Jump-Starting Start-ups

VentureLab gains momentum as member companies attract investors, gain admittance into ATDC.

BY T.J. BECKER

Technology transfer may be a bumpy road, but the Georgia Institute of Technology’s VentureLab program provides a smoother lane for faculty and students to move lab research into commercial markets.

A unit of the Office of Economic Development and Technology Ventures (EDTV), VentureLab was piloted in 2001 by the Advanced Technology Development Center (ATDC), Georgia Tech’s incubator for high-growth technology companies.

“Faculty members either weren’t pursuing commercialization or weren’t able to build companies to a point that they were ready to move into ATDC,” says Wayne Hodges, vice provost of EDTV. “We believed that the earlier we could get involved, the greater the chance that faculty start-ups would be sustainable.”

Although VentureLab is still in its infancy, success stories are emerging. This summer, four companies (GTronix, Jacket Micro Devices, Stheno and Orthonics) received more than $6 million in venture capital — a coup for such early-stage companies.

Real-world filter

Taking a proactive approach, VentureLab’s staff scouts the campus for promising technologies that might otherwise remain in the lab because researchers may be too busy or don’t know how to begin commercialization efforts.

“We have one foot in academia and one foot in the marketplace,” says Steve Derezinski, VentureLab’s director. “We meet with faculty and graduate students regularly so they understand what’s required to form a company. And we look at the marketplace to determine if there’s real potential for the technology.”

That business filter is critical because not all innovations translate into commercial successes — or warrant the formation of a new company. It may be better to license a technology to an existing company than go through the expense and rigors associated with a start-up.

VentureLab also assists with:

• **Market focus.** Staff members identify the best market to target and where to enter it.

• **Pre-seed funding.** Georgia Research Alliance (GRA), VentureLab’s umbrella organization, provides grants to validate technology and develop working prototypes.

• **VentureLab Fellows.** Faculty researchers are matched with experienced entrepreneurs and managers who may become a company’s first chief executive.

Professional management makes a big difference in a company’s growth, says Madhavan Swaminathan, a professor in Georgia Tech’s School of Electrical and Computer Engineering (ECE). Swaminathan and four other researchers in Georgia Tech’s
Trying unsuccessfully to win institutional capital, researchers had been trying to win institutional capital.

—Madhavan Swaminathan, explaining how researchers had been trying unsuccessfully to win institutional capital.

Microsystems Packaging Research Center are commercializing an integration technology for radio-frequency passive components used in wireless telecommunications products such as mobile phones. With help from VentureLab, they formed Jacket Micro Devices (JMD) in 2002.

JMD gained significant funding when VentureLab Fellow Jim Stratigos became CEO in Feb. 2004. “As soon as Jim came, we got our funding,” says Swaminathan, explaining that the researchers had been trying to win institutional capital on their own for nearly two years. One month after Stratigos’ arrival, JMD received term sheets and closed on financing in June.

“We are technologists, and venture capitalists invest in a business, not a technology,” Swaminathan adds. “Jim helped us strategize better and convey our strategy to investors.”

Beyond bootstrapping

Formed in December 2003, Orthonics is developing novel biomaterials for spinal disc repair and regeneration, which incorporate several Georgia Tech technologies. Among them is research by Barbara Boyan, a professor of biomedical engineering and GRA Eminent Scholar.

Launching any new company is difficult, but biotech start-ups have particular challenges. “It takes a long time to get to market — and a lot of money,” says Steve Kennedy, a VentureLab Fellow who now serves as Orthonics’ chief executive.

Indeed, commercializing a medical device, such as Orthonics’ materials, typically takes at least three to five years and $25 million in funding.

That means traditional bootstrapping isn’t a possibility. Yet proof of concept is required before a start-up can even hope to attract investors.

“One of the biggest services VentureLab performs is providing pre-seed capital that allows you to prove your technology and be taken seriously by investors,” Kennedy says.

Orthonics received two VentureLab grants totaling $150,000, which led to funding from Viscogliosi Brothers LLC, a New York venture-capital firm that focuses on the musculoskeletal and orthopedics industry. The VentureLab grants also enabled Orthonics to get a grant from the National Institutes of Health. It will fund studies to allow further development of the spinal disc prosthesis.

Involved in faculty commercialization at other universities, Boyan says VentureLab was a major factor in bringing her to Georgia Tech in 2002.

Access to VentureLab Fellows is a huge plus for faculty researchers, Boyan says. “I had to be the person that ran my company before,” she explains. “No one can do it all.

Start-up company Stheno Corp., formed through VentureLab, is commercializing non-contact optical chemical detection technology developed at Georgia Tech. Shown are: Professor Andreas Brommarius, center, Stheno CEO Bill Edens, left and chief science officer Phillip Gibbs.

Something has to give, and usually that means your research program. VentureLab allows me to do what I do best — be the scientist and professor.”

Resource for resources

Stheno Corp., which is developing chemical-detection solutions to find impurities in pharmaceutical processing, graduated from VentureLab in summer 2004 and was admitted to ATDC.

Proximity to other entrepreneurs at ATDC’s Biosciences Center has helped solve numerous problems, says Bill Edens, Stheno’s CEO. For example, when a machine shop delayed Stheno’s order for a month, putting project deadlines in jeopardy, another ATDC member suggested an alternative supplier — one that specialized in smaller orders.

“Now when I start to look for vendors or suppliers, it’s my normal procedure to walk the halls and ask for referrals,” Edens says.

Stheno came onto VentureLab’s radar screen when Edens, completing a master’s degree at Georgia Tech, won second place in a business-plan competition sponsored by the College of Management. The award prompted a chain of support: Acceptance into the VentureLab program helped Stheno secure a Small Business Innovation Research grant from the National Science Foundation. Then, William Oakes, one of the competition’s judges, became an early investor in Stheno.

Launching a new company requires a wide variety of resources. Edens says: “It’s not simply a matter of assembling pieces, for you must first find those pieces. Georgia Tech has made it possible to get the resources we needed.”

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