

STARTUP

Startup of the Week: Traverse Biosciences

COMPANY: Traverse Biosciences
LOCATION: Stony Brook
FOUNDED: June 2013
FOUNDER: Joseph Scaduto
EMPLOYEES: 1 full-time, several unpaid interns
PRODUCT: Drug for treating canine periodontal disease
LAUNCH INVESTMENT: Looking to raise \$100,000 to \$200,000
FUNDING SOURCES: To be determined
MAJOR CHALLENGES: Finding funding
PRODUCT STATUS: In development

Stony Brook University's first bio-entrepreneur-in-residence program has culminated with the formation of a new company, Traverse Biosciences.

Founded by Joseph Scaduto, a stalwart at Stony Brook's Center for Biotechnology who became the center's bio-entrepreneur-in-residence early last year, Traverse Biosciences is in the process of commercializing TRB-N0224, a new drug candidate for the treatment of inflammatory conditions in humans and animals.

"It's still very early-stage, so the drug doesn't have a sexy name yet," Scaduto noted.

Considering the amount of time it takes to get a new drug to human trials, Scaduto and the compound's inventors, Lorne Golub and Francis Johnson, decided to market the product as a once-daily, edible prescription medication for the prevention and control of canine periodontal disease.

Scaduto noted that 80 percent of dogs ages 3 and up have some form of gingivitis or periodontal disease – easily diagnosed by bad breath – that can lead to complications including gum damage, tooth loss, bone infections and even more serious health problems.

Considering there are more than 83 million domestic dogs in the United States, with 47 percent of households including one or more canine family members, there's

definitely a market, according to Scaduto.

"Clearly we have an interest in the larger market treating human diseases, but with how long it takes to do human trials, we'll pursue that farther down the road," Scaduto said. "Right now, our focus is on animal health; if we're successful on the animal health side, we'll have an opportunity to reinvest in the human side."

Considering a conservative estimate of 1 million dogs using the product in a year, for three to six months at a time, at a retail price of \$1 to \$3 per dose, it's estimated the pup pills could fetch \$100 million in annual revenues. But despite that market potential, raising capital still a significant hurdle for Traverse Biosciences.

"Attracting private investment capital for early-stage university technology is not an easy task," Scaduto said. "Without it, we're dead."



JOSEPH SCADUTO: Dogs have dental problems, too.

Having just signed an exclusive option agreement with the Research Foundation for the State University of New York to license TRB-N0224 – university officials won't be able to shop the biotech around to other interested players – Traverse Biosciences is now seeking between \$100,000 and \$200,000 in pre-seed stage funds to further develop and upscale the

product. Scaduto will ultimately seek \$2 million in series A funding to advance it to market.

The figures sound good, but Scaduto conceded his status as a first-time bio-entrepreneur could be seen as a risk in the eyes of investors, ultimately causing credibility issues. But by sticking to the business plan, he added, TRB-N0224 should speak for itself to investors.

It's not like Scaduto doesn't have any background in commercializing biotechnology, however.

"I spent 13 years in various business roles at the Center for Biotechnology," he said. "If you were just getting started or needed help with investor presentations, we helped you do it. That was basically my job for the last decade-plus: aiding companies getting started out of the university's innovations and providing strategic advisory services."

Scaduto was announced as Stony Brook's first bio-entrepreneur-in-residence last year. The program brings in executives to launch new businesses, letting them choose a research project to commercialize and offer continuing staff and research support. Similar commercialization programs have been implemented at the University of Washington and the University of Utah.

Stony Brook's Technology Transfer Office executes only a handful of license agreements each year. And commercializing can be a long and sometimes fruitless process that spans a decade or more or ends abruptly with a startup's failure.

Those risks remain with the new program, as does the possibility that a successful startup would move the technology – and related jobs – off Long Island, which several locally commercialized companies have done.

The hope with the new program is that by growing organically from a program established through the university, the new company will be less likely to relocate to other parts of the country.

"The whole point of the entrepreneur-in-residence program is to start a company," Scaduto said. "It's on paper. It's becoming real now."