

The New York Times

Phoenix Moves to Put Itself on the Biotechnology Map

by Morris Newman

February 2, 2005

Taking the first step in an ambitious, if risky, strategy to create a biotechnology center, the city of Phoenix has completed work on a \$46 million medical laboratory building dedicated to genetic research.

Finished in December, the 170,000-square-foot laboratory stands on a 15-acre downtown area known as the Phoenix Biomedical Center at Copper Square. Although the official opening is not until March, two nonprofit research groups - the Translational Genomics Research Institute, known as TGen, and the International Genomics Consortium - have already moved into four floors that they leased before construction.

Another floor of the six-story laboratory is to be occupied by the National Institute of Diabetes and Digestive and Kidney Diseases, an arm of the National Institutes of Health, leaving only one full floor still to be leased.

City officials plan to build five additional structures and refurbish three buildings, which were part of a high school. All this development is to produce as much as one million square feet of space and is to take place in the next five years. The intent, according to city officials, is to create a research cluster as a lure to both academics and biotechnology company start-ups.

Phoenix joins a national race involving cities across North America, each seeking to position itself as a hub for the rapidly growing biotechnology industry.

"Phoenix is just the latest of the cities and states that have identified biotech as the growth area of the next 10 years," said Keith Brownlie, area practice leader for biotechnology in metropolitan New York at Ernst & Young, the accounting and consulting firm. The city, he added, is among many that are "looking for higher-salaried white-collar people, such as researchers."

Unlike some of its competitors - including such industry strongholds as the Boston-Cambridge area, the San Francisco Bay region, San Diego and the Research Triangle area of North Carolina - Phoenix is starting from scratch.

Arizona does not even figure on the list of 16 states and Canadian provinces monitored by Ernst & Young as the largest biotechnology markets in North America. That list was led by California, Massachusetts and Quebec, according to a report by the firm in 2004.

"It's an act of will," Richard Love, chief operating officer of TGen, said of the drive to create a biotechnology hub in Phoenix.

Willful or not, when judged by fund-raising, the biotechnology effort appears broadly supported in Arizona: in a single eight-month period in 2003, the city of Phoenix raised \$100 million from public and private sources, including the state of Arizona and the Flinn Foundation, a private organization started by a Phoenix doctor in 1965, whose grant recipients include medical causes. The city's contribution is limited to the construction cost for the laboratory building.

Still, the amount raised in Phoenix is a tiny fraction of the \$3 billion that voters in California have authorized that state to spend for stem cell research.

Phoenix's sum also includes \$5 million from the Salt River Pima-Maricopa Indian Community of Maricopa County, Ariz., which operates casinos and which is seeking to sponsor research that could benefit the tribe's members, according to H. Janette Torres, the city's technology industry manager. <p>

"There is a high incidence of diabetes in the Native American population, and the tribe was interested in partnering with TGen by funding diabetes research," she said.

From the biotechnology fund, the city provided \$46 million to construct the laboratory to TGen's specifications for the group to rent and pledged an additional \$12 million in operating costs for the two research groups.

In its bid for biotechnology success, Phoenix is seemingly trying to follow the classic recipe for biotech centers, by seeking to replicate the mix of education, industry and government found in established research capitals.

Medical schools and the researchers and entrepreneurs they attract are part of that formula. Accordingly, Phoenix has persuaded three public universities - the University of Arizona, Arizona State University and Northern Arizona University - to combine forces and create the city's first four-year medical school near the Phoenix Biotech Center. It is scheduled to hold its first classes in 2006.

Even the local school district is joining in by building a new science-oriented high school near the center, with the hope of expanding the city's biomedical labor force.

For city officials, the biotechnology move is the means to create new economic momentum in Phoenix's thinly developed downtown. "We had been looking for a way to bring 'intelligent capital' to our region and create some density of population in our downtown area," said Patrick Grady, director of the city's Downtown Development Office.

Although Phoenix's population has increased to 1.4 million - it was the sixth-largest city in the country in 2000 - most of its growth is away from downtown in a spreading circle of suburban sprawl. Most new office buildings and shopping centers are in outlying areas of Phoenix like the developments along Camelback Road three miles north of downtown, and in suburbs like Scottsdale about eight miles east.

Phoenix first prospered a century ago as a railroad depot for cattle, cotton and citrus. In recent decades, the city enjoyed some success as a center for software and silicon chip manufacturing. With growth in those industries flagging, city officials looked for new economic engines to lift downtown. "We had folks looking into retail development, and other folks looking at residential development," Mr. Grady recalled.

In 2002, the Flinn Foundation commissioned a report about the Arizona economy from the Battelle Memorial Institute. The report found that Arizona had a little-noticed concentration of research and biotechnology companies with strengths in cancer research, neurosciences and bioengineering.

Following up quickly on the report, Phoenix officials began the biotechnology drive the same year, by responding to a request for proposals for a new headquarters for TGen, a research group formed by scientists formerly affiliated with the National Institutes of Health. Other areas competing to attract the company included the Baltimore-Bethesda area of Maryland, Atlanta and Houston. Phoenix offered to construct a building to TGen's specifications quickly and to provide the \$12 million subsidy. TGen's rent has not been made public.

Designed and built by a venture of DPR Construction Inc. of Redwood City, Calif., and the Smith Group architecture firm, based in Detroit, the straightforward laboratory stands near the center of downtown, close to City Hall, the city's expanding convention center and a theater district.

Although the research groups have barely moved into the building, city officials are set to start construction this summer on a second building at a cost of \$27 million. It is to be occupied by the Arizona Biomedical Collaborative, a research venture of the state's three public universities.

There are risks in the costly effort, according to Mr. Brownlie, the bio-industry consultant. To succeed, Phoenix will need "the basic infrastructure and the facilities that support the personnel who work in biotech companies," starting with "a successful research park," where start-up companies can turn discoveries into products.

Competing states offer a variety of incentives to biotechnology companies, like financing from settlements from tobacco-industry lawsuits. Other states, including New Jersey, allow companies to sell their net operating losses, which can be used as tax credits by those who buy them.

Despite the high number of communities racing to capitalize on biotechnology, Mr. Grady said, the two anchor organizations in the new laboratory will make Phoenix competitive in the genomics niche. "We are not just building another biotech center," he said. "We are on the leading edge of a very important technology. The genomics field is not more than five years old."

Arizona can compete not only with direct incentives but also with affordable housing, according to Ms. Torres. "You can buy a large three-bedroom house in Phoenix for \$230,000, which would barely get you a condo in California," she said.

For Mr. Grady, however, "what will bring people here will be the science," he said.

"All the amenities are secondary."

