

Connecticut Innovations Snapshot

Second Quarter Fiscal 2015



Snapshot: December 31, 2014

Assets



Total Portfolio COMPANIES*



Total Connecticut JOBS**



91 Equity/risk capital companies

882 Connecticut jobs

163 Companies receiving debt/other financial assistance

21,462 Connecticut jobs

309 Companies receiving innovation/collaboration support

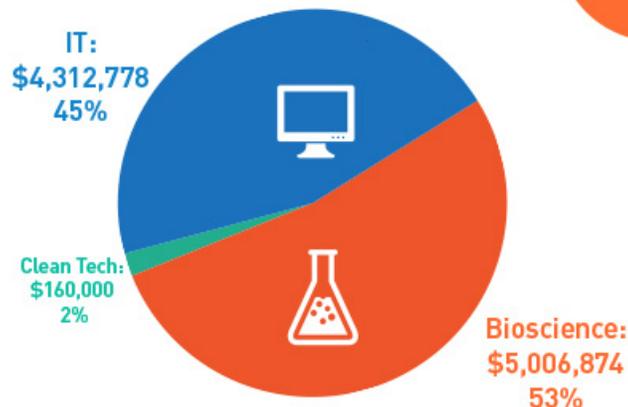
* Adjusted for overlap between funding/support sources
** Portfolio company job counts are predominantly as of June 30, 2014. Total does not include SBI company jobs.

YTD Fiscal 2015 (July - December 2014)

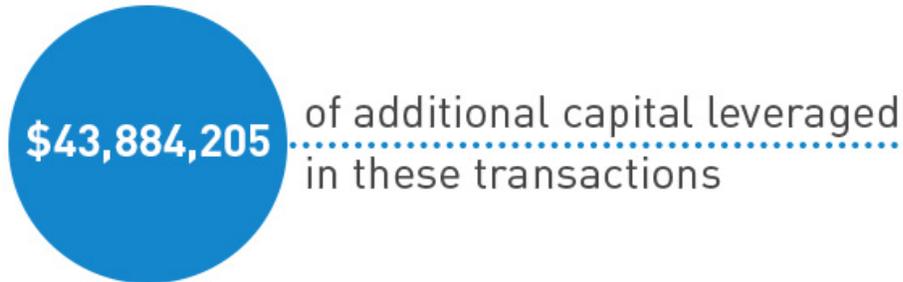
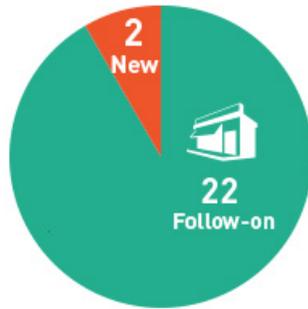
FUNDING ACTIVITY

Equity and Risk Capital Investments

\$9,479,651



Invested in 24 companies



Featured Company:

AxioMx Inc. (Branford, CT)



Founded in 2012 by a team of experienced and successful life science industry leaders, [AxioMx](#) is a provider of antibody development and production services. AxioMx uses a proprietary high-throughput method to synthetically produce custom antibody fragments that are used in life science research, diagnostic tests and therapeutics development. Its rapid development platform,

which reduces the time and cost to generate such antibodies by 80% compared with conventional processes, helps customers attain results and publish – or develop their products – faster.

Recently, AxioMx joined the global effort to combat the spread of Ebola. Because of its capabilities in rapid antibody development, the company was recruited to assist the U.S. Department of Defense (DOD) in the search for diagnostic agents for and antibodies against the Ebola virus. AxioMx has also used its antibody development platform to develop antibodies for other biothreat reduction programs.

When they launched AxioMx, the company's chief executive officer and chief scientific officer were already familiar with Connecticut Innovations, having served as executives at former CI portfolio companies. So, when it came time to seek a first round of financing for AxioMx, they knew that CI was a resource they should contact.

CI, confident in the founding team and the company's development work, has assisted AxioMx with three rounds of financing. In late 2012, a few months after the company was formed, [CI](#) made an investment of \$750,000, participating alongside other investors in the company's seed funding round. Then, in 2013, CI participated in a second financing round, providing a follow-on seed investment of \$500,000. In 2014, CI made a third investment: \$750,000 through the Eli Whitney Fund.

CI's investments have helped the company refine its technology, build partnerships, secure resources to facilitate its growth and acquire new customers.

In addition to securing investments from CI, AxioMx has attracted significant investments from private venture capital firms and been awarded over \$2.3 million in grant funding from the National Institutes of Health to advance its research and development work.

In December 2014, the company launched its latest offering, AxiomX Express, a new service featuring rapid, five-week development of affordable custom recombinant antibodies.

