Skerlos' path to success is problem-solving

By Tom Henderson

Innovation opportunity has knocked twice for engineer entrepreneur Steven Skerlos.

Ann Arbor-based Accuri Cytometers Inc. has become something of a poster child for how to spin off university research into real-world products with global reach.

The company was founded in 2004 by Skerlos, an associate professor of mechanical engineering at the University of Michigan. Co-founder and CEO Jennifer Baird was able to raise $27 million over the next six years as the company ramped up development and took its devices to market.

Last January, Baird was replaced as CEO by Jeffrey Williams, who had been president and CEO at Ann Arbor-based HandyLab Inc., another UM spinoff that was sold for $275 million in 2009. Baird joined another Ann Arbor startup, Accio Energy Inc.

Ironically, Skerlos had no intention of founding a company making medical devices. As a graduate student in the 1990s at the University of Illinois, founding a company was the last thing he had in mind.

He was working on a project to reduce contaminants in the oily water used to lubricate and cool the tools that cut and drill metal on the factory floor. One of the major contaminants is bacteria, which thrives in water and poses a threat to workers as water turns into airborne mist during machining.

Skerlos devised membranes he hoped would filter out much of the bacteria in the water, but to quantify how well they were working he needed to use one of the university’s cytometers, which were huge, multimillion-dollar machines.

Those in charge of the cytometers told Skerlos there was no way they would let him run his polluted water through their devices to measure bacteria, not with what they cost to buy and install.

"I thought there has to be a better way," he said.

So Skerlos devised a relatively low-cost laser-based fluorescent system for identifying and quantifying bacteria in liquid, which eventually led to the formation of Accuri.

But Skerlos was still left with problems to solve. How could you improve the cooling and lubricating process in factory cutting tools? How could you increase tool life by making the cooling liquid cooler? How could you reduce both the polluted water and airborne mist?

By substituting cooled carbon dioxide for water, he thought.

A patent was filed and granted, and in 2010, Fusion Coolant Systems Inc. was formed.

Tom Henderson: (313) 446-0337, thenderson@crain.com
SUBSCRIBE TO CRAIN’S DETROIT BUSINESS

If you enjoy the content on the Crain’s Detroit Business Web site and want to see more, try 8 issues of our print edition risk-free. If you wish to continue, you will receive 44 more issues (for a total of 52 in all), including the annual Book of Lists for just $59. That’s over 55% off the cover price. If you decide Crain’s is not for you, just write “Cancel” on the invoice, return it and owe nothing. The 8 issues are yours to keep with no further obligation to us. Sign up below.

Name: ____________________________
E-mail: ____________________________
Company: ____________________________
Address: ____________________________
City: ____________________________ State: ____________________________
Zip/Postal Code: ____________________________ Country: ____________________________

Type the two words:

Submit

Offer valid for new MI subscribers only. Non-MI subscribers - $79. All other Foreign - $127.
Skerlos' path to success is problem-sol...
Skerlos' path to success is problem-sol...
Skerlos' path to success is problem-sol...
Skerlos’ path to success is problem-sol...