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UM, Penn State Finding Success With Revamped IP Policies, Options

Universities and other academic institutions that have tried to attract industry funds for research have probably heard the complaint that negotiating agreements with them is, well, not exactly fun. Or fast. Or simple, for that matter.

Recently, nearly a dozen universities took those complaints to heart, making changes they hope will bring more industry research dollars in the door, and do so without compromising their integrity or interests.

At least two — the Pennsylvania State University and the University of Minnesota (UM) — are already seeing results, according to officials with both institutions who recently described their experiences at a "town hall" webinar sponsored by the University-Industry Demonstration Partnership (UIDP), with support by the National Science Foundation and the Association of American Universities.

UIDP President Anthony Boccanfuso moderated the event, which included questions from participants who were tuned in via the Internet. The speakers were Brian Herman, vice president for research at UM; Jay Schrankler, executive director of UM's Office for Technology Commercialization; Ronald Huss, Penn State's associate vice president for research and technology transfer; and Neil Sharky, Penn State's vice president for research.

Boccanfuso noted at the outset of the event that Penn State and UM were among eight universities featured in a 2014 UIDP report, *New Models for University-Industry Collaborations*. The others are Georgia Tech, Iowa State, North Carolina State, Purdue University, the University of Michigan and the University of Oregon.

Faculty, Focus Groups Gave UM Input

In fiscal year (FY) 2014, UM had $741 million in research funding, of which $47 million is "industry sponsored research," Schrankler said, an amount that "has remained relatively flat over the past five years." UM made changes in hopes of altering this trend.

UM officials spent a year meeting with industry representatives and faculty members. They held focus groups and conducted a dozen or so interviews with commercial representatives. Once the program was developed, it "went through the full route of faculty governance [at UM] so the faculty bought into this as well," Schrankler added.

Not only were potential industry sponsors put off by complex negotiations over possible intellectual property (IP) that could be produced by research they might fund, they also wanted "uncertainty removed," Schrankler said.

Specifically, they wanted to "eliminate the uncertainty in future financial obligations" and "minimize financial risks for licensing unproven technologies"; "define the licensing terms in the research agreement"; obtain "exclusive rights to the IP"; and have fewer worries that "competitors will license the IP that results from research" they funded.

Industry officials said they would "like to be certain about what would happen with the outcome of that research in particular with respect to IP" and "would like to have time to evaluate the IP," Schrankler said.

Although UM's goal was to simplify its industry arrangements, its new program has two versions and each has multiple options.

The overarching program is called Minnesota Innovation Partnerships, or MN-IP. Under this are MN-IP Create and MN-IP Try and Buy.

Under option "A" of the create program, commercial firms may obtain exclusive IP rights. They must pay "100% of the monetary value of the research" including UM's "full overhead rates," as well as an upfront fee equal to the greater of 10% of the sponsored research contract or $15,000.

The IP agreement in Option A does not include annual minimum payments, nor milestones or "time limits," Schrankler said. Sponsors also are "free to sub-license or cross-license with no additional fees," activities that are common in many industries, he added. UM protects its future interests by adding

what Schrankler called an "R&D recovery clause," also known as a bonanza clause.

UM "wanted to make sure that our sponsors had time to sell the resulting products made from this IP, and recoup some of their costs before they started paying royalties to us," Schrankler explained. "And so we came up with a 1% royalty fee, really irrespective of what the invention is, after the first $20 million in sales. And that's it. And that's annual sales. So if it's $20 million in one year you pay 1% and if you sell $18 million the next year you don't pay 1%, and so forth," he said.

Additionally, if the IP is an improvement "to the sponsor's existing products and processes," the sponsor's royalty payments are capped at $5 million, he added. The other terms also apply to IP that is an improvement, he said.

Finally, under option A, the sponsor applies for patents and "controls" this process, which includes paying costs of obtaining and defending the patent. The sponsor would "collaborate" with UM concerning "patient strategy," Schrankler added.

Option "B" under MN-IP Create is "business as usual," Schrankler said. This is offered for industry sponsors that may not "think there's going to be an IP generated" and are willing to negotiate an IP agreement later if there is.

Try and buy, which UM launched in January 2014, offers an "industry-friendly IP license for existing technology" that in some cases was "sponsored by the federal government," Schrankler said.

Under "try," commercial firms would receive "an exclusive option with a low, single fee" and would not have to pay any "patent expenses."

UM publishes the IP it has available and the royalty rates and licensing fees it charges. "The first $1 million of sales are royalty-free, to give you a chance to catch up," Schrankler explained. "Patent expenses are due in the U.S., for U.S. filings, only when the patent issues." In addition, "if you are a Minnesota company, you get a special discount because we are a land-grant university."

In response to an audience question about how often companies were choosing A over B, Schrankler said that "of over 150 companies that have done this MN-IP program, 25% of them pick Option A."

Joint Faculty Appointments Offered

He noted that this might indicate that three-fourths of firms didn't mind the uncertainty that comes with Option B — despite the complaints to the contrary. A "key finding" is that "companies didn't have a choice before. So, when given the choice, it forces them to think about it," Schrankler said, with now more consideration given to whether the arrangement will produce IP or not.