AxiomX currently employs 27 people. In addition, it has utilized two interns from local universities. One of the interns was supported with a grant from CI's [Technology Talent Bridge Internship program](#) and was subsequently hired as a full-time employee.

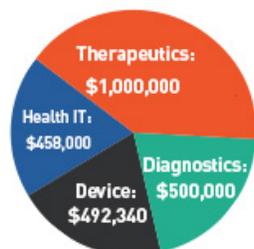
Early-Stage Bioscience Projects

\$12,450,306

Connecticut Bioscience Innovation Fund

Funded: \$2,450,340

Projects funded: 5

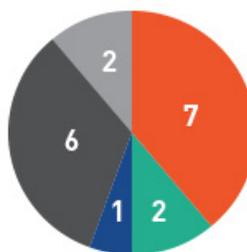


NOTE: In this, its first year of operations, CBIF has approved \$4.4 million to support nine projects.

Regenerative Medicine Research Fund

Funded: \$9,999,966

Projects funded: 18



Featured Company:

Dura Biotech (Storrs, CT)



[Dura Biotech](#) is a [UConn Technology Incubation Program \(TIP\)](#) company led by CEO Eric Sirois, Ph.D., who received his doctorate in mechanical engineering from the university in 2014. His

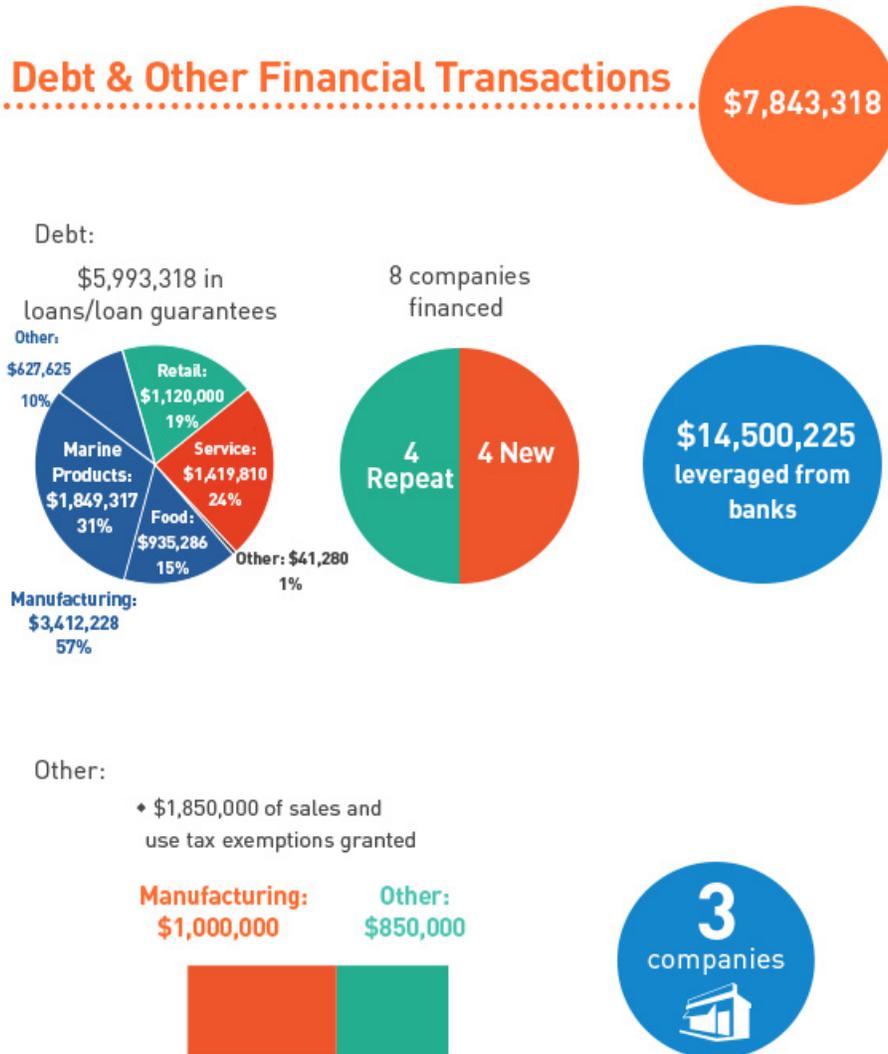
innovation, a thinner heart valve—specifically, a transcatheter aortic valve that is 33 percent smaller than anything on the market—could be a game changer. It can be delivered through an artery in the leg rather than the heart, which means no open-heart surgery, a procedure that is risky for many patients and has a long recovery time. The valve also has the potential to save lives. Some 17,000 people, mostly children and senior citizens, can't have valves implanted because the options currently available are too large.

