

## LIVES ON THE LINE

## PRODUCING SAFE AND EFFECTIVE MEDICAL DEVICES

**B**iological engineering is behind many of the innovations in the world, including those in the medical arena. Josh Lovekamp knows that firsthand.

A biological engineering graduate with a bachelor's degree from the University of Georgia and a master's and doctoral degree in bioengineering from Clemson University, Lovekamp specializes in the medical device business.

Lovekamp, who grew up in Augusta, Ga., always had an interest in both medicine and engineering. He decided to combine those two interests when he majored in biological engineering with a medical emphasis.

Lovekamp is a product specialist in the medical products division of W. L. Gore and Associates, located in Flagstaff, Ariz. The company consists of four divisions:

fabrics (makers of GORE-TEX®), electrical, industrial, and medical.

Lovekamp says his biological engineering education provided him with a very well-rounded background and laid the groundwork for his current career and the type of work he is doing now with cardiovascular medical devices.

"My education was very diverse, and I learned a lot of different things," says Lovekamp. "It has made it possible for me to understand the engineering behind the medical devices that are developed and how they apply to a patient."

His interest in the cardiovascular field began in graduate school when he conducted research on bioprosthetic heart valves made from pig tissue. That interest has continued in his recent work with aortic stent grafts at Gore.

Lovekamp's position in the medical products division consists of working together with a team of people having varied backgrounds. His job runs the gamut, he says, depending on the project and the phase of that project. He works with the regulatory, manufacturing, sales, marketing, training, and research and development aspects of a medical product. As a project specialist, Lovekamp is the one person that follows the project from start to finish.

Lovekamp is responsible for the safety and efficacy of the devices he is working with, whether they are in early

product development or are already in use commercially. He makes sure that the devices are both safe and work the way they are intended, allowing patients to receive the best possible treatment for their condition.

Lovekamp's position puts him in contact with numerous physicians, both in the United States and abroad. This contact occurs both in the field while observing device implantations, as well as during medical conferences and consultant visits.

"My involvement with physicians helps to identify a need for a potential future device and obtain a clinical background regarding the disease," says Lovekamp. "I then work

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with engineers to come up with solutions, and I take those back to the physician. I am the intermediary between engineering and the physicians, bridging that gap.

"Communication is vital, both written and spoken. You need to be outgoing and have common sense," says Lovekamp. "I'm the common thread on the product being developed as the product specialist," says Lovekamp.

Lovekamp confesses he didn't know this type of job existed before applying to Gore. He heard about the position from a contact at Clemson University and decided it fit his personality as well as his strengths and weaknesses.

"Gore is one of the most ethical companies that I know. There is a lot of integrity and pride in the products we sell," says Lovekamp.

He says his biggest satisfaction is the difference a device can make in a patient's life and knowing the products are very high quality.

"I know they will benefit a lot of people in the long run," Lovekamp states.

From engineering to the medical field, Lovekamp's work is making a difference in the lives of patients worldwide.



Josh Lovekamp enjoys his work as a product specialist in the medical products field.