One of the first firms to take advantage of the MN-IP program was Boston Scientific, Inc., which Herman said has "major operations" in Minnesota. UM announced this agreement in 2012. The relationship "has now led us to jointly co-locating our academic faculty and Boston [Scientific] employees here at the university side by side."

The new program also brought in PepsiCo, Herman said. The firm "has come in buildings where we know the tax status and we know we are not having a [tax] problem there and they now have renovated space that they'll house their employees in," Herman said.

UM continues to form other ties, including offering faculty positions, with industry sponsors. "Most recently" UM "has decided to start having joint academic-industry faculty appointments," Herman said, describing this as a "third area" that UM is "looking at in creating a better partnership between us and industry."

Revenue Too Low for the Effort

Huss said Penn State conducted a process much like UM's, having heard similar complaints from its industry partners.

While Huss said Penn State had more than $800 million in annual research expenditures in each of the preceding four years, what he called its "true" industry funding was about $20 million annually, an amount that had not been increasing.

"The main motivation here was that we weren't really doing very well in this space despite a lot of prolonged negotiation, a lot of expense on personnel, and a lot of investment of time," Sharky added.

That began to change in 2011 when Huss conducted a study of Penn State's activities from 2000 to 2006 and discovered that licensing revenue during that period was "very low."

During this timeframe, "we had negotiated strongly with our industry partners on IP terms for the sponsored research agreement and also on the terms of licensing agreements," yet "generated less than $100,000 of licensing revenue," Huss said.

Penn State, he said, "decided to implement a model whereby we would actually assign IP, transfer ownership of IP from Penn State to the sponsor," a policy that went into effect July 1, 2012.

Previously, "Penn State would always own IP even if it was sponsored by a company," Huss explained. "The sponsor had the first option to negotiate a license

agreement. The financial terms of that license agreement were not determined until after the IP had been created; we had to wait. That created some uncertainties. And the sponsor was never guaranteed access or licensing rights to the IP."

Penn State also makes use of a bonanza clause, Huss said in its IP agreements, which were shortened from six pages to two.

Agreements are still negotiated individually, with careful attention to how the researchers feel about them.

"We ask our researchers if they agree with this new approach of assigning IP," he said. "All of the researchers have to [specify] in writing, or electronically, that they agree with this new approach."

Erie Campus Sees Doubling of Activity

Perhaps the biggest impact has been the adoption of Penn State's shorter agreements. Data show that more than half the agreements Penn State negotiated in fiscal year 2015 utilized its template, compared to less than 15% of agreements prior to the new policy. "We think that's very meaningful," Huss said. "Negotiations are faster, simpler."

Since the change went into effect, Penn State overall has not "seen a tremendous uptick in the number of agreements with companies or the dollar value of agreements with companies," Huss said, but "there are pockets across the university of groups, organizations and individuals that are making really good use of this policy change."

Penn State's College of Medicine and its academic medical center in Hershey, Pa., have not adopted the new IP policies. "We do encourage collaborations" between the Hershey medical faculty and other campuses, Sharky said. "We have an understanding that whichever group is in the lead [the other] will follow their approach."

The impact of the new policy has been especially positive at Penn State's Erie campus; Huss described it as "like somebody turned on a light." The number of agreements signed grew from five in FY 2012 to 11 in 2013 and 12 last year.

The dollar value of each agreement "went from under $100,000 a year on average to over $900,000," Huss added.

Erie, he said, is "primarily an undergraduate educationally focused and research-focused campus. This is a group of people that have many company connections [and] strong connectivity to industry."

He noted that one PI in Erie's College of Engineering told him that the IP policy changes resulted in him "doing more sponsored research in the last two years" than in all of the preceding decade, which Huss verified.

This faculty member is also "very hopeful…that several of his graduate students will receive employment offers from sponsors," which Huss described as "an additional possible benefit."

Biggest Lesson So Far: Communicate

Developing these new programs isn't easy, and the officials cautioned that universities must not overlook the "complex" tax issues that arise in relationships with companies relating, in particular, to whether buildings where the research would be conducted had been financed with tax-free bonds. Some of the tax implications may also vary based on state, in addition to federal, laws, they added.

Penn State's Sharky said it was "really too early" to assess what the "true impact" will be of the changes his university has made in its IP policies. He said a five-year period or longer was probably necessary "to have really good, solid data."

Still, he stressed that the importance of communication is one lesson that already rings true. Penn State officials have found that "no matter how much we communicate both internally or externally, it's never enough," Sharky said.

UM's Herman agreed.

"You can't communicate enough, and you have to bring along all of your stakeholders at the same time in the process and get everybody in the same place and get them to understand how they all benefit from the changes that you're making," Herman said.

But he has no doubt that the changes have been beneficial for UM.

"We would definitely do this again. The response that we've gotten has been absolutely fabulous. In less than two years we've probably had over 100 companies sign up for MN-IP agreements," Herman said. "When you go out and talk to people in the industry they say, 'Gosh, the university is so much easier to work with now, so much [more] open to opportunity.'"

Beyond the specifics of the programs that Penn State and UM and others are instituting, these efforts are important in fostering industry collaborations, said Boccanfuso, the FDP director.

"One of the reasons I applaud what you have done is you have increased the number of options available for engagement with industry," he said to the Penn State and UM officials.

Link: http://tinyurl.com/lt5hjro ✧