

Technology Transfer Tactics™



The monthly advisor on best practices in technology transfer

Should more endowments have university start-ups in their portfolios?

U of Michigan taps endowment for start-up funding

When the University of Michigan announced in October that it would use a portion of its \$7.8 billion endowment to fund start-ups, it wasn't a surprise to **James Golubieski**, president of the Foundation for Venture Capital Group, an entity affiliated with the University of Medicine and Dentistry of New Jersey (UMDNJ). That's because Michigan called to ask UMDNJ about its unique funding for start-ups, forged out of its endowment fund -- a massive pool of dollars that is typically invested in traditional vehicles like stocks and bonds.

Though endowments have historically been off-limits as a source of research and start-up funding, there is a certain undeniable common sense to tapping into this ready source of capital: Endowments at most universities are huge, the dollars are invested, and portfolios are carefully managed for returns. If the university truly believes in the value of its start-ups, why not apply some of that money to its own research, where returns have often outstripped the market? Add the fact that many start-ups go begging for scarce funding, and the idea becomes even more compelling.

About six years ago, UMDNJ created a separate venture capital fund out of its endowment designed to stimulate commercialization. The idea came from the director of the institution's Office of Technology Transfer and Business Development, **Vince Smeraglia**. The university's foundation board, intrigued with the idea, asked for information on others who had gone this route. "There weren't any," says Golubieski. The closest was Case Western Reserve University, which had a model limiting funding to \$250,000 and that was subject to university control. "One of the guys there said if we wanted to do this, it had to be completely independent of the university."

And that's exactly what UMDNJ did, he says. The venture fund has \$200 million in assets, \$5 million of which is slated for investment in university start-ups. The maximum investment per start-up is \$500,000. Thus far, the fund has invested in seven initiatives. One was sold mid-2010 for an undisclosed sum, but which Golubieski says is over ten times the total

investment. The initial investment in Longevica Pharmaceuticals was less than the half million maximum, he notes. It was sold to Rostock International, a Russian company.

The model at the University of Michigan is secondary funding, provided after venture capitalists have vetted proposals and provided initial money. That's not the case at UMDNJ. "The nature of this fund is for seed money," says Smeraglia. "We invest in the earliest technologies, where no one else will fund them." The university sees about 120 inventions a year. Some are licensed to large companies, but a growing number are these earlier stage ideas. "The TTO will see if something is patentable, if it has a commercial application, and where the faculty has an interest," Smeraglia says. He then brings likely candidates to the venture capital group board, which conducts due diligence before deciding whether to invest. Once a decision is made to fund, the paperwork on license agreements by the TTO and investment by the venture capital group are done at the same time, closing on the same day.

Part of the reason they can get the work done simultaneously relates to the number of deals the venture group has done with the TTO. "We have nice standard documents we can use, and we are able to be more efficient because we have worked with them so many times," Smeraglia says.

Ownership structure differs with each deal, Golubieski says. But in general the FVC group takes a seat on the start-up board with voting rights, while the TTO has observer rights and an equity stake.

Risk and return

As a trailblazer with five years experience, Golubieski has fielded calls not just from Michigan in advance of its announcement, but the University of Connecticut and the University of Pennsylvania, among others. "We do this to make money, and have done well with it. But we understand that this is not without risk," Golubieski says. "Because we are not for

profit, we can take more risks than others." He dead-pans: "We can go in as an investment, and if it doesn't work, we can always call it research."

Each start-up chosen for funding is a true investment just as it would be in any VC's portfolio, and if there is a loss, the fund writes it down just like any traditional fund would note a loss. But they are more willing to take the initial risk on early-stage companies, says Golubieski. "I don't think most traditional funds would invest at the point we do. They would come in after. Yes, we have stakeholders, but we have a different slant on it than a typical venture capital group."

There are no specific rules about the kind of return on investment the fund looks for, except that each start-up chosen have a solid idea behind it that gives it a good chance of successful commercialization. The start-up next closest to reaching that status is an Alzheimer's blood test developed by Durin Technologies, in part with seed money from the fund. Once sold, any profits can be plowed back into the fund to make more investments.

Filling the gap left by risk-averse VCs

One reason for the increased interest in endowment funding is probably tied to the recession, says Smeraglia. "There are fewer venture capital groups, and those that exist don't want to do the seed funding. This is something that helps fill in the gaps. We will still do more traditional licensing, but it's a great additional resource."

Considering the size of most investments and the relatively modest amount used in start-up investments, it's an idea more universities and TTOs appear to be considering. Typical endowments at research universities are in the billions of dollars – the largest, at Harvard, tops out at \$27 billion.

And as the new Michigan program illustrates, the investments can be made at a lower-risk stage – which could ease any discomfort among endowment investors and foundation boards. The UM program won't be nearly as risky as UMDNJ's because it provides later funding, after another funding entity has given an idea the vote of confidence.

That said, Michigan's technology transfer office has a good track record of promoting profitable start-ups, says executive director **Ken Nisbet**. In fact, that track record is part of the reason UM is putting some of its endowment fund at risk: a university Investment Office analysis of returns on UM start-ups in the last 10 years showed that the school lost out on a potential hefty return by letting other entities take on the investment risk. One start-up, HealthMedia, sold for

an estimated \$200 million to Johnson & Johnson three years ago, and two device companies sold over the last two years for a combined total of nearly half a billion dollars.

Michigan is part of the Osage University Partners venture capital group, and is one of eight members that Osage named as particularly good at generating high-quality start-ups, Nisbet notes. As with many university start-ups, in typical deals the university has preemptive rights for funding in future rounds but rarely exercised those rights since later investments are often for big dollars beyond their comfort level. Osage's business model is to overcome some of that lost opportunity by co-investing with the university and sharing in the returns.

When the university looked at some of those returns, it saw the potential of using its endowment to directly invest in start-ups. Nisbet says that the Osage agreement stands, and the new funding mechanism is a "complement" to it.

In the future, Nisbet says UM may look at providing earlier stage seed investments like UMDNJ does. For now, the new fund is an additional resource for university start-ups that have already attracted outside funding. And while a sound economic return is the main impetus for each investment, the strategy in general is also a statement "about investing in community, too, and economic development," he says. "The university participating is a sign of commitment. I don't think this will substitute for some other capital investment. I think it means an expansion of investment."

Many in the tech transfer community are watching as UM starts its experiment. **Stephen Hartlen**, assistant vice president of industry relations and executive director of the Industry Liaison and Innovation Office at Dalhousie University in Halifax, Nova Scotia, says the way Michigan is coming in, after initial funding, is interesting and might be a comfortable entry point for organizations that have considered using pension funds or other money for start-ups and decided it wasn't worth the risk. "It's great because they have already vetted the idea. But venture capital funds are moving to later stage funding themselves," he notes, leaving a continuing void for the earlier stage businesses that are often in dire need of investment.

Still, Hartlen thinks it's "an interesting experiment. I'll be watching it."

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