

UA students win top prize at business competition

By Staff report

Posted Apr 3, 2017 at 5:38 PM

Updated Apr 3, 2017 at 5:38 PM

Three University of Alabama students who won the top prize at business plan competition say their creation could change how life-saving medicines are stored and transported.

Business majors Andrew Johnson and Grant Becker and chemical engineering major Kyle Pecot are the founders of KuLVAX, a start-up company that has created a more efficient cooling process for the transportation of life-saving vaccines, particularly in developing countries that have unreliable access to ice and electricity.

KuLVAX won the \$50,000 grand prize at the Edward K. Aldag, Jr. Business Plan Competition held March 30 at UA. Business leaders from throughout Alabama judged the 40 teams that entered the competition.

Pecot said that although KuLVAX's viability is not yet to the level of other companies in the competition, the potential social impact likely led to them winning the grand prize.

"We're talking about 30 million kids that don't have access to basic vaccines," Pecot said.

Johnson said desired temperatures for vaccines typically range between 2 and 8 degrees Celsius. Lack of infrastructure in electric grids in developing countries can lead to a struggle to store vaccines at these temperatures, which can lead to spoilages and undermine aid efforts.

Ice-lined coolers, the most common transportation method, have a 50 percent spoilage rate, he said.

"For reliable delivery, the cold-chain in developing countries must be insulated from the unpredictable electric grids and time constraints associated with it," Johnson said.

"KuLVAX is essentially a cooler, and in its lid is a water storage tank, from which water runs into a cylinder and through a valve that meters the flow-rate of the water, which is calculated through a simulation of the heat loss through the cooler's walls," Pecot said. "When the water gets into the cylinder it mixes with a cartridge filled with a chemical compound, which, when mixed with water, keeps the cooler at a stable temperature."

The students will now pursue patents and work on creating a prototype.

In addition to the \$50,000, KuLVAX will receive space at The Edge, an entrepreneurial hub located on 22nd Avenue in Tuscaloosa. KuLVAX will also receive mentorship from UA faculty and business professionals affiliated with The Edge.

NeuroPress, which plans to license NASA technology to measure intracranial pressure to better detect and treat concussions, earned the first prize of \$5,000. Team members are mechanical engineering majors Matthew Mims, Lizzy West and aerospace engineering major Jake Zalesky.

Food Drop, a web-based grocery delivery system, took second prize and won \$3,000. Team members are Ethan Mergen, a finance and hospitality management major, Ryan Keelin, a finance major, Trey Byers, a finance major, and Jake Jackson, a math and accounting major.

Gift.me, a web site that allows customers of existing retail sites to build and store shopping profiles for multiple people, took third prize and won \$2,000. Its team members are Brandon Locke, a master of business administration student, Derek Legenzooff, a management information systems major and Anna Claire Smith, a management information systems major.

Those three teams also will receive space at The Edge.

The Alabama Entrepreneurship Institute sponsored and hosted the event, held at the Bryant Conference Center. AEI provides learning opportunities and mentorship to young entrepreneurs and is located at The Edge.