

Two startups find home at SFCC tech center

By Bruce Krasnow

The New Mexican | Posted: Monday, December 21, 2015 9:45 pm

When startup business consultant Michelle Miller visited Santa Fe Community College to look into the fabrication shop as a manufacturing center for a client, she saw the potential for bigger collaborations.

The new Trades and Advanced Technology Center at SFCC has all the ingredients for many business startups, including high-speed Internet, low-cost solar and alternative energy, student interns, and an invigorating campus environment.

So with two of her new business clients looking for spaces to pre-commercialize products in Santa Fe, she thought the surplus mezzanine areas in the new building at SFCC might be the perfect fit for small, versatile space that would also be affordable.

So did college SFCC President Randy W. Grissom and Luke Spangenberg, director of the BioFuels Lab that anchors the technology center.

The result were agreements with the two startups, NTXBIO and Rio Grande Neurosciences, to move into SFCC at no cost in exchange for teaching, student mentoring, lecturing and eventually hiring students as part-time employees.

“The college ought to take a greater role in business development for our community,” Grissom said. “The students ought to be given a chance to see what innovation is like, and to take part.”

Both businesses have raised an initial round of venture-capital funding, but need an area to do more development and testing. Keeping costs low is essential to this success — and both companies say that is easier to do in New Mexico than California or other large urban areas.

The first startup, NTXBIO, moved into the college this past weekend and plans to use part of the Advanced Trades and Technology Building as a lab to work on production of anti-virals, an important component of the drug market that has largely been set aside by profit-driven pharmaceutical companies.



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From left, Santa Fe Community College President Randy Grissom, Alex Koglin and Michael Humbert stand in one of the areas that will become a lab for startup company NTXBIO at the college’s tech center. Bruce Krasnow The New Mexican

The second startup that will move into the building, after final agreements are in place, is Rio Grange Neurosciences, which hopes to manufacture devices for noninvasive brain therapies that can treat concussions and other brain swelling with electrosensors.

Opened in 2011, the Trades and Advanced Technology Center College has earned the highest certification from the U.S. Green Building Council. It offers a broad curriculum that includes associate in applied science degrees in building science and construction technologies, drafting and engineering technologies, greenhouse management, and sustainable technologies such as biofuels and biodiesel/alternative fuels.

The building has a rooftop with solar-thermal collectors and water harvesting. The inside area has welding and fabrication shops, adobe construction, a greenhouse, a solar electronics and engineering lab, and a biofuels and algae test bed with aquaponics and hydroponics

“I was blown away by the facility when I came to see them,” said Miller, founder and chief executive officer of High Desert Discovery District, or HD3. Miller helps new businesses obtain and sustain all the pieces needed to grow and thrive in New Mexico — and physical location as well as young employees are part of that puzzle.

“I thought it would be a win-win for the college to let students and faculty rub up against each other and see what can happen,” she said.

“For the college there is no downside,” Grissom said. “They’ve agreed to teach and guest lecture and have interns.”

For Alex Koglin, the founder of NTXBIO, it has been an unusual ride.

Koglin completed his Ph.D. in biophysics at Goethe University Frankfurt in Germany, and continued his research as a fellow at Harvard Medical School and joined Los Alamos National Laboratory as the J. Robert Oppenheimer Fellow, where he worked in the bioscience division before leaving to start NTXBIO.

As he was working to move machinery and lab equipment into the Richards Avenue space last week, he joked, “From Frankfurt to Harvard to LANL, and now SFCC.”

Koglin’s work has focused on producing new antibiotics without the initial strain of bacteria. The process combines necessary components in a vial at the right temperatures and uses trial-and-error data to drive the work forward.

The process can cut the development of these drugs by years.

Some of what they will need at SFCC includes incubators, mass spectrometers, water purification and ways to isolate and test the materials.

“Everything that’s possible to accomplish on the coast and in the Bay Area, we can do here,” he said,

sitting in the SFCC technology center. In fact, it could be better, as the company can grow and make mistakes outside the limelight.

He said many large drug companies have stopped developing antibiotics and anti-virals because the products are used for such a short time by a small number of patients. It also takes a long time and can cost more than \$1 billion to get one of the drugs to market.

On top of that, many of the drugs have just stopped working due to drug-resistant infections that have evolved. There is still no shortcut to testing the products in the clinical trials that are required by the U.S. Food and Drug Administration, but Koglin hopes he can cut the pre-trial time by years.

Michael Humbert, a former researcher and instructor at the Dana-Farber Cancer Institute at Harvard and an HIV specialist who worked on drug development in Palo Alto, Calif., was brought into the company by Koglin.

He said Koglin's business is far ahead of others in the field as it has actually been able to convert the process into a proven anti-viral. "Alex is the only one in the world to put the pieces together without having the actual bacteria in their hand."

The Los Alamos science and technology magazine *1663* put it another way in an October profile. "The team's efforts to produce new antibiotic compounds without ever cultivating an organism stand to greatly accelerate therapeutics production in general. These achievements have the potential to revolutionize drug development."

Rio Grande Neurosciences aims to produce medical devices for noninvasive brain therapy. Its products are undergoing clinical trials with the goal of manufacturing at the community college in 2016.

The company and its founder, Steven Gluckstern, moved from San Francisco to Santa Fe and were featured in a *New Mexican* article Sept. 24.

Miller said both companies have found resources and expertise in Northern New Mexico that are unavailable elsewhere.

"Everybody wants to focus on what we don't have," Miller said. "We want to bring together what we have and stand behind the startups and institutions."

Said Koglin, "I wouldn't have imagined this coming together in the Bay Area."

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