Michigan Drives For Biotech Industry, But The Road Can Be Bumpy

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The frequently asked questions on human-tissue bank Asterand Inc.'s Web site include standard fare about the company's business and science. Then it asks, "Why Detroit?"

The epicenter of America's automotive industry, Detroit isn't an obvious choice for the headquarters of a biotech start-up. But Asterand answers that the motor city has been good to the venture-backed company. Wayne State University wooed Asterand with equipment, access and the anchor spot in TechOne, a former General Motors facility transformed into a high-tech incubator with a $12 million facelift. Asterand has also received $2.3 million in state funding reserved for life science projects.

The bigger picture is that biotechs like Asterand are benefiting from a major push by Michigan to reinvent itself with a thriving industry that brings in high-paying jobs and prestige. Plenty of states talk up intentions to seed a biotech industry because of its general stability amid large shifts in the national economy. But in Michigan the idea has a particular urgency. After powering the state for a century, the automotive industry is cutting jobs and generally deflating. Once an industrial powerhouse, Michigan now contends with some of the worst unemployment in the nation.

Among the many states striving to create a life science industry, Michigan enjoys advantages that make it a useful example of how to create a business climate hospitable to high tech start-ups, but success is not assured.

Michigan Economic Development Corporation Senior Vice President Jeff Mason said that while the state is not a premier life science destination, "I think we've seen some pretty significant success." Since 1999 about 105 life science companies have formed in the state. By this measure, Michigan claims to boast the fastest growing life science industry in the country.

Over the past several years the Michigan's governments have made a bipartisan financial commitment to high technology, and biotechnology in particular. In 1999 the state pledged to advance life sciences by distributing $50 million annually for twenty years, of which it has distributed $220 million so far, according to Mason. More recently, Democratic Governor Jennifer Granholm has called for a $2 billion bond issue on the November ballot to advance high tech; the Republican led state senate countered with a proposal for a $1 billion bond, half of which would go to life science.

Spearheading the state-wide initiative is Ann Arbor, the sort of place where life science start-ups sprout like toadstools. The city is home to one of pharmaceutical giant Pfizer

Inc.'s major research and development facilities, and boasts the world-class University of Michigan, where the technology transfer office alone has spun out 47 technology companies in the last five years, though not all are based in Michigan. In addition to these scientific resources, Ann Arbor's college town atmosphere secures its place as Michigan's most natural new economy hub. Several other cities, such as Kalamazoo however, are vying to present companies with the best infrastructure and strongest community support networks.

Even with an attractive combination of educational, governmental and private sector resources, Michigan faces similar obstacles to rival states in its effort to become a top-tier life science center. Firstly the state has a creaky industrial reputation. As Jeff Mason of the MEDC said, "Michigan is not traditionally thought of as a biotech or life science state."

More tangibly, the challenge for Michigan is to create the sort of self-perpetuating critical mass of entrepreneurs that is the pride of established technology clusters such as Boston and Silicon Valley. Michigan like many regions has developed a galaxy of programs to recruit and develop high-tech start-ups. But places like Michigan have an entrepreneur shortage because if they fail "they're scared that they're 2,000 miles away from the cocktail party that's going to get them their next job," said Tom Dickerson, chairman of Tullis-Dickerson, a health care-focused VC firm that has an office in Ann Arbor and atypical states like Alabama and New Mexico. Michigan has more than enough science, he said, but lacks "folks that can take companies from ten employees to 50 or 100 employees."

Citing the same problem Kenneth Nisbet, executive director of the technology transfer organization at the University of Michigan, confessed that integrating recruiting efforts with the school's enormous alumni network has been slow. "It's an asset we realize we have that we want to leverage more."

Peter Young, chief executive of Research Triangle Park, N.C.-based vaccine company AlphaVax Inc. and the recently elected chairman of the North Carolina Biosciences Organization, a trade group, said that before North Carolina built its sizzling biotech sector it, like Michigan, had to get entrepreneurs from the northeast and California "to think beyond their reflective bias." Like Michigan, North Carolina has numerous pro-entrepreneur programs and strong universities, but ultimately the only way to succeed is to produce successful companies.

Industry leaders also grumble about a lack of venture capital to finance Michigan start-ups. In 2004 there was about $597 million under management in the state. Though less than some coastal firms manage, it is enough to give opportunities to many promising companies, especially those which are not developing pharmaceuticals. Some regional and national venture capital firms also invest in the state.

As with Asterand, community support is an often overlooked factor which can lure in companies. While far too early to declare victory, one of Michigan's more impressive community efforts has been in Kalamazoo.

The city's biotech history extends back to 1885 when W.E. Upjohn patented the "friable pill," a tablet that could be crushed into powder. More than a century later, in 1995, the Upjohn Company merged with Pharmacia Corp. which was acquired by Pfizer in 2003.

After the purchase, Pfizer closed a Kalamazoo research and development facility costing the area about 1,200 jobs. To sustain the community, economic development group Southwest Michigan First waged a "Stick Around" campaign asking Pharmacia researchers to start companies in the area.

The campaign aimed to connect scientists to business advisors and in some cases to angel funding, leading to more than 25 start-ups. Kalamazoo also received state funding to build a life sciences incubator facility that now houses 15 of the fledgling companies. Of these Southwest Michigan First said at least six have angel funding and one, ProNAi Therapeutics, has received VC funding from investors including the local Apjohn Ventures Fund. In addition the booster group's board helped to raise the $50 million SWMF Life Science Fund scheduled to hang out the shingle in September.

As in Detroit, whether life science companies thrive in Kalamazoo will depend in part on how willing the community is to nurture them. Asterand, which broke even financially last year, is an example of how it can work. Randal Charlton, Asterand's chief executive, said he wanted to be "literally embedded" at Wayne State University. "We didn't want to be in some office park outside of Ann Arbor," he said. "You can be three miles away and be a million miles away."