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Sharklet Moves Out of the Startup Scene

COMPANY READIES FOR GLOBAL COMMERCIALIZATION



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Sharklet has turned a corner. For the last 10 years, the startup company has worked to develop the chemical-free, micropatterned coating it pioneered to not only prevent contamination by harmful bacteria on medical devices and surfaces, but also promote favorable healing mechanisms. In May of 2017, Peaceful Union, a firm based in Hangzhou, China, acquired Sharklet through an equity investment.

The deal launched the company out of the startup neighborhood and into a global market. In 2018, Sharklet plans to commercialize several products.

But the company's success hasn't overshadowed the business community that nurtured it. "We've relied on the fostering nature of the Colorado bioscience community to be successful," said Chief Operating Officer Dr. Ethan Mann.

In addition to the mature healthcare companies in Colorado, there are a good number of early-stage businesses refining their technology and operations, said Mann. As they do, they face similar problems as their peers, having to deal with regulatory or policy issues, or trying to raise funding. In order to grasp the unknowns pervasive in healthcare, they turn to their industry peers, he said.

"PEOPLE ARE USING SUCCESS STORIES AND LESSONS LEARNED TO DEVELOP THEIR OWN MEDICAL DEVICE NICHE IN THE GLOBAL MARKET," SAID MANN. "THAT'S PRODUCED A PRETTY TIGHT KNIT BIOSCIENCE COMMUNITY IN COLORADO."

The Colorado BioScience Association, networking groups, and government representatives from mayors to senators work to make sure startup companies in the state have the resources they need to succeed, said Mann. For a company like

Sharklet that has been working for a decade to refine its technology, the state's collaborative environment played a critical role. "I don't know if Sharklet would have been as successful in the Bay Area or in Boston," he said. "On the coasts, we may have been unable to transverse the valley of death given the more competitive and less collaborative environment fueled by the fail-fast mentality of biotechnology in those areas."

To truly make Sharklet successful, the team has devoted time and energy to research and development, understanding the complex nature of device-related infections as well as the overall biological process of device integrations or healing mechanisms. They've also had to come up with creative solutions for incorporating the Sharklet micropatterned surface onto individual medical devices—catheters and endotracheal tubes—in a way that doesn't add costly modifications to the distinct manufacturing process of each device.

Doing that involves in-depth analysis and innovative design solutions. "We evaluate the current state-of-the-art process and then figure out a way to creatively add the micropattern into their current process, with the least amount of disturbance," said Ryan Stoneberg, Vice President of Engineering.

For endotracheal tubes, for example, Stoneberg found that adding the Sharklet pattern at the stage where the tube is extruded into its shape was the ideal place, said Stoneberg, "We attack each manufacturing process like that."

Doing that evaluation for each medical device takes time and money. But with the recent investment from Peaceful Union, Sharklet is ready to move up to the next level.

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