

CONTACT • Karl Greenberg 646.997.3802 / mobile 646.519.1996 Karl.Greenberg@nyu.edu

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**Immediate Release** 

## NYU answers desperate need for medical face shields with low-cost, quick-production design

The clinician-tested designs will be made publicly-available for free to enable other regions to launch similar efforts for COVID-19 response

BROOKLYN, New York, Friday, March 27, 2020 – Responding to a nation-wide shortage of protective personal equipment that is particularly acute in New York, faculty and researchers from across NYU have developed plans to distribute a new protective personal equipment (PPE) face shield design for healthcare workers on the front lines of the COVID-19 pandemic. The shield can be produced and assembled in under one minute, delivering a unit at a fraction of the time it takes for those produced using 3D printing. While the team has already produced over 100 of the masks at small-scale and deployed them to emergency rooms, production at scale will begin the week of March 30, 2020, with capabilities to produce close to 300,000 shields within two weeks of materials arriving at production sites. The New York City Economic Development Corporation is funding the first round of production.

The New York University COVID-19 Task Force — which includes the NYU School of Global Public Health, health care providers at NYU Langone Health, and engineers at NYU Tandon School of Engineering — will work in collaboration with the Open Face PPE Project to make the process, from design to end-use in healthcare settings, available to all for free. The Task Force will specifically call on smaller manufacturers to get involved as they have the resources to more quickly ramp up production.

The Task Force focused the design on the fastest and most versatile production methods at the lowest material and production costs. The components of the new shields are made of laser-cut Plexiglas, with a simple, easy-to-attach elastic head strap. The design was tested, improved upon, and approved by medical professionals at the NYU School of Global Public Health and NYU Langone Health.

The face shields will be manufactured at <u>Daedalus Design and Production Inc.</u>, <u>PRG Scenic Technologies</u>, and <u>Showman Fabricators</u>. Finished products will be delivered by <u>Black 6 Project</u> directly to a distribution center for New York City hospitals. As of March 24, 2020, <u>Sinai BioDesign</u> of the Icahn School of Medicine at the Mount Sinai Hospital System has been testing and validating the basic clinical functionality of this devices with success.

"We are organizing manufacturers across the tri-state area to make the face shield using a variety of manufacturing processes, from laser cutting and CNC (computer numerical control) machines to die cutting. These small-scale manufacturers have the advantage of both being able to mobilize quickly and of being located in striking distance to overstressed New York area hospitals. Instead of laying off staff they're able to use our designs to fill an important need for PPE," said <a href="Steven Kuyan">Steven Kuyan</a>, director of entrepreneurship at NYU Tandon and managing director of the <a href="Future Labs">Future Labs</a>.

The New York City metropolitan area, experiencing the <u>largest number</u> of reported COVID-19 cases in the nation, is facing an impending shortage at hospitals and other care facilities of PPE, including face shields. Hospitals are going through hundreds of thousands of PPE per day and officials estimate that the entire city will need to procure millions.

"The urgency for hospitals and health centers to receive face shields cannot be overstated," said Grant Fox, director of the <u>Veterans Future Lab</u> at NYU Tandon. "While major manufacturers are stepping up across industry sectors there is a need today. To get the most face shields out to as many facilities as possible in short order — and to make our designs and processes available to everyone — we focused on delivering effective protection at the lowest cost per unit, made as fast as possible."

"New York City and the entire country face an unprecedented crisis from the COVID-19 pandemic, one that is putting enormous pressure on hospitals and other healthcare facilities nationwide," said <u>Jelena Kovačević</u>, dean of the NYU Tandon School of Engineering. "I couldn't be more grateful that Steven Kuyan; Grant Fox; Uriel Eisen, our ProtoShop Manager; and members of the NYU COVID-19 Task Force — including the School of Global Public Health — are stepping up today to make an immediate difference by supplying desperately-needed face shields. This project demonstrates how creative entrepreneurship can be a force for good in a time when we most need ideas and solutions to make a critical difference."

## About the New York University Tandon School of Engineering

The NYU Tandon School of Engineering dates to 1854, the founding date for both the New York University School of Civil Engineering and Architecture and the Brooklyn Collegiate and Polytechnic Institute (widely known as Brooklyn Poly). A January 2014 merger created a comprehensive school of education and research in engineering and applied sciences, rooted in a tradition of invention and entrepreneurship and dedicated to furthering technology in service to society. In addition to its main location in Brooklyn, NYU Tandon collaborates with other schools within NYU, one of the country's foremost private research universities, and is closely connected to engineering programs at NYU Abu

Dhabi and NYU Shanghai. It operates Future Labs focused on start-up businesses in Brooklyn and an award-winning online graduate program. For more information, visit http://engineering.nyu.edu.

## About the NYU Tandon Future Labs

The NYU Tandon Future Labs is a network of innovation spaces and programs that support the early-stage startups of tomorrow through personalized and curated support services, mentorships, and resources. The companies work at the intersection of a leading academic institution and the City of New York. For more information, visit <a href="https://futurelabs.nyc">https://futurelabs.nyc</a>.

## About NYU School of Global Public Health

At the NYU School of Global Public Health (NYU GPH), we are preparing the next generation of public health pioneers with the critical thinking skills, acumen, and entrepreneurial approaches necessary to reinvent the public health paradigm. Devoted to employing a nontraditional, interdisciplinary model, NYU GPH aims to improve health worldwide through a unique blend of global public health studies, research and practice. The School is located in the heart of New York City and extends to NYU's global network on six continents. Innovation is at the core of our ambitious approach, thinking and teaching. For more, visit: <a href="http://publichealth.nyu.edu/">http://publichealth.nyu.edu/</a>

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