



Pumping innovation throughout the state

The Global Cardiovascular Innovation Center and the next big ideas

You have a diagnostic test or new medical device that could potentially improve care for patients suffering from heart disease. Now what?

A wise first step would be contacting the Global Cardiovascular Innovation Center (GCIC) a state-wide catalyst for cardiovascular innovation. The GCIC specializes in commercializing innovations like these, propelling them to market quicker so that patients can benefit sooner.

Founded in 2007, GCIC is a \$250 million product commercialization consortium made possible by a \$60 million grant from the State of Ohio's Third Frontier Project. It's the largest-ever grant made under the Third Frontier Project, the state's billion dollar effort to expand Ohio's high tech research capabilities, promote innovation and create high-paying jobs.

On top of developing and acquiring new technologies, the GCIC also looks to launch new companies and recruit companies and experienced executives to establish an internationally recognized cluster of cardiovascular expertise in Ohio.

In his 2008 State of the State Address, Ohio Governor Ted Strickland commended the public-private partnership formed to develop new cardiovascular products. "It will create hundreds of new jobs," he said, "and more importantly, it will help countless patients in Ohio and around the world overcome a terrible threat to their health."

This independent consortium is led by the Cleveland Clinic, the nation's top heart care center for 13 years running, and includes an enviable cast of industry and clinical partners—AstraZeneca, Boston Scientific, IBM, Johnson & Johnson, Medtronic, Procter & Gamble, Siemens, Case Western Reserve University, the Ohio State University, the

University of Cincinnati, the University of Toledo and University Hospitals of Cleveland. It is also strategically linked to economic development partners, including BioOhio, BioEnterprise, Fairfax Renaissance Development Corporation and TeamNEO.

Nearly \$30 million of the \$60 million provided by Ohio's Third Frontier Project will be used to provide seed funding for start-up companies. To receive funding, the companies need to have a physical presence in Ohio. In addition, the center will construct a facility that will have the ability to house up to 20 startup cardiovascular firms. Located close to the heart of the Cleveland Clinic research and clinical operations, the center will provide the proximity and links to ensure that translational research moves rapidly from preclinical studies to early- and late-phase clinical trials, and on into clinical practice. The GCIC is also working with incubators and accelerators around the state to house GCIC companies.

Mark Low, managing director of the GCIC, said the consortium partners are committed to establishing Ohio as one of the premier locations for locating cardiovascular businesses, both new and established firms.

"We're aiming to provide the complete array of factors that cardio businesses need to grow," he said. "An environment that provides unparalleled access to researchers, mentors and development expertise, low-cost and flexible incubator space, core facilities for rapid prototyping and development, world class preclinical and clinical testing, and connections to a strong supply and manufacturing infrastructure."

In addition to facilitating the formation of new companies, the GCIC team has been working with companies from around the U.S. and from Brazil, France, Hungary, Ireland, and Israel to help them establish operations in Ohio. The overall goal of the GCIC is to create or attract 40 companies and create 850 related jobs by 2011. Recently four cardiovascular companies have located in Ohio to access GCIC experts, funds, and partners.

GCIC also assists institutions and companies by providing resources and funding for technology commercialization. In a short time, GCIC already has held Three rounds of funding during 2007, allocating \$9.5 million to the development and commercialization of 34 cardiovascular technologies, including groundbreaking imaging techniques, cellular therapies, and vascular devices. Funding recipients include Akebia Therapeutics, Interventional Imaging, and ZIN Medical, among other emerging companies.

Some of Ohio's leading research institutions also have attracted GCIC investment. The Ohio State University received funding to further develop electrostatic spinning of biodegradable nanofibers. Case Western Reserve University will use funds for glycoprotein inhibitor R&D and a non-embryonic stem cell network. The Cleveland Clinic received grants for projects including neuroactive stents and mitral annular remodeling. And the University of Toledo earned financial support for ongoing drug design and development efforts.

"With more than 100 cardiovascular-related entities already in Ohio, we have an exciting and existing, albeit unrecognized cluster," said Tony Dennis, president and CEO of BioOhio, the state's bioscience membership and business development organization.

"We are excited that with the GCIC Ohio's reputation will quickly become known as *the* cardiovascular destination for innovative, growing companies," he added, "and our \$146 billion bioscience economic impact will continue to rise."

Estimated at over \$420 billion, cardiovascular medicine is the largest health care market opportunity in the U.S. The cardiovascular disease burden poses clear challenges—medical, scientific, and commercial.

“As the leading cause of death in the United States, heart disease represents an area of vast opportunity for the development of life-saving technologies and procedures,” said Delos M. “Toby” Cosgrove, M.D., CEO and President of Cleveland Clinic. “By establishing an internationally recognized center that unites the most advanced research, clinical care, talent and medical breakthroughs, the GCIC intends to maximize such opportunities, significantly improving the economic landscape of our community and transforming patient care.”

Cardiovascular research and commercialization as well as millions of patients around the world soon will benefit from the progress made through companies and technologies affiliated with Ohio’s Global Cardiovascular Innovation Center.

For more information and the current funding RFP go to www.GCIC.org