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## Chamberlain Group and Baystate Medical land organ grant

By Bridget Botelho, Special to Mass High Tech

Realistic-looking human tissue is in demand this time of year, not only to stage gruesome scenes at haunted houses but for a more practical reason; to give medical students and residents something to practice on.

Great Barrington-based [The Chamberlain Group](#) designs and manufactures artificial body parts that replicate the feel, structure, physiology and response to a surgeon's scalpel blade of human body tissue, complete with accompanying body fluids.

[The Chamberlain Group](#) is integrating their realistic anatomical models into a new surgical training project, called the Tactility Learning System, designed in partnership with Springfield-based [Baystate Medical Center](#). The system includes an anatomical model — in this first case, a bowel — along with a curriculum written by Baystate, surgical instruments and other learning resources that will be used by medical students and residents for surgical practice.

In support of this training project, the [John Adams Innovation Institute](#) presented a \$150,000 grant to [Baystate Medical Center](#) and [The Chamberlain Group](#) this week.

"The Tactility (Learning System) is the first in what we hope will be a series brought to market for repeatable, affordable surgical training at the residency level," said Chamberlain Group co-founder and principal [Lisa Chamberlain](#). "This level of training will soon become part of the mainstream medical community."

[The Chamberlain Group](#)'s founders got their start in 1982 creating special effects for movies at [R/Greenberg Associates](#) in New York, creating things like space ships and doing technical effects, but had never created body parts, Chamberlain said. Their resume includes Superman, Predator I and II, Tootsie, Ghostbusters, The Matrix and many other films.

Eventually, when computerized special effects started squeezing them out of that industry, they were asked to try creating realistic medical models.

"We became known for our modeling, so we were approached by someone in the medical device field, but we had no medical background, so we had to learn all about human anatomy and surgical training," Chamberlain said.

The challenge to come up with life-like anatomical models was all theirs, since no one else was doing it, Chamberlain said.

Since then, [The Chamberlain Group](#) has developed its own proprietary materials for creating life-like models and has patented its beating heart, which is used by surgeons to practice suturing and bypass surgery. The firm offers about 500 medical models, ranging in price from \$10 to \$7,500, and sells them to medical device companies, medical schools and training hospitals in nearly every state and in 40 countries.

Chamberlain said the business is growing quickly because of problems with the traditional training tools — cadavers, animals, or live people.

"There are problems with using cadavers and animals — they are perishable, they are expensive, they require a tremendous amount of clean up and are unappealing for lots of obvious reasons. Also, they can't be used again and again," Chamberlain said.

"We are constantly being contacted by labs across the country, asking us what we offer. There is a market for this, because we as patients want to make sure the surgeon who works on us has the fullest range of experience they can possibly have."