Big Pharma on campus: Why Abbott does R&D at UIUC

PROJECT CASE STUDY ■ AURP BioParks presentation reveals why a firm with a $2.7 billion research budget and 100+ facilities worldwide is leasing a tiny space at the U. of Illinois

By Murray W. Wolf

Editor's note: *In this, our second report from the Association of University Research Parks (AURP) BioParks 2010 conference in Chicago, we summarize a presentation that explained how one university was able to attract a Big Pharma firm to its research park.*

Abbott Labs established a satellite R&D facility at the University of Illinois Urbana-Champaign Research Park to get closer to the latest innovations.
Photo courtesy of UIUC Research Park

Historically, university bioparks have focused on attracting and nurturing start-up and early stage bioscience companies. The rationale has been that emerging bio ventures benefit from locating near a concentration of research talent, while university researchers benefit from having access to for-profit firms through which they might be able to commercialize their discoveries.

But wouldn't large, established firms benefit from that same dynamic?

At least one Big Pharma firm seems to think so. Researchers from Abbott Laboratories (NYSE: ABT), the world's eighth largest pharmaceutical company, are now rubbing shoulders with comparatively tiny bio ventures at the University of Illinois at Urbana-Champaign (UIUC) Research Park.

How that came to pass was the subject of a presentation titled "Attracting Large Bio-Related Companies to Your Park" during the recent BioParks 2010 conference in Chicago. The conference was presented by the Association of University Research Parks (AURP).

Economic development mission

After years of discussion, University of Illinois (UI) officials began moving forward in 1999 with plans for a research park immediately southwest of the university's flagship campus in Urbana-Champaign, Ill. A request for proposals (RFP) was issued to select a for-profit firm to develop, own and lease the buildings, with the university retaining ownership of the underlying land via a long-term ground lease. A university subsidiary, University of Illinois Research Park LLC, was created to oversee operations.

Fox/Atkins Development LLC – a partnership of two local commercial real estate firms, Fox Development Corp. and The Atkins Group – was selected and began construction of the first multi-tenant building in 2000.

The first two buildings were completed in 2001, and today the research park abutting the southwest corner of the UIUC campus boasts 12 buildings totaling about 607,000 square feet. Those facilities include eight research and development (R&D) and office buildings, a 43,000 square foot EnterpriseWorks incubator facility for start-up companies, a rapid prototyping facility, a daycare and early childhood development center, and a hotel/conference center with a Houlihan's restaurant, plus an amphitheater. The long-term master plan calls for an eventual phased build-out that could total up to 5 million square feet of space on 250 acres.

UIUC Research Park is home to 87 companies and more than 565,000 square feet of office space, according to park officials. The EnterpriseWorks incubator has 35 tenants with a total of 174 employees, and the other 43 tech-related companies in the park employ a total of 807 people.

"So (it's) certainly a wide range of very small companies – from one employee that's just getting going – to these larger corporations that are collaborating with the University of Illinois," Laura Frerichs of the UIUC Research Park explained during the AURP BioParks presentation. Ms. Frerichs is associate director of research park and incubation facilities, and director of the Illini Entrepreneurship Center at the UIUC campus.

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Another 465 people are employed by seven different university units, the hotel/conference center and the restaurant, bringing total employment at the park to 1,446, according to UIUC data. That includes more than 1,000 full- and part-time workers and more than 400 university student interns.

Those employment numbers are closely watched by university and state officials, who see the research park as a driver of jobs and economic activity as well as science. In fact, the university formalized a "technology based economic development" strategy in 2000, with a stated mission "to encourage collaborative research, development and commercialization of the university's intellectual assets, and to foster economic growth."

That focus on economic growth and jobs extends to the UIUC Research Park's vision. That vision calls for not only incubator facilities to encourage start-ups and for facilities to house closely allied university activities, but also for facilities for developing and mature companies.

The UIUC Research Park is not solely a biopark; many of the tenants are involved in other technology based businesses. Major non-bio tenants include Yahoo! Inc. (Nasdaq: YHOO), State Farm Mutual Automobile Insurance Co., Caterpillar Inc. (NYSE: CAT) and SAIC Inc. (NYSE: SAI).

But the park also includes as smattering of bio firms, most notably iCyt Visionary Bioscience Inc., a maker of analysis and sorting technology. iCyt was acquired earlier this year by Tokyo-based Sony Corp. (NYSE: SNE).

iCyt moved into the two-story, 45,045 square foot iCyt Building at 2100 S. Oak St. in 2005 and occupies 17,804 square feet on the ground floor. The second floor is leased to four unrelated tenants, with two more suites still available, according to marketing materials from Fox Development.

