Tulane graduates win kudos for biomedical engineering project

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It's been a busy summer for Nicholas Chedid, Christopher Cover, Scott Kleinpeter, Gabriela Nunez and Seth Vignes. They graduated from Tulane University in May but haven't gone their separate ways quite yet. The <u>biomedical engineering</u> majors designed a medical device that not only placed first in a national competition but has attracted so much interest that they are launching a startup company to market it.



Biomedical engineering grads, from left, Seth Vignes, Chris Cover and Nick Chedid show off a device they developed on a team in their senior design class. It is designed to provide patients with continuous unobstructed ventilation while giving a doctor visualization of the throat during surgery. (Photo by Paula Burch-Celentano)

As part of their senior design class, the five developed a modified laryngeal mask airway that provides patients with continuous unobstructed ventilation while giving the physician continuous visualization of the throat during tracheostomy surgery. Cover says current devices on the market partially obstruct the patient's breathing tube.

The so-called EZ-View placed first at the ASAIO Student Design Competition in Chicago in June. ASAIO, formerly known as the American Society for Artificial Internal Organs, sponsors the competition to give engineering seniors an opportunity to present their work on a national stage.

"It was a very intellectual experience for us to see the level of work of other senior BMEs (biomedical engineering students)," Cover says. "A lot of these teams had excellent work."

In addition, the team won a \$20,000 grant to develop a prototype of the device in conjunction with the Tulane School of Medicine. The grant came from the Louisiana Board of Regents Opportunities for Partnership in Technology with Industry (OPT-IN) program.

"The money will be used to buy materials and equipment to produce a fully functional prototype," Vignes says. "It will ideally meet FDA standards and be used for phase I clinical trials."

The team credits Tulane advisers Dr. Jaime Palomino, Dr. James Korndorrfer and biomedical engineering professor of practice Lars Gilbertson with guiding the team through the process.

"For the grant to be accepted gave us further confidence to move forward with the startup company," Cover says.