Health & Medicine

# Engineers ...and Librarians! to the Rescue

Columbia staff and students get creative in combating a shortage of face masks.

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|
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A face shield produced by Columbia Engineering. (Yevgeniy Yesilevskiy)

**As medical workers in New York** faced a harrowing shortage of personal protective equipment in their fight against the new coronavirus, Columbia engineers — and librarians — met the emergency head-on.

In March, Madiha Choksi ’19GSAS, a research and learning technologies librarian at Columbia University Libraries, began producing protective face shields using the libraries’ 3D printer and a model by Budmen Industries, a 3D-printer company in upstate New York. Within days, Choksi and Alexander Gil Fuentes, a librarian of digital scholarship, formed a consortium of local 3D-printing companies and volunteers to crank out and deliver thousands of shields per day.

At the same time, at Columbia Engineering, students, faculty, and technical staff designed their own face shields with an emphasis on production speed and affordability, then manufactured them in the Columbia Makerspace. Teaming up with CUIMC, which tested and approved the prototypes, the school stepped up production to turn out fifty thousand shields daily for New York hospitals.

“If back in early March anyone had suggested that we would be designing and mass-producing a product in just a week — or even at all — we would have said a clear no,” said engineering dean Mary Boyce. “But desperate times call for extraordinary measures.”

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