Abbott's changing model

As the UIUC Research Park's mission evolved during its first decade, another Illinois-based organization was undergoing some strategic shifts of its own – shifts that would ultimately bring together the two entities. That organization was Abbott Labs, a $30.8 billion (2009 revenues) Big Pharma firm headquartered near Chicago.

"Attracting a large company to your park – or even in some cases, smaller biotech firms – can be a long discussion," Ms. Frerichs told the AURP BioParks conference gathering, "and this one began many years ago as we tried to encourage Abbott to consider coming to the flagship University of Illinois campus to establish an operation in our research park."

Ms. Frerichs had a unique perspective on the process; prior to joining UIUC, she was VP for business development and marketing at Fox Development, and was responsible for marketing the research park and supervising the leasing and marketing staff.

With Abbott, UIUC obviously had a "home state advantage," and John C. Landgraf, Abbott's senior VP, Pharmaceuticals, Manufacturing and Supply, was interested in establishing a presence there, Ms. Frerichs said. But Abbott has multiple divisions, including pharmaceutical products, nutritional products, diagnostic instruments and tests, medical and surgical devices, animal health, and vision technologies. With so many product lines, more than 7,000 researchers worldwide and billions of dollars in annual R&D investment, Abbott executives weren't quite sure where to begin.

As it turns out, UIUC has a sizable Department of Food Science and Human Nutrition. Abbott has also been working with the university for more than two decades, Dr. Robert Miller of Abbott told the BioParks conference audience. Abbott employs about 1,000 UI graduates.

Dr. Robert Miller

Dr. Miller, division VP, Abbott Nutrition Research & Development and Scientific Affairs, said that another thing that smoothed the way for the eventual recruitment of Abbott by UIUC was a gradual change in the firm's site selection criteria for R&D operations.

The conventional wisdom for Big Pharma firms has been to locate R&D and technical operations near manufacturing plants, he said. But that model can isolate researchers from universities and other potential sources of innovation.

"Innovation is the lifeblood of Abbott, and certainly of Abbott Nutrition," Dr. Miller said.

As a result, he said that Abbott is adopting a different model: locating R&D in research parks. Company executives now believe they need to have a presence in university research parks "for knowledge spillover," he contended.

"In the '90s, it was all about, 'Can I acquire, license R&D agreements?' " he said. "In this 21st century ... the focus is more on access to public and private facilities, and the ease of interaction with these organizations."

Laura Frerichs

Abbott gets serious

In 2008, Abbott executives started talking seriously about how to get involved with the UIUC Research Park, Dr. Miller said.

Abbott's strategy was to:
■ continue to strengthen its collaborative relationship with UIUC, including the leveraging of funds to develop the newest technologies for commercialization;
■ gain targeted access to faculty, intellectual property and an entrepreneurial environment; and
■ gain access to a high-caliber talent.

In May 2009, it was announced that Abbott Nutrition had leased a 2,070 square foot suite the second floor of the iCyt building at the UIUC Research Park. Another 4,045 square feet is available for potential expansion.

Lease rates were not disclosed, but Fox Development has adjacent space in the building listed for $16.50 per square foot, triple net (NNN).

"This is exactly the kind of thing we wanted to see in the research park: a major company looks to locate in the research park because they are wanting to form partnerships with the university," Avijit Ghosh, UI's VP of technology and economic development, said at the time of the announcement.

"We do have partnerships with a number of universities around the world but certainly the University of Illinois is a priority for us," added Tracey Noe, spokeswoman with Abbott Nutrition. "Abbott is committed to building a pipeline of future leaders."

The ability to employ graduate research assistants and undergraduate student interns also provides an available, flexible and relatively low-cost workforce, Ms. Frerichs noted.

Abbott Nutrition moved into the satellite R&D facility at UIUC Research Park in summer 2009.

"It took a long time of patience to develop it," Dr. Miller said. "But when we moved, we wanted to move now. And everyone in these organizations – Fox Development, UIUC – was there to make it happen in short time. And that's what we need to have on those types of things."

Abbott's UIUC facility currently has 11 employees: seven researchers, two regulatory affairs personnel and two operations personnel.

Besides the Illinois facility, Abbott Nutrition has pursued its new model with an R&D center of about 30,000 square feet at the $300 million, 2.4 million square foot Biopolis biomedical research campus in Singapore. That facility opened in January 2009.

