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We partnered with a local university, Rochester Institute of Technology (of which I’m an alumni), who is using 3D printers to create face shields. The face shield can prolong the life of a cloth mask, as you can wear the shield over the mask. Within 36 hours, the university was able to make six face shields.

Below is an article from the Rochester Institute of Technology:

An early evening delivery connected an RIT Tiger caring for kids to RIT’s advanced manufacturing researchers.

Chrysa Charno ’03, is the owner/operator of AcuteKids pediatric urgent care in Webster, NY. As a healthcare professional, Chrysa is on the front lines of the Covid-19 epidemic and has experienced the supply issues for protective gear firsthand.

“Pediatric offices like ours have a very limited supply of masks and face shields on hand,” she explained. “We knew we were going to run out in a few days, so I reached out to my contacts at RIT to see if they could help.”

Denis Cormier and the team in RIT’s Center for Additive Manufacturing and Multifunctional Printing (AM Print Center) went to work creating 3D printed facemasks for her practice. Each mask is laser cut from plastic sheets, and then “cooked” in an oven for approximately 30 minutes to get the plastic visors to curve.

Researchers in the Center used their own personal protective equipment when handling any parts and all printed parts were dipped in isopropyl alcohol before transportation just in case one of the staff had been exposed to the virus but was asymptomatic. Every precaution possible was taken to avoid exposing any parts to possible contamination.

Chrysa anticipates her volume of testing for the Covid-19 virus will increase significantly throughout the current crisis. It’s difficult for smaller clinics and doctor’s offices to get protective gear, as the demand in hospitals and critical care units is overwhelming the supply. But offices like AcuteKids are often the first place parents take their children when they are sick, and without gear like that provided by the AM Print Center, everyone in the office would be at risk.