

NEW PRODUCT DEVELOPMENT CENTER

Tulsa's best-kept secret? OSU's New Product Development Center provides prototyping services to inventors, manufacturers across Oklahoma

Evan Pratt, a design engineer at the Oklahoma State University - Tulsa campus, location of OSU's New Product Development Center (NPDC), held a small plastic device in front of me for inspection and challenged me to guess its purpose.

I didn't have a clue. New computer mouse? Fancy salt shaker? Home security device?

Wrong, wrong and wrong.

Pratt was actually showcasing a "bottle grabber" assembly used by a Tulsa area manufacturer to keep the bottle filling and shipping process flowing smoothly.

"What this does is it fits on a conveyer system that is in their bottling system that helps them move and transport bottles from one conveyer system to another," Pratt said.

The bottle grabber assembly was designed and created at the NPDC lab on a 3D printer to replace an original design and mesh perfectly with the client's manufacturing process.

"This piece recently became unsupported by the original manufacturer," Pratt said. "So, under a pay-for-service contract, we reverse engineered this bottle grabber assembly and created a 3D-printed prototype for them to test."

The New Product Development Center was founded by OSU in 2002 to provide Oklahoma inventors and entrepreneurs with market research, prototype development and grant writing assistance to advance their concepts, said Jessica Stewart, assistant director.

Along with the Oklahoma Center for the Advancement of Science and Technology (OCAST), i2E Inc., the Tom Love Innovation Hub at the University of Oklahoma and the Oklahoma Manufacturing Alliance, the NPDC is a key element in the Oklahoma Innovation Model that supports Oklahoma's innovation economy. Robert Taylor is NPDC executive director.

The bottle grabber assembly was created as part of a \$399,000 grant awarded in 2017 to NPDC by the federal Economic Development Administration through its "i6 Challenge" program. Launched in 2014 the ongoing i6 Challenge has awarded \$42 million with \$54 in matching funds that are supporting 88 projects across 36 states, according to the EDA website.

"The EDA i6 grant is basically set up to assist small businesses, inventors, startups and some manufacturers with a working first prototype to be able to get them further along in their product development," Stewart said.

On this mid-January day, Pratt and Stewart gave me and OCAST colleague Debbie Cox a tour of their fabrication shop that features 3D printing capabilities along with tools to engineer and create just about any prototype to the specifications sought by manufacturers or inventors.



The EDA grant led to a unique collaboration between the OSU organization and OU's Tom Love Innovation Hub, which expanded the array of services offered Oklahoma innovators through the grant.

"The Tom Love Innovation Hub has been excellent in providing services to our inventor community to create prototypes that we don't have the capacity to do here," Stewart said.

Added Tom Wavering, executive director of OU's Innovation Hub: "When jobs come in, and they come to us and need some help, we figure out if we can help them or OSU can help them and send them to the right spot. Jessica and Robert do the same."

At its Tulsa location, the NPDC provides both a mechanical and electrical engineer who provide design expertise and prototyping services like that of the bottle grabber assembly.

"We are probably Tulsa's best kept secret," Stewart said of the NPDC. "We invite inventors, small businesses and manufacturers to call us to see if we can provide resources and move them forward."

[Watch the video](#)

[Visit the NPDC website](#)