciences, the maker of that drug, also hopes to win approval for Emtriva as a treatment for hepatitis, said Mr. Sherer.

Drugs were not the only inventions that paid off for academic institutions. Vanderbilt University catapulted to a spot among the top 20 in revenue thanks to a license it has with a company developing one of its software inventions. Christopher D. McKinney, the university's director of licensing, said the company, which he declined to name, had paid about $10-million to Vanderbilt in 2002. The software, which will be used in medicine, is not yet on the market. The company, therefore, is not yet paying royalties, but it did make a series of payments as it hit predetermined milestones in developing the software into a commercial product.

Vanderbilt, which earned $11.8-million in 2002, also profited from nontechnological inventions. One of them was a reading curriculum for children, "READ 180," which the university has licensed to the Scholastic Corporation.

For all 156 institutions reporting, revenue for 2002 was $997.8-million, about 15 percent greater than the $868.2-million reported for fiscal 2001, but year-to-year comparisons can be misleading because the same institutions don't report each year. Also, in 2001, 14 fewer institutions reported than in 2002. In fiscal 2000, the figure for total revenues, reported by 141 institutions, was $1.1-billion.

Five universities reported their data anonymously: Marquette, Rockefeller, and Yale Universities, and the Universities of New Orleans and of Wisconsin at Milwaukee. Their results are included in the totals but not identified in the tables that break down the data by institution.

The 2002 year was a busy one for licensing offices. The number of patent applications filed for new inventions was greater than in any previous year. The number of overall filings by universities at the U.S. Patent and Trademark Office -- 10,632, including such things as applications for separate patents on parts of an invention for which a patent had previously been filed -- was also greater than ever before.

Universities also reported receiving 12,638 "disclosures" of inventions from professors, graduate students, and other researchers in 2002, more than in any previous year. Faculty members are expected to file disclosures when they discover things that might have a commercial use. In 2001, with 142 institutions participating in the survey, disclosures numbered 11,259. In 2000, with 141 respondents, the number was 10,802.

By contrast, the number of start-up companies built on university inventions declined in 2002, to 364. In 2001, with 142 respondents, 402 companies were formed; in 2000, with 141 respondents, 368

companies were formed. According to a report that accompanies the survey, the drop-off was due in part to 2002's being an "extraordinarily difficult period for raising early-stage funding."

As with revenues, start-up activity remained very concentrated. Six institutions or systems accounted for about one-quarter of all the start-ups in 2002. The University of California and the Massachusetts Institute of Technology formed 23 each, Stanford University formed 13, the University of Illinois and the University of Pennsylvania formed 12 each, and the University of Southern California formed 10.

Spending on legal fees, meanwhile, is becoming a far-more-commonplace activity, as increasing numbers of institutions devote more of their energies to filing patents and, in some instances, protecting their patent rights in lawsuits. Forty-four of the respondents said they had spent more than $1-million on legal fees in 2002, and 18 said they had spent more than $2-million.

Some of those costs are eventually recovered, typically after an invention is licensed and the commercial partner is asked to reimburse the institution for its patenting costs. In 2002, the universities reported legal-fee reimbursements of $68.7-million, or about 43 percent of what they spent.

For a summary of the "AUTM Licensing Survey: FY 2002" or the full report, contact AUTM Headquarters, at (847) 559-0846, or see "Surveys" at http://www.autm.net

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My profound thanks for your article on the Bayh-Dole body of law, i.e. the 1980, '84 and '86 Acts. Some say that history is lost on most people. Hopefully your article will assist in putting things straight.

~~I had given up long ago on the American press lead by the New York Times and the Washington Post on reporting on the importance failing~~

~~Bayh-Dole~~

~~There has~~

~~As you suggest~~

~~There has always been even prior to Bayh-Dole~~

~~From the beginning of~~ At time increased of funding

~~Since funding of~~ the ~~beginning~~ of U.S. government funded research and development ~~during and~~ after WWII ~~there~~ the U.S. Attorney General ~~has been a very vocal~~ populous group who supported government ownership of resulting inventions on the ground that what the government paid for it should own. ~~After world war II this philosophy prevailed and a large government~~ in statute and ~~regulations which~~ required ~~resulted in growth of~~

~~We made available to assume Non-exclusive use by the public~~

the U.S. Attorney General

~~An acceptance of this philosophy by resulted in the growth of large bureaucracy assigned to its enforcement in the bureaucracy bureaucracy [illegible] ground its enforcement. Stunting in the early 1960's a very small element of this bureaucracy~~ By 1960 some began to realize that the continued federal investment in research could not be rationally supported ~~because~~ if ~~its~~ inventive results were cut off from commercial development ~~for the reasons you so eloquently set out. In the late 1960's the Dept. Health Education & Welfare~~

In 1969 ~~this group successfully persuaded~~ their position the DHEW to ~~change~~ abandon its ownership policy ~~to~~ from one permitting university and non-profit ownership of inventions and ~~the~~ to permit exclusive licensing ~~N.I.H.~~ of Dept. employee inventions. ~~Given~~ Given this incentive universities began soliciting the same treatment from all the other federal agencies. ~~By~~ 1972 the National Science Foundation followed the DHEW lead and allied itself with DHEW ~~in convincing~~ in moving to convince the remaining agencies for the need for change.

because patent rights were unavailable to protect the most investment for commercial development

~~The ongoing success at~~
~~DHEW/NSF~~ agency wide
By 1976 ~~uniform~~ regulations adopting the DHEW/NSF policy were ~~drafted and adopted~~ agreed to by all the Federal agencies, ~~and~~ ~~however, the ad~~
~~In the same year a change in president, brought a New administration~~
and published for public comment.
~~and~~ one of the first
This percipitated a full blown confrontations with ~~[illegible]~~ a populous group

Hopeful your ~~may~~ article may ~~have~~ change that course.

