Besting four other teams in the finals of the eight-month tech business plan competition that is UC Santa Barbara’s Technology Management New Venture Competition (NVC), Spinjet3D earned the $10,000 First Place Award in the 2020 contest, this year held remotely due to the coronavirus outbreak. It was viewed live online by people around the world.

Team members Anurag Pallaprolu, a Ph.D. student in the Electrical and Computer Engineering Department; physics major Noah Treiman; mechanical engineering student Yiling Yang; and Piergiacomo Palmisani, a technology management graduate student, were recognized for the new type of 3D printer they have developed.

Making metal parts, especially those that are not produced at large scale, is expensive and time-consuming. Molds have to be made by hand before the metal is poured in to create the part. Sand-mold 3D printers, which print the mold directly from common sand materials, are a time-saving alternative, but their size and hefty price tag make them inaccessible for many metal-part manufacturers.

Spinjet3D’s new sand-mold 3D printer could greatly benefit cast-mold manufacturers in the jewelry, prototyping and tool design industries. The students say that their fully automated printer, with its unique design, is faster, cheaper, more precise and more eco-friendly than existing technology.

“We are extremely grateful to the Technology Management Program for this incredible experience and opportunity,” the team said in a written statement. “Our
team met through NVC events, and the mentorship the program provided was invaluable. We look forward to making a positive change in the metal manufacturing industry, and we are excited to start our journey here in the Santa Barbara community.”

The Spinjet3D team said that they plan to use their winnings to finish developing the product and raising capital. They plan to test their prototypes this summer.

The second-place finisher in the competition was Legtrek, which offers a new medical device to patients challenged with lower-limb mobility by combining a powered wheelchair and a powered gait trainer. They earned $7,500.

Third place and a check for $5,000 went to Genesis, an AI-based startup that uses high-quality data annotation to solve the problem of bad data in machine learning.

Two honorable mention awards and $2,500 apiece went to Deadstock and Thermaform Technologies. The Thermaform team, which created a compression device to benefit seniors and others affected by circulation deficiencies, also received the People’s Choice and Best of Fair awards, worth an additional $5,500 in prize money. Deadstock built an application enabling users to verify whether luxury goods, such as high-end sneakers, are authentic.

When faced with the COVID-19 pandemic back in March, organizers quickly changed to a virtual format to ensure that students still received a platform to showcase their innovation, dedication and hard work. All activities, the finals and last month’s New Venture Fair, took place over Zoom on a single event stage. The online nature of the events still allowed students to think on their feet while interacting live with judges and audience members and answering their questions. The virtual fair drew a global audience of 620 people from as far away as Nepal.

“I salute all of our students,” said Dave Adornetto, technology management’s entrepreneurship director, during the online finals. “You all did an excellent job through very difficult challenges and circumstances. You guys never wavered, and you pushed through.”

Now in its 21st year, the New Venture Competition is the culmination of a rigorous eight-month process open to students from all disciplines at UCSB. Mentored by a team of more than forty individuals who have lived and thrived in the past-paced world of tech entrepreneurship, students receive first-hand knowledge and the
opportunity to hone their entrepreneurship skills, refine their business plans and practice pitching their stories and ideas.

This year, out of 35 teams that began the program in October 2019, 15 were sent to the New Venture Fair, and from there five teams went on to participate in the finals. Team pitches of all fifteen teams that participated in the New Venture Fair can be viewed at https://www.newventure.live/. According to Adornetto, more than half of the 22 students competing in the finals came from science, technology, engineering and mathematics (STEM) backgrounds.

During the finals, teams were judged by a panel of tech entrepreneurship experts and investors made up of: Bei-Jing Guo, a graduate of UCSB’s Electrical and Computer Engineering Department and investor with Seattle Alliance of Angels, who founded her own artificial intelligence start-up after spending 20 years at Microsoft and Amazon Web Services; Kenny Van Zant, a software company executive for more than 20 years and an active angel investor; and Kevin Zhang, a partner at Upfront Ventures, the largest and longest-serving venture capital firm in Los Angeles. Judges said they would make themselves available at a later date to provide additional feedback to the finalists.

“I was very pleased with the performance of all of the teams, but not surprised given the amount of work they put in these last few weeks polishing their business models and perfecting their pitches,” said Adornetto. “It was a tough field this year, with several deep technology teams in the mix. Ultimately, the judges honed in on the industry most ripe for disruption in awarding Spinjet3D the top prize, but they recognized the potential of all of the finalists. We’re determining how our G2 Launchpad Accelerator program may operate this summer, so we can offer these teams an opportunity to continue their journey.”

The G2 Summer Launchpad is an eight-week program focused on product commercialization and business launch.

Several winners of the NVC have gone on to establish successful businesses, including Inogen (1999), Apeel Sciences (2012), and Salty Girl Seafood (2014), among others.

Just this week, Apeel Sciences announced $250 million in new financing and endorsements from Oprah Winfrey and Katy Perry. The financial boost brings the company’s valuation to more than $1 billion. The company developed a plant-
derived solution to extend the shelf life of fresh produce.

About UC Santa Barbara

The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.