

Strong pulse at iCardiac

■ Medical tech firm seems poised for success, bringing UR work to market.

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Allens Creek Road in Brighton is a long way from North Carolina's Research Triangle Park, California's Silicon Valley or the I-495 technology corridor in Massachusetts.

But step inside the offices of iCardiac Technologies Inc., near the road's intersection with Monroe Avenue, and those meccas of economic success built on academic research seem a little bit closer.

iCardiac is where a team of entrepreneurs is busy doing exactly what Gov. Eliot Spitzer hopes to accomplish with his proposed \$50 million investment to help the University of Rochester move its latest biotechnology advances to the marketplace.

Less than two years after obtaining exclusive rights to UR software that tests a drug's effect on the human heart, iCardiac has more than doubled its work force, discovered a promising new application for its core tech-

nology and won a new round of funding from investors.

Things are going well for iCardiac. And that could be good news for the regional economy as yet another company demonstrates the potential of the area's research, said Alex Zapesochny, who founded the company in 2006 with his friends J. Mikael Totterman and Alexandra "Sasha" Latypova.

"I'm certainly pleased with where we are so far," Zapesochny said. "But more importantly, I hope this becomes a success story that the community can build on



ANNETTE LEIN The Associated Press

Thuan Pham, a software architect for iCardiac Technologies Inc., demonstrates software used in managing EKG data for cardiac safety trials. Pham lives in Greece.

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and create synergy."

The iCardiac team is using technology developed by UR researchers Jean-Philippe Couderc and Wojciech Zareba that analyzes electrocardiograms to determine if medications are causing abnormal heartbeats.

By 2006, the commercial appeal for such a test was heightened after several drugs, including Vioxx, fen-phen and Seldane, were linked to fatal heart attacks and other cardiac troubles.

In response to those scares, the U.S. Food and Drug Administration announced that any drug that lengthened the microsecond gap between heartbeats beyond a certain point would not be approved.

Latypova said even the FDA recognizes that this test of the "QT Interval" is too broad and has halted the development of scores of drug compounds that might not pose any heart risks.

"It's a one-size-fits-all approach," she said.

That's why the pharmaceutical industry wants a more precise measurement and one reason why venture capitalists were willing to invest in iCardiac's spinoff from UR. And the government provided the UR researchers with access to its electrocardiogram databases to further develop the technology.

Then last year, the iCardiac team members realized their test could spot variances within



Zapesochny



Totterman



Latypova

the baselines of the ECG data, which opens the possibility that individual patients can be tested to determine if their hearts are prone to adverse effects from a drug.

If so, pharmaceutical companies might be able to return some banned drugs to the market, Totterman said.

"The reality is, no drug is safe for everybody," he said. "But (with this test), you (could) basically predict which person can safely take a drug and which can't."

New money

The discovery brought in a new round of undisclosed funding from venture capitalists, including Advantage Capital Partners, Stonehenge Growth Capital LLC and the Trillium Group of Pittsford.

The company has used the funds to increase its staff to 22 employees, up from 10 at the end of 2006.

Among the new workers is Thuan Pham, a software developer who graduated from Rochester Institute of Technology in 2003. Pham, who worked at Fujifilm e-systems before joining iCardiac, said he made a lateral move that requires him to share the workload with a

smaller group of colleagues.

But with a compensation package that includes stock options and a product that could save lives, Pham

said he's excited to be on the startup team of a company with such potential.

"My boss is the director of software, and he'll jump on any task that needs to be done. There are no lines between the job descriptions," he said. "I was more comfortable in my old job, but the end result here is very fulfilling."

José Coronas, a general partner at Trillium, said investor confidence in iCardiac is based on more than its promising technology. All three founders have demonstrated entrepreneurial skills, he said.

Totterman and Latypova, who are married, were both executives at VirtualScopics Inc., another UR medical technology spinoff that has since gone public. Zapesochny was on the executive management team at Lenel Systems Inc. when the Perinton systems security company was sold for \$440 million.

Management teams that have taken companies public or set them up for acquisition show investors they're likely to see a return on that investment, Coronas said.

"This is one of those situations where we seem to have all the pieces together," he said. "They've got unique technology

and people who know how to be successful with it."

Innovation economy

The iCardiac story is one of many in what is fast becoming an important chapter in the evolution of upstate's economy — technology transfer.

Government and business leaders across the region are striving to follow the example of other parts of the country, where academic and business research has been spun off to create businesses with high-skill, high-wage jobs.

In his State of Upstate address last week, Spitzer pledged to invest millions to strengthen this "innovation economy."

"The problem is that we lack the programs to help translate these ideas — especially from our institutions of higher education — into jobs," the governor said.

Spitzer said he would provide the University of Rochester Medical Center with \$50 million toward the construction of a Clinical and Translational Sciences Building, where commercial applications would be developed for research.

Companies like iCardiac play an important role toward this larger goal, said Jim Senall of Greater Rochester Enterprise. They underscore the potential of area's intellectual capital, which can attract veteran business leaders to the area and foster an entrepreneurial spirit among workers.

"One success story at a time builds momentum," he said. □

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