

INNOVATIVE TREATMENT STRATEGY FOR HUMAN DISEASE SHAPES A SUCCESSFUL BIOTECH COMPANY

RIBOMETRIX, A YOUNG BIOTECH COMPANY incubated at UNC-Chapel Hill, is using a completely different strategy for combating disease. Turns out the company is also being clever with its business strategy, tapping into the One North Carolina Small Business program to bridge the dreaded Valley of Death.

Ribometrix develops drugs that target ribonucleic acid (RNA) instead of proteins, where most treatments for human disease place their focus. Ribometrix' technology has the potential to cure devastating diseases and improve the lives of millions of people. But to succeed at that worthy goal, the company itself first had to attract substantial investments and develop a business infrastructure.

Thanks to company founder Dr. Kevin Weeks' faculty status at UNC-Chapel Hill, Ribometrix got early support from a university business incubator. "The KickStart Venture Services program is designed to help faculty make their ideas possible," said Dr. Weeks. "We received tons of help from Don Rose, who is the head of the program, and I feel like his program is a womb [for companies]. The program provides cuddly support but also offers direct and frank feedback, which was critical to our success."

From there, Ribometrix won multiple competitive Phase I Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants from the federal government, grants that were then matched by the One North Carolina Small Business Program. This strategy yielded multiple payoffs, and not just financial ones. "We recognized that we needed to get a little bit of data to convince venture capitalists to give us more money, so we needed grants," said Senior Director of Research Dr. Katie Warner, "You get a few grants, you get a little bit of data, you convince people that you're real, and then you [can get a] larger amount of money from external people."

Referring specifically to the value of the One NC Small Business funds, Warner elaborated, "[Federal] grants are amazing in many ways, but there is a lot of stuff you can't do. You need consultants to help you on the business side, but you can't use [federal SBIR] grant money for that. You would like to travel to Boston to pitch to venture capital firms, but you can't do that. There's this huge gap that [the One NC Small Business matching funds] filled. We went to Boston, pitched, and [raised] our first venture capital money, and I don't know how we would have done that if we didn't have

those [matching] funds." By enabling Ribometrix' fundraising and business development efforts early on, the One NC Small Business funds supported the company during the treacherous Valley of Death stage that every early stage company faces.

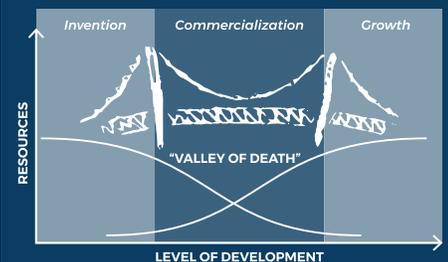
In terms of growth, Ribometrix started in 2014 with Dr. Weeks, Dr. Warner, and one scientist. Now, four years later, they have expanded to fourteen full-time employees and multiple consultants who contribute to the company's mission. They are currently closing their next round of funding, which they predict will lead to the doubling of the team in North Carolina in the near future.

Weeks also emphasized the importance of keeping their company local, saying, "Of all the companies our lead venture company has invested in, very few have been allowed to remain outside of Boston. We were adamant that we were going to stay here in the Triangle area and so far [we have been able to]." The One NC Small Business Program helped deepen the company's roots in North Carolina, which supported the company's ability to stay local.

ABOUT THIS SERIES

Entrepreneurs and business owners face many challenges during the life of their companies, but none strike more fear and difficulty than the 'Valley of Death.'

A familiar phrase to venture capitalists and business executives, the Valley of Death is the period of time a company must navigate between the discovery of a business-worthy idea or technology and the point when the company generates enough paying customers and revenue for long-term survival, job creation, and profits. Finding funding sources to bridge this gap is an ongoing struggle.



The One North Carolina Small Business Program helps promising, technology-oriented companies in the state survive and thrive. By providing matching dollars to companies that have already won highly-competitive federal technology grants, the OneNC Small Business Program is an important solution for North Carolina companies facing one of the business world's toughest challenges.

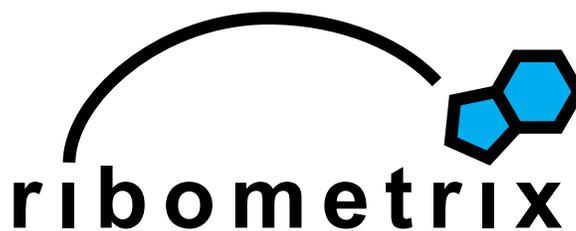
BRIDGING THE VALLEY OF DEATH: A One North Carolina Small Business Program SUCCESS STORY



one north carolina
Small Business Program

ABOUT THE PROGRAM

- Established in 2005 (§ 143B-437.80-81), the Program awards matching funds to small businesses that receive federal Phase I Small Business Innovation Research (SBIR) or Small Business Technology Transfer (STTR) Phase I grants.
- SBIR and STTR grants are the single largest source of early-stage technology development and commercialization funding for small businesses (more than \$2 billion annually) – larger than all private sources combined.
- Yet the federal grants are often not large enough to allow the small businesses to complete their work, and federal restrictions on the uses of grant funds often limit the businesses.
- The North Carolina Program supplements and leverages the federal funds, helping homegrown businesses commercialize innovative technologies & create jobs.
- Since Program Inception:
 - 398 grants awarded
 - Over \$24.7 million awarded
 - 255 different companies in 25 counties and 41 cities across the state have received funding
 - More than 900 jobs created or retained
 - More than \$500 million in external capital investment
 - More than 100 patents and copyrights already received, and another 250 applied for and under review
 - More than \$125 million in total sales resulting directly from the technology developed with Program funding
 - More than \$1.5 billion in total sales resulting indirectly from licenses of the technology developed with Program funding
 - More than 95 percent of the grantee businesses agree that the Program encourages the establishment and growth of high-quality, advanced technology firms in North Carolina
 - For more information, visit: nccommerce.com/sti/grant-programs

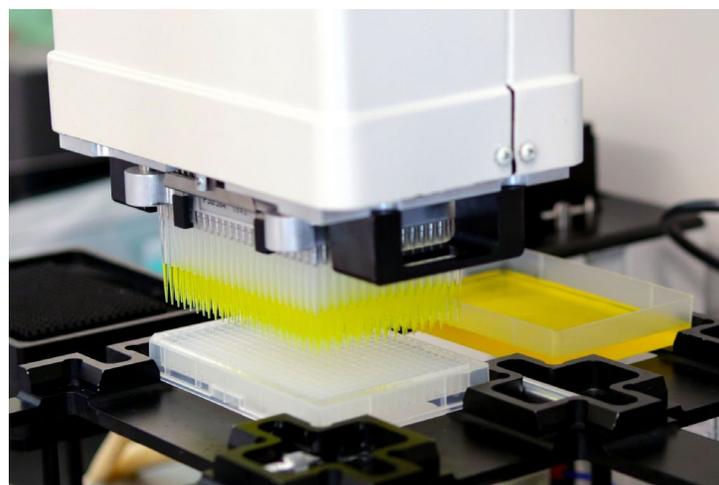


ABOUT THE COMPANY

- Ribometrix is a platform therapeutics company discovering small molecule drugs that target functional 3D RNA structures to treat human diseases.
- Year Founded: 2014
- Office Location: Durham, N.C.
- Current Number of Employees: 14
- Website: ribometrix.com
- Federal SBIR/STTR Funder: U.S. Department of Health and Human Services - National Institutes of Health
- One NC Small Business Grant Recipient in 2016



The Ribometrix team



Ribometrix uses advanced technologies to discover drugs that function by binding RNA.



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