Although the two R&D facilities are a world apart – both literally and figuratively – they both reflect Abbott's newfound strategy of "being in the mix," Dr. Miller said. By locating R&D facilities in research parks, the company can avoid being isolated and can tap into more local and regional talent, ideas and insights.

A space of barely 2,000 square feet is a drop in the bucket for a firm with annual R&D spending of $2.7 billion (2009) and more than 100 facilities worldwide. Yet initiatives like Abbott's R&D operations at the UIUC Research Park will be critical to the company's ability to continue to innovate, he said.

Abbott Nutrition and other Abbot divisions are looking for additional opportunities to collaborate with universities in a research park setting, he said.

"I'm looking at: where are my next areas to go at? And we're taking a little different even view on that," Dr. Miller concluded. "Before, it was I saw that we should be close to manufacturing plants. I don't know that that's true anymore." ❑

University of Illinois UC Research Park
Champaign, Ill.

STATS
■ Project size: 12 buildings totaling 607,000 square feet (current)
■ Tenants: 87, including operations of nine Fortune 500 companies
■ Future plans: Up to 5 million square feet on 250 acres
■ Development cost: About $82 million (to date) based on a reported $63 million in private investment and about $19 million in investment by UIUC (Source: News-Gazette, Champaign, Ill.)

PLAYERS
■ Developer/building owner: Fox/Atkins Development LLC, a partnership of Fox Development Corp. of Champaign, Ill., and The Atkins Group of Urbana, Ill.
■ Land owner: University of Illinois Research Park LLC, a UI subsidiary

Postcards from Chicago: More from BioParks 2010

SPECIAL REPORT ■ Here are some additional highlights from the Association of University Research Parks' annual conference focusing on university affiliated bio campuses

"We have a fragile economic recovery underway. In the United States we passed the largest healthcare bill in our history just a few months ago. This will radically affect the way we do the business of healthcare in the United States."

Brian Darmody, AURP president and
Associate VP of Research and Economic Development,
University of Maryland

"Over the past 10 years, Illinois' eight technology parks have increasingly become lynchpins in the state's strategy to promote technology transfer. Our parks' collaborative efforts mimic what it takes to succeed in business. And from these efforts, our parks don't just attract any tenants but the right tenants, and tenants that strive and contribute to our economy. Economists estimate up to half of the U.S. economic growth over the past five years is due to advances in technology. And as every $1 million in R&D spending supports 36 direct and indirect jobs, truly our economy simply cannot afford to perpetuate boundaries."

Warren Ribley, Director,
Illinois Department of Commerce and Economic Development

"I try to keep the role of my department simple... Our job is to utilize the tools that we have to retain and attract new businesses to our city... And this certainly aligns with your organization's mission to foster innovation, commercialization and economic growth in a global economy through university, industry and government partnerships. The biotechnology industry is one of the key's to Chicago's future."

Christine A. Raguso, Acting Commissioner,
City of Chicago Department of Community Development

"To me, what makes America great and what makes us so innovative is our freedom. It's not our government granting exclusive rights. It's our ability collaborate, share, talk, brainstorm... There is a lot of free-riding that occurs on American innovation by foreign countries..."

Dr. Daniel B. Ravicher, President and Executive Director,
Public Patent Foundation (PUBPAT), and Associate Director,
Intellectual Property Law Program, Benjamin N. Cardozo School of Law

"2008 was the first time money from institutional sources exceeded money from individual sources. So friends and family, angels, angel networks are incredibly important to... a start-up business. So we are proposing an investment tax credit for individuals who invest in a university spin-off company that's raised less than $5 million in equity."

Dr. Ashley Stevens, Special Assistant to the VP
for Research Technology Development, and
Senior Research Associate, ITEC, Boston University - School of Management

"When you look at the average size of (research) parks in the United States and compare them to some of our competitors, particularly China – ours are puny... It's a scale issue. And it's kind of funny because the whole notion of these research parks was really created here in the States but (is) being perfected abroad. And in the meantime, if we're truthful, the United States just has lacked a national emphasis on accelerating investments in these kinds of critical 21st century infrastructures."

John Fernandez, U.S. Assistant Secretary of Commerce,
Economic Development Administration

"Focus on regions" to be more competitive. Clusters of bioscience companies in a single geographic area provide more opportunities and career mobility for prospective employees. "If they are in an environment where they have a lot of scientific institutes, where always good jobs are offered... If they find this environment, then they will easily go there. They will like to go there... Strengthen these regional activities."

Dr. Klaus Plate, Senior Advisor and former CEO,
Heidelberg Technology Park