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Wichita State alumni in the running to win \$1 million in XPrize mask challenge

By Sara Ornelas, Marketing Content Strategist



Wichita State alum Jared Goering models a mask that he and his team created for the XPrize Next Generation Mask Challenge.

They've advanced to the top 10!

Spencer Steinert, Jared Goering and Maggie Koops — all recent graduates of Wichita State's Master of Innovation Design program — teamed up to for the [Cyfive](#) apparel company to address a challenge created by XPrize: to craft a face mask addressing the obstacles that deter people from wearing them and promote positive mask-wearing behavior.

"We are super excited to make it to the semi-finalist top 10 round of the XPRIZE competition. The next steps are, our prototypes go to in-lab testing and get judged by cultural ambassadors," Goering said.

XPRIZE announced the top 10 finalists on [Nov. 9](#). More than 1,000 teams from 30 countries initially entered the contest. Other to 10 finalists hail from Australia, Nigeria, and Cameroon.

"Based on their work in the Master's of Innovation Design program, I'm not at all surprised by the success Jared, Spencer and Maggie are having with their Xprize mask design," said Doug Stucky, manager of program and development for Wichita State's College of Innovation and Design. "Individually they are innovative, creative and technical, but collectively they are a dynamic team that pushes each other to the next level."

According to the XPRIZE website, "The semifinals round includes in-lab testing from industry experts and evaluation from XPRIZE's Panel of Cultural Ambassadors. XPRIZE partners ... are developing physical prototypes of the top 10 mask designs that will be distributed to cultural ambassadors to try on and assess for style, comfort, and function.

In addition to winning one of two \$500,000 prizes, XPRIZE has also a \$10,000 People's Vote Bonus Award. To win this prize, anyone, anywhere can vote on their favorite mask between November 18 and Nov. 25, 2020 at xprize.org/mask.

"We're almost to the finish line on it!" Goering said.

Oct. 5, 2020 — Three Wichita State University alumni are in the running to win \$1 million as part of the [Next-Gen Mask Challenge](#) sponsored by [XPrize](#). They were chosen one of only 25 finalists from a field of 1,000 teams from 30 countries.

Spencer Steinert, Jared Goering and Maggie Koops — all recent graduates of Wichita State's Master of Innovation Design program — teamed up to for the [Cyfive](#) apparel company to address a challenge created by XPrize: to craft a face mask addressing the obstacles that deter people from wearing them and promote positive mask-wearing behavior.

"We are in the midst of an unprecedented global crisis," said Peter H. Diamandis, Xprize founder and executive chairman. "We know that wearing a mask is an effective way to curtail the spread of COVID-19, yet many find masks undesirable for many reasons, from comfort to fashion. The mission of the Next-Gen Mask Challenge is to resolve this situation, to drive innovation that results in a new generation of masks that are comfortable, safe, fashionable and ultimately desirable, encouraging mask wearing

behavior. Thus far, we've been so impressed with what our competing teams have developed. Our next step is to connect these teams with our ecosystem manufacturing partners who will provide mentorship, resources and guidance."

"We thought it was a great opportunity to jump in and apply some of our expertise, technology, innovation and material science that we'd become aware of when we were at school and then take that out of the lab and into the real world," Goering said.

XPrize surveyed thousands of people and came up with the top 10 reasons that people don't like wearing face masks:

- 53% — They're too hot.
- 47% — They fog my glasses.
- 36% — It's difficult to breathe.
- 35% — They are uncomfortable.
- 20% — It's difficult to exercise.
- 19% — They hurt my face.
- 18% — It's hard to eat or drink.
- 15% — People can't see my expressions.
- 5% — They are not ecofriendly.
- 5% — They are hard to get.
- 5% — They are ugly.

"We started with the form because we've all been wearing masks for a few months, and we have a pretty good understanding of what is comfortable and uncomfortable," Steinert said. "We thought that taking a very user-centered approach to the design of the mask would be the most efficient."

Cyfive's mask looks much like the masks we've become accustomed to seeing since March, but it's been created with nanofibers and includes a second piece of fabric near the chin.

"Basically, with the second piece here and some of the things we have going on inside, it rests a lot easier on the face so whenever you're talking it doesn't stretch or pull," Steinert said. "The design on the inside has a sleeve for putting in a filter. The mask is highly reusable but still effective and comfortable."

Cyfive will go on to consult and improve on its creation with top-tier companies, such as 3M, Autodesk Inc., Honeywell, Lydall and Under Armour.

"We meet with these companies, and they give us a presentation and inform us on how to take our mask and company to the next level. We met with 3M and they kind of gave us an overview of how they do their product design," Goering said.

Steinert and Goering (who both work at The Wonder School) have been friends since they were in second grade, and they met Maggie (an aerospace engineer and lead 3D modelist at Cyfive) while they were students at Wichita State. This isn't the first project the trio has collaborated on.

“The three of us kind of mess around with some other fun ideas for companies like some furniture companies and some other fun things to tinker with, and so we're just all close friends that hang out frequently,” Steinert said. “Whenever this idea came up, it was pretty easy for us to all jump on it because we were all actively together.”

The mask competition is a sign of the time we're living in, as the COVID-19 pandemic continues to spread exponentially.

“Whether we like it or not, there's been a fundamental shift globally over the past nine months. That isn't going away soon,” Steinert said. “Masks are going to continue to be a part of everyday life whether you are in Wichita or Utah or California. It was important for us to make the experience of actually engaging in a mask and wearing it as seamless as possible.

Xprize will announce the winners of the Next-Gen Mask Challenge in November.