Dura needed funding to turn its design from a prototype into a completed product and then launch pre-clinical animal trials. That's when the company turned to Connecticut Innovations.

Dura applied for and won a \$10,000 [CTNext Entrepreneur Innovation Award \(EIA\)](#) and used that money, combined with a \$50,000 UConn Third Bridge grant, to fine tune its valve so it could apply for funding from the [Connecticut Bioscience Innovation Fund \(CBIF\)](#). In July 2014, Dura was able to secure \$492,340 in CBIF funding to support valve fabrication and evaluation, as well as the pre-clinical animal study.

Dura also won \$400,000 from a [federal Small Business Innovation Research \(SBIR\) grant](#).

The CBIF support has leveraged significant funding to help move Dura Biotech's product closer to commercialization and has put Dura in position to leverage even more money once its clinical trials are completed.



Featured Company:

LBI Inc. (Groton, CT)



Since 1971, [LBI Inc.](#) has been involved in the engineering, development and fabrication of marine-related products for civil, commercial and military uses for customers such as General

Dynamics, Northrup Grumman, the National Oceanic and Atmospheric Administration and the Navy. LBI specializes in the design and rapid prototyping of composite and thermoform products related to the marine environment. The company is able to fabricate products in composites and metal.

LBI successfully developed the Air-Deployable Expendable Severe Environment Drifting Buoy (AXSEB) and the Airborne Expendable Ice Buoy (AXIB). The AXIB is currently operational in the Arctic and Antarctic regions. These buoys are relatively small (190 lbs.) expendable systems that collect high-resolution weather and climate data that is transmitted real time through satellite telemetry. They are parachute-deployed from aircraft or ships, primarily icebreakers involved in polar research. LBI developed a reliable air-deployment system for low-altitude pinpoint drops in open water in expanses of sea ice. The AXIB is the only commercially available buoy that can survive open-water deployment and the crushing forces of moving ice.

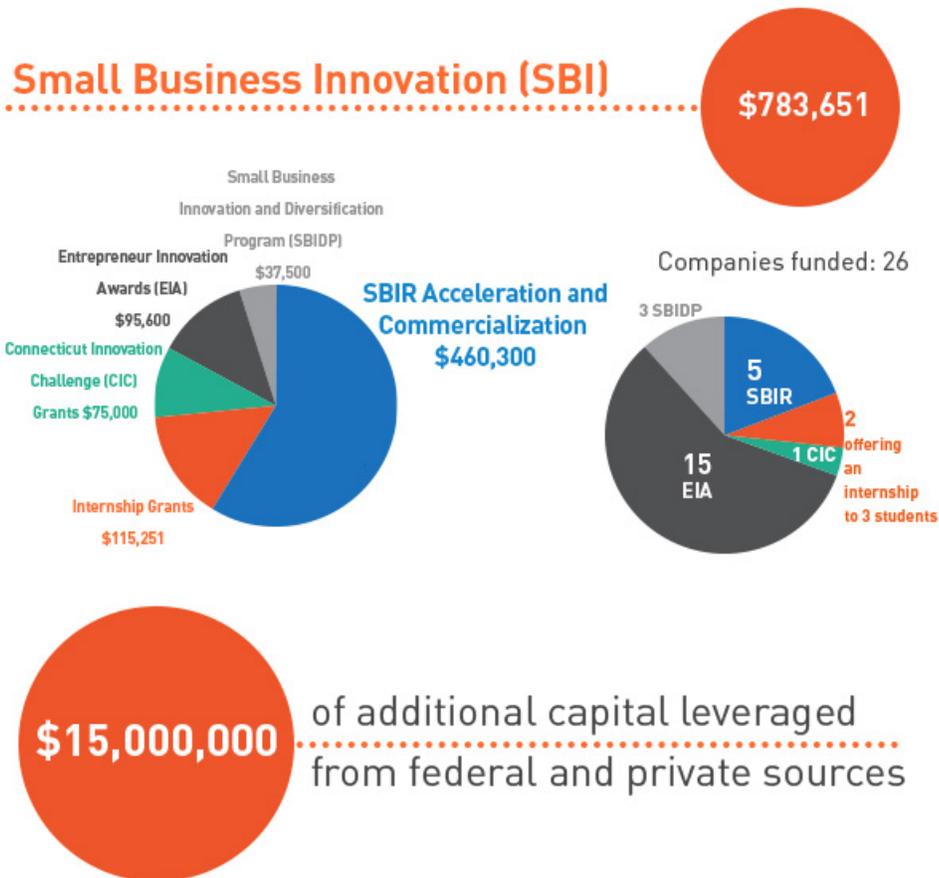
With the Scripps Institution of Oceanography, LBI has also developed the Stingray and X-ray underwater gliders, which take measurements of temperature, conductivity (to calculate salinity), currents, bottom depth and acoustic backscatter. They can be used for both military and weather-related applications.

