

AU Summerville houses 3D printing operation for protective equipment

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AUGUSTA, GA. (WRDW/WAGT) -- The battle against the coronavirus isn't just happening over at the hospital, or in restaurants and stores. Staff at Augusta University's Summerville campus are helping fight it by building protection.

Medical illustrators and even some in the community are using 3D printers to make face shields and silicon masks for those on the frontlines.

"These will replace surgical masks," Lynsey Ekema, a medical illustrator at AU, said. "These are supplementary protection. These go on top of something that's already being used like a surgical mask or N-95 respirator."

Ekema and Amanda Behr are both working on the project, along with faculty across AU. It's all done by uploading a design file, and then the machine makes it.

"It's anywhere from 60 to 80 hours a week of work, but this is going to fuel us forward in innovation if it has not already," Ekema said.

The hospital is asking for 1,000 face shields and 500 silicon masks, not exactly a job that can be done overnight.

But the illustrators aren't doing it alone, there's 15 printers in the community and across the university who are offering their expertise.

Donations of supplies are making it all possible.

"These are people who have printers at home, and they have spools of filament, who want to help. So this is coming out of their own pockets," Ekema said.

Resources coming out of their pockets and into the hands of those who need it.

But, why use 3D printing? AU officials say this protective equipment is reusable.

"When we use silicon, we are able to disinfect it— so do a surface cleaning. But, we can also sterilize it," Behr explained.

With each mask or shield that's made, a healthcare worker is protected, and they can stay protected as long as those masks hold up.

"In all honesty, the healthcare workers are saving lives. By helping them, we are helping people," Ekema said.

And by helping people, they are helping end the war against COVID-19.

AU told News 12 they are sending 50 to 100 face shields to the hospital every other day. They expect to get silicon masks fully approved by next week, which will replace surgical masks. N-95s will not be replaced.

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