

# Talent plus expertise equals an innovative future for rigid medical packaging.

Eastman recently got a glimpse of the deep talent pool preparing to enter the packaging design field through their collaboration with Clemson University's Department of Food, Nutrition, and Packaging Sciences. Eastman's rigid medical packaging team sponsored a group of students from Dr. Robert Kimmel's Fall 2017 Package Design and Development course. The students were tasked with the design and fabrication of prototype rigid medical packaging for various sizes of orthopedic hip implants.

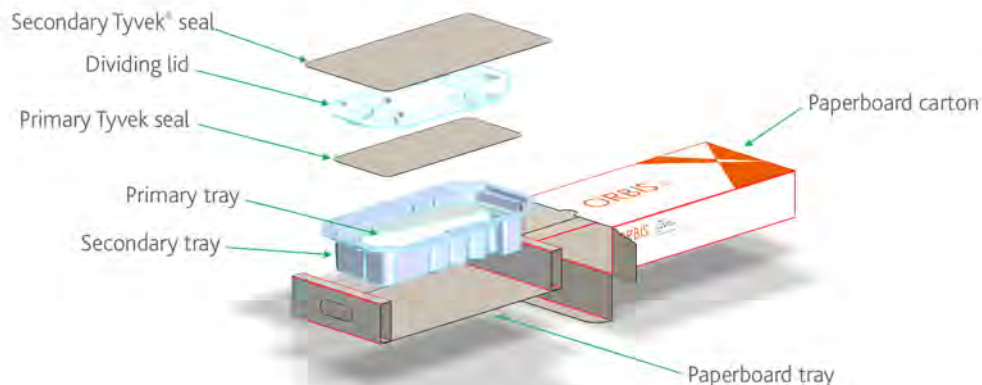
While providing Eastman an opportunity to build relationships with academia and future design engineers, the course offered students a window into a medical packaging design career. Aneta Clark, global market segment leader, served as Eastman's sponsorship liaison. "Collaboration is part of our fabric at Eastman. When Dr. Kimmel expressed interest in our participation, we felt we could contribute to the learning process and leverage Eastman's years of expertise in this area," said Clark. Along with funding, Eastman contributed polymer expertise specific to medical packaging, market experience, and knowledge of industry standards.

The team of students, made up of Tom Bradley, Lauren Tremaglio, Alton Ellone-McKenley, and Jeff Burks, began by conducting ethnographic research at a local hospital and then moved into the ideation phase, keeping in mind requirements for sterilization, shelf life, shipping, and distribution.

The students worked under the guidance of Eastman medical packaging technical expert Gary Hawkins. "We outlined the project to allow the participants to experience as many facets of design and testing of medical packaging as possible. Although extensive validation was not possible due to semester timeline constraints, we were impressed with the level and quality of work completed by the team," said Hawkins.



*Clemson students' tertiary packaging design concept*



*Clemson students' rigid medical packaging design concept*

The Eastman team introduced the students to their portfolio of materials for rigid medical packaging, including Eastar™ 6763 copolyester, Eastman Tritan™ MP100 copolyester, and Eastman Eastalite™ copolyester. The students analyzed the properties and economics of the three materials in the context of this application.

“We have long been aware of Eastman’s preeminent position as a supplier of key materials used in medical device packaging,” said Kimmel. “We were therefore delighted to work with Eastman’s medical device packaging team to provide an opportunity for interested students to work on a medical device packaging project and to help us understand the technical and marketing requirements of this industry segment.”

A growing number of Clemson students are seeking and finding employment in the medical industry. “We have a strategic objective to expand our teaching and research efforts in health care and add faculty and laboratory capabilities to support these efforts. We are confident that the partnership we developed with the Eastman medical packaging team will be extremely valuable in supporting our strategic goals in health care packaging,” says Kimmel.

Clemson University’s Packaging Science program is unique because it gives students a strong foundation in basic and applied sciences combined with intensive training in design. According to Dr. Kimmel, Clemson packaging science graduates are in high demand for employment at suppliers, converters,

and consumer products companies in both technical and sales/marketing positions in a wide range of industries. The cornerstone of the program’s educational philosophy is hands-on experience through extensive laboratory work, industry-sponsored projects, and a required industry co-op.

Eastman and Clemson will continue their partnership in Fall 2018 with a new team of students. Project work will resume with a focus on validation and testing. Eastman and Clemson hope to engage other value-chain partners as additional program sponsors.



*Dr. Robert Kimmel, Clemson University  
Department of Food, Nutrition, and Packaging Sciences*

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