My profound thanks for your article on the Bayh-Dole body of law, i.e. '80, '84 and '86. ~~It's been some~~ Some ~~said~~ say that history is lost on most people. I had given up long ago ~~that the~~ on the American press ~~focusing~~ ~~such lead by myth~~ ~~telling the public~~ reporting on the importance and success of Bayh-Dole. ~~To the extent that Bayh-Dole~~ ~~Over the last two decades~~ ~~The last~~ ~~To the contrary, the last two decades have been~~ In large part the press ~~has taken~~ ~~interest in Bayh-Dole~~ has chosen to characterize Bayh-Dole as a misdirected piece of ~~the~~ legislation ~~vehicle~~ permitting greedy inventions ~~and~~ ~~industry~~ universities and industry to make unconscionable profits on ~~inventions which would government~~ ~~inventions~~ government generated inventions so unobviously useful when made that they would have reached the marketplace ~~without an~~ with little if any of ~~them~~ assistance. This wrong-headed thesis ~~which~~ ~~was~~ obviously rejected by ~~the~~ ~~Congress~~ ~~in which~~ unanimous ~~by~~ ~~the~~ ~~Congress~~ ~~in which~~ ~~an~~ passage of the Act.

was expressed by supporters of government ~~[illegible]~~ ~~[illegible]~~ passage of the Act

outdoing policy

~~Over last two decades I have received a number of calls from the press soliciting~~

~~This has been driven in most part by populous supporters of government ownership ~~when~~ ~~that that~~ who have not changed their~~

This ~~of course~~ ~~was the~~ is the same line of ~~reasoning~~ argument used by the populous supporters of government ownership before ~~its mean unanimous rejection by~~ rejection by ~~on the same basis you~~ ~~by passage of~~ Bayh-Dole ~~that but~~ ~~which now~~ not with standing finds a sympathic ear from the press.

Over ~~the last two decades~~ years I have received a number of calls from reporters ~~about~~ ~~to~~ ~~involving~~ covered by ~~Bayh-Dole~~ ~~success~~ ~~regarding~~ ~~commercially successful~~ inventions ~~mostly drugs on~~ (usually life-saving drugs on medical devices) soliciting ~~my~~ views on the propriety of the ~~remuneration~~ return to ~~of~~ the inventors universities on industry. My pointing out

that under prior policy ~~there~~
it would be most likely
the invention would not have been
available that ~~basic research~~
the taxpayers investment in
basic research would not be
tangibly measured ~~that~~
the ~~productive~~ contribution
of
the ~~frustration~~ of inventors with
~~no outlet for~~ them ideas
the failure of a government
ownership policy ~~the~~ because it
undermining support for
basic research ~~with no~~
~~tangible results~~ because
it produced few tangible
results the waste of taxpayer
~~funding of basic research~~
~~the frustration~~
how Bayh-Dole has ~~favorable~~ changed
~~changed~~ science by enhancing the development of
~~interface~~ of its inventive results
~~between government~~
~~science and technology development~~
and ~~all the~~ the Nobel ~~favorable~~ ~~Results~~
~~meaningful~~ ~~the~~ recognizing
of the equities of all the
contributing parties, gov't, inventors,

by the compelling ethics of

university and industry seldom
diverted attention away from
the reporters,

From: "Richard Latker" <pristine@netvigator.com>
To: "Norman Latker" <NJL@browdyneimark.com>
Date: 5/8/04 11:32AM
Subject: Re: Sen Bayh's statement

I'm reluctant to make any changes.

There are a few editorial weaknesses. In the passage about the NIH tech transfer policy that the Carter administration suspended, for example, "this policy" should probably be replaced with "the NIH policy" so listeners/readers can follow more easily. There are some other minor rough spots I'd smooth over if I had time, permission and a clear sense of how the text was to be presented. The Economist quote is probably too long.

But I would nonetheless leave this text alone, lest I rob it of its authoritative voice and personalised style, both of which come through quite effectively. The reader is escorted through the salient arguments in a comfortable, gentlemanly way -- who will care about the occasional limp in the syntax?

This is especially true if the text is to be delivered orally.

Sen Bayh's presentation will be judged by a wholly different standard than your piece, which had to be much more thorough, "technocratic" and hard hitting in its approach, or, frankly, it would probably have been ignored.

A retired US senator needs to worry less about the precision of the contents and more about the flavour of the presentation. I think the man knows what he is doing -- or whoever is writing for him knows.

I, not knowing Senator Bayh, am not going to touch it.

R--

----- Original Message -----
From: "Norman Latker" <NJL@browdyneimark.com>
To: <pristine@netvigator.com>
Sent: Saturday, May 08, 2004 6:26 AM
Subject: Fwd: Sen Bayh's statement

Richard
Here is Bayh's statement for the May 25 NIH hearing that I contributed to. I would like you to read it over and if you see any editorial problems please advise. I do not want you to add any new concepts unless you feel strongly that they would enhance the product I also do not expect you to spend much time on it especially because I would I told Joe Allen that I would talk to him about some of the minor problems I found on Monday. If you can advise over the weekend at home I would appreciate it. If you don't have time that's O.K. too.
Thank You