

## TOM LOVE IHUB

---

### OU Catalyst Programs lead entrepreneurs to successful proposals for federal grants

When Ashton Robinson Cook was 3 years old, a tornado struck the mobile home in which he lived with his mother in Little Rock, Ark. The experience terrified Cook but also stirred a life-long interest in all things weather.

He became the first African American male to earn a Ph.D. in meteorology from the University of Oklahoma.

Along the way, Cook worked at the National Weather Service's Storm Prediction Center in Norman. He studied the relationship between the El Nino Southern Oscillation and winter and spring tornado outbreaks in Oklahoma and the Midwest.

Cook subsequently developed a weather forecasting model to predict severe weather outbreaks months in advance, based on oceanic temperature changes.

"I developed technology and started introducing the tools and incorporating several larger-scale oscillations that impact severe weather," he said. "Then out came this model, and it's actually performed better than I could ever have expected or dreamed."

Cook then began looking for ways to commercialize his proprietary forecasting technology. That led him to connect with the Oklahoma Catalyst Programs at OU's Tom Love Innovation Hub on OU's South Research Campus in Norman.

Mentored by Tom Wavering, executive director at the Tom Love Innovation Hub, and Daniel Moses, programs manager for the OK Catalyst Programs, Cook created a new business called WeatherDeep and submitted a successful Small Business Innovation Research (SBIR) proposal.

The federal SBIR program is a \$2.5 billion funding opportunity for small businesses to conduct technology-focused research and development for government entities such as the Department of Defense.

WeatherDeep was awarded a \$50,000 Phase I SBIR grant to support development of highly accurate, long-range weather forecasting for the U.S. Air Force.

Recently, I met Cook at the Tom Love Innovation Hub, where he and fellow entrepreneur, Ocupath founder Greg Hallman, discussed their SBIR proposals and the role the OK Catalyst Programs played in their successful applications.

Ocupath was awarded a \$125,000 grant to fund its proposal to use augmented and virtual reality to develop educational courses for U.S. Navy personnel.

The OK Catalyst Programs were launched in partnership with the Oklahoma Center for the Advancement of Science and Technology (OCAST), the U.S. Small Business Administration and the Oklahoma Business Roundtable, among others, to provide training, mentoring and support for submitting SBIR proposals.



“Tom, Daniel and their group with Oklahoma Catalyst Programs were instrumental in helping me win this grant,” Cook said. “They actually walked me through the process.”

“We actually led them through every step in the process, from incorporating their company and filing their registration with the government to writing their proposals and helping them do their budgets to helping them find partners and navigating this sometimes overly complicated process that can be the federal SBIR program,” Wavering said.

Now the focus for Cook and Hallman shifts to hitting the milestones outlined in their SBIR proposals and preparing subsequent grant applications for much larger Phase II awards.

“Our goal is to knock it out of the park,” Hallman said.

[Read the article in the 11-16-18 Oklahoman](#)

[Watch the video](#)

[Go to the iHub website](#)