

Michigan

STATE OF INNOVATION

PART I IN A SERIES: FOCUS ON LIFE SCIENCES

In Life Sciences Corridor, Both Cures and Companies Grow

by Vickery Eckhoff

For business start-ups, 2001 was no time to be out looking for funding—except in Michigan.

Over the last three years, a program spearheaded by the State of Michigan's Economic Development Corporation (MEDC) has shown what innovation, collaboration and some well-placed seed money can do to spur investment, jobs and life-saving research.

With \$1 billion from its tobacco settlement, the state established the Michigan Life Sciences Corridor, a project that has catapulted Michigan's life sciences industry into the spotlight and 22 biotechnology businesses in 2001 alone into, well, business.

At nearly \$2 billion, Michigan's life sciences industry is growing fast. For the last five years, the state was *Site Selection* magazine's top pick for new business investments and expansions, as well as Coopers & Lybrand's number one state for business attraction and retention programs, according to *Corporate Location* magazine. Michigan's resources are many: 20,000 life sciences workers, four of the nation's top academic and research institutions, prominent scientists and a progressive business climate that includes tax incentives, incubators and SmartZonesSM.

Since it began in 1999, the Michigan Life Sciences Corridor (MLSC) has awarded \$150 million. The Corridor's biggest project to date is the Core Technology Alliance (CTA), a network of five advanced technology facilities being developed for use by Michigan researchers affiliated with universities, private research institutes and biotechnology or pharmaceutical firms. The centers will focus on genet-

ically modified animal research, automated gene sequencing, determining protein structure and function, and developing scientific computation tools for analyzing the complex data from living systems.

"This is an unprecedented effort to pull Michigan's leading research institutions together to share very advanced laboratory facilities that might otherwise be out of reach," said Fawwaz T. Ulaby, chairman of CTA's executive committee and vice president of research at the University of Michigan.

The Life Sciences Corridor also has helped a variety of start-ups get off the ground. These include Velcura Therapeutics, a biotechnology company founded in 2001 by Dr. Michael Long, a University of Michigan Medical School Department of Pediatrics professor. Velcura knows how to grow human bone outside the body, "something that's been done with other tissues, but for bone growth, it's a first," Long states. The company hopes to use its breakthrough technology to discover cures for bone disorders.

Support to Integrated Sensing Systems helps this cutting-edge firm create marketable prototypes of sensing systems small enough to fit in the eye of a needle and take key measurements inside the body. The Van Andel Research Institute (VAI), one of Michigan's newest facilities, is undertaking research into a reagent it had been testing for imaging in mouse models. "These antibodies are used to image tumors that express a specific antigen that VAI had been working on for a number of years," says the facility's director, Dr. George Vande Woude, a former head of the National Cancer Institute.



From top: Technician using MALDI-QTOF mass spectrometer; two medical pressure sensors in a needle's eye; the Van Andel Research Institute; technicians working in clean room.

For these start-ups, the MEDC's support was critical, not simply because of the economy, but because they were new and perceived as risky by venture capitalists. "Investing \$50 million a year is a potent catalyst, encouraging companies and institutions to share ideas and research, license that research out of the universities, and get it working and curing people," says MEDC's president and CEO, Doug Rothwell. "Before, that research stayed in the library," he notes. "Now it's on the street."

For more information on the Life Sciences Corridor and other MEDC services, call 1-800-946-6829 or visit www.michigan.org.

