



[Ross MBA goes from building
gadgets to building a business]

REINVENTING THE SUTURE

By Terry Kosdrosky //
Photos By Aruna B.

For surgeon **Jafar Hasan**, MBA '06, the term “closing” took on new meaning recently when he secured funding to commercialize his own medical invention.

Surgimatix is the decidedly catchy name of a handheld device Hasan designed to close surgical incisions with the speed and ease of a skin stapler but with the quality and minimal scarring of manual sutures. Hasan built and refined the device at home after closing thousands of wounds during his surgical residency at University of Michigan Hospitals and Health Centers.

When he sought seed funding to help bring the device to market, he knew exactly where to turn: the Frankel Commercialization Fund at Ross. As a former member of the student-managed venture capital fund, Hasan was able to approach the financial side of this procedure with the savvy of an enterprising entrepreneur.

“The whole reason for going to business school was to get all the individual pieces in place so when a big idea came around that had commercial potential, I would know what to do with it,” says Hasan, who came to Ross with a Michigan M.D., earned in 2000. “I started putting together the case for Surgimatix based on things I learned in business school. There are specific, objective criteria that predict success in commercialization. All those measures I learned through my years at Ross.”

Hasan’s Surgimatix Inc. represents the third investment — and the first in the healthcare field — by the Frankel Commercialization Fund, which specializes in early-stage investments. Founded in 2005, the fund is organized into student teams that function as independently financed venture capital firms. The monies from Frankel will help Surgimatix secure technology options from the University, since the device was developed while Hasan was a surgical resident at U-M.

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AN OPERATIONS QUESTION As is the case with many inventors, Hasan conceptualized his novel idea on the job after he ran up against limitations presented by existing technology. The two ways to close incisions each have benefits and drawbacks. Metal surgical staples are fast, easy, and don’t expose the healthcare worker to needle sticks. But they have to be removed, which can be painful for the patient, and can lead to “railroad track” scars. Manual sutures cut down on scarring but take longer to perform.

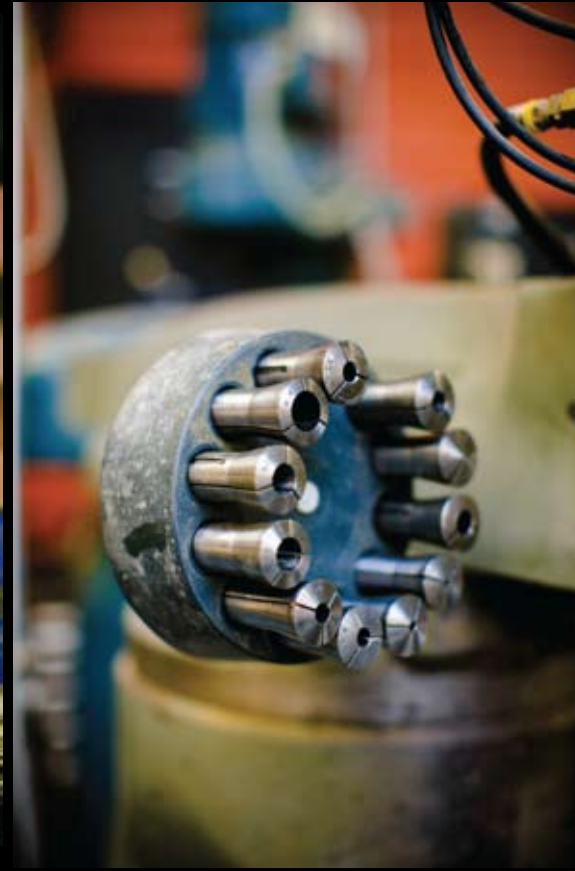
In addition, the person doing the suturing runs the risk of being poked by the needle, a hazard with which Hasan is all too familiar.

“It started to hit me over the years that this was an inefficient way to do things,” says Hasan. “In my field of plastic and reconstructive surgery, we have long incision lengths. And it’s not an option to use metal staples.”

In 2006, the self-described “constant tinkerer” started to stitch his own plan together, combining his medical expertise with his entrepreneurial streak. Once he had a preliminary design, he approached the

University’s Office of Technology Transfer. Their experts helped execute the initial patent work and secured funds from the Michigan Universities Commercialization Initiative, a partnership between universities and businesses that helps connect colleges, industry, and investors. With that financing in place, Hasan was able to refine the technology behind Surgimatix and improve the original prototypes.

He then drew upon his experience at Ross and the Frankel Commercialization Fund to formulate a business plan — studying the market size, the competition, and intellectual property. Operating with the acumen of an MBA, he knew it took more than a good idea to bring a product to market. On the one hand, his previous experience on the investment side of the venture capital table worked to his advantage. On the other, he knew how tough the pitch to current Ross VCs-in-training would be.



Tom Porter, executive-in-residence at the Zell Lurie Institute for Entrepreneurial Studies and director of the Frankel Commercialization Fund, says the fund's healthcare team evaluates about 35 opportunities per year. Students seek out seed (or even earlier pre-seed) investments that will help high-potential entrepreneurs defray organizational costs. The fund's investment in Surgimatix is in the form of a convertible note that, under certain conditions, will convert to equity in the future.

"In the third year, to be able to invest in one of our former students is pretty neat," says Porter, adding that Hasan "did a great job of putting the package together. That made it easy for the healthcare team to do their homework, and he respected that they had to contribute. As an investor, you just don't get into these things if it isn't a partnership or collaboration."

Potential for that partnership seemed low at first, says Ross second-year MBA Philip Kowalczyk, who led the fund's healthcare team on the investment. A competing device was already making inroads on the market, and the students weren't yet sold on the value proposition of preventing needle pokes.

"We knew Surgimatix saved time, but we didn't know if that really would convince the people who purchase devices, ones who are not surgeons, to buy it," Kowalczyk says.

But interviews with medical professionals revealed the time savings and reduced risk of needle pokes were of greater value than the team initially thought. And further research convinced the team that Surgimatix could outperform the

existing competition.

"As we started talking to doctors, those value propositions were enhanced to us," Kowalczyk says. "Once we did our initial round of diligence, Surgimatix kind of shot to the top of the list."

ALL SEWN UP The real key to closing the deal, though, was Hasan's grasp of the business, technical, and customer angles regarding his product, says Kowalczyk.

"When you're doing such an early-stage investment, who the individual is and who starts the company is critical to understanding and predicting the success of it," he says. "We thought [Hasan's] business acumen, technical skill, and ability to understand the needs of the customers put him in a unique situation. A lot of entrepreneurs might not have such an understanding of both sides."

Hasan is now working with a medical product development firm on further testing and research with the ultimate goal of approval by the U.S. Food and Drug Administration. Refinements to the technology continue as well. He plans to hire executives for Surgimatix Inc., including a CEO, and envisions his role as chief medical officer. In the meantime, he is establishing a plastic and reconstructive surgery practice in Chicago.

"Building things has always been a hobby of mine," Hasan says.

Thanks to his shot from the Frankel Commercialization Fund, he's graduated from building gadgets to building a business. ✎