Recently, LBI was awarded a substantial multi-year contract by the Naval Surface Warfare Center (NSWC) to fabricate and install deep-draft camel separators used as a mooring system for U.S. Navy nuclear submarines at naval bases in the United States, Guam, Japan, Scotland and Spain. What separated LBI's camel design from the competition was its proprietary corrosion coating system, which extends the useful life of the separators by 10 years.

LBI needed significant financing to expand its operations and meet the company's NSWC contract obligations. In response, Connecticut Innovations (CI) and the Department of Economic and Community Development (DECD) teamed up to craft a \$3.4 million financing package to support the project. The package included financing for the construction of a 12,000-square-foot CNC metal fabrication facility as well as financing for the purchase of state-of-the-art equipment needed for in-house fabrication of all of the camel components required under the contract – a capability that is unique to the Northeast market.

In tandem with CI's and DECD's funding, LBI's bank continued to support the company's short-term working capital needs.

LBI anticipates adding more than 20 new full-time jobs during the next two years in southeastern Connecticut.



Featured Company:

MetroCrops LLC (Bridgeport, CT)



Much like the lettuce and baby kale that MetroCrops is now producing with its proprietary hydroponics technology, this startup company is growing at a healthy pace.

[MetroCrops](#), founded in 2010, strives to be a leader in urban, high-density indoor farming, developing technology to turn old factory buildings into indoor lettuce farms. With help from Connecticut-based organizations, such as Connecticut Innovations (CI), and the U.S. Department of Agriculture (USDA), MetroCrops founders Steve and Nancy Domyan secured the funding and assistance they needed to launch the company and accelerate its growth.

The Domyans discovered CI in 2010 while searching the Internet for funding sources. CI subsequently recommended a number of resources, provided direct assistance and made valuable introductions. For starters, CI recommended that the company pursue grant funding through the federal [Small Business Innovation Research \(SBIR\) Program](#) to help pay for critical research. The company did so, was successful in winning over \$500,000, and ultimately forged a collaborative relationship with the USDA, the federal funding entity.

CI also recommended that the Domyans locate their nascent business in a Connecticut incubator facility. They chose the [University of Connecticut's incubator](#) on the Depot Campus in Storrs. There the Domyans benefited from informal interactions with the university's College of Agriculture, Health and Natural Resources.

Additionally, the Domyans needed workers to assist with engineering and farming tasks, as well as equipment. CI pointed to two CI initiatives: the [Connecticut SBIR Acceleration and Commercialization Program](#) and the [Technology Talent Bridge](#). Through the former, CI provided a \$40,000 grant that paid for equipment and two interns from the UConn School of engineering. Through the latter, CI provided approximately \$13,000, which enabled MetroCrops to hire five additional interns from UConn's College of Agriculture, Health and Natural Resources.

After MetroCrops' research was well underway, CI went on to introduce the company to the [Department of Economic and Community Development](#), which provided \$250,000 in grant and loan funding to support early commercialization activities. MetroCrops also secured additional grant funding from the [Connecticut Center for Advanced Technology](#).

The company now leases 8,000 square feet in a former factory building in Bridgeport and has begun growing small quantities of lettuce and baby kale – soon to be marketed to high-end retailers and restaurants. Its plan is to sell both hydroponically-grown produce *and* its proprietary growing systems and equipment. MetroCrops will ensure that others are able to replicate and benefit from the type of hydroponic farming it is creating in Bridgeport.

The company has three full-time and three part-time employees and projects future job growth, adding farming, manufacturing and engineering talent.

OTHER INITIATIVES

Angel
Investor
Tax Credit
Program

- 50 angels made a total of \$3,040,012 of investments in 17 companies

The
Jackson
Laboratory

- Project completed; operations commenced
- Total advanced to date is \$155 million

MILESTONES

- CI portfolio company CyVek Inc. was acquired by global life sciences company Bio-Techne Corporation, yielding a 3x return on CI's investment.
- The Connecticut Bioscience Innovation Fund (CBIF) announced its first investments in July 2014.
- Developed a cost-share financing model that the National Science Foundation is using as a national model for its SBIR/STTR program.
- CI portfolio company Silversky was acquired by BAE Systems, an international provider of advanced defense, aerospace and security solutions.
- The Connecticut Regenerative Medicine Research Fund (formerly known as the Stem Cell Research Fund) fully transitioned to CI on October 1, 2014.