



For Immediate Release: September 29, 2020

The Cornell Center for Materials Research Announces the Fall 2020 JumpStart Funded Companies

Ithaca, NY - The Cornell Center for Materials Research (CCMR) Industrial Partnerships Program is designed to help New York State's businesses access world-class capabilities; solve technical challenges; and develop and improve their products, with the ultimate goals of revenue growth and job creation.

During the 2020 Fall semester, three New York State companies have been awarded funding to participate in the following collaborations:

- 1-by-1 Diagnostics, Inc., (Ithaca) will collaborate with Alireza Abbaspourrad, Professor of Food Chemistry and Ingredient Technology, to prototype a microfluidic device that can detect the COVID-19 virus rapidly for use at home or at the point-of-care.
- Chip Scan, Inc., (New York) will collaborate with Jonathan Shu, Ph.D., Director of the CCMR Shared Experimental Facilities, to develop scanning electron microscopy methods to detect malicious circuits and other vulnerabilities hidden in microelectronic devices that may pose security risks.
- Otex Protective, Inc., (Rochester) will collaborate with Juan Hinestroza, Professor of Fiber Science & Apparel Design, on the development of textile fibers for arc flash PPE. The new fibers will help absorb toxic fumes produced during an arc flash event.

JumpStart projects receive up to \$5,000 in matching funds for project costs that include faculty and research staff, facilities, services, supplies and materials. Since the program's inception, 106 companies have benefited from this program. The program is also supported by Empire State Development's Division of Science, Technology and Innovation (NYSTAR). Small to mid-sized New York State manufacturing and research and development businesses from the following industry sectors are eligible: materials, chemistry, energy, pharmaceuticals, food and textile.

About the Cornell Center for Materials Research (CCMR)

The Cornell Center for Materials Research is a National Science Foundation and New York State funded interdisciplinary research center at Cornell University whose mission is to advance, explore, and exploit the forefront of the science and engineering of advanced materials. The CCMR pursues this objective through fundamental, experimental and theoretical studies. Three other complementary functions complete the CCMR's mission: educational outreach to teachers and students; industrial outreach and knowledge transfer; and the operation of shared instrumentation in support of materials research both on and off campus. www.ccmr.cornell.edu/industry

About Empire State Development's Division of Science, Technology and Innovation

Empire State Development's Division of Science, Technology and Innovation (NYSTAR) supports collaborative industry/academic partnerships to foster integrated approaches for developing and commercializing innovative technologies. NYSTAR serves as a resource for small and startup technology companies. For more information, please visit www.esd.ny.gov/nystar/

About 1-by-1 Diagnostics

1-by-1 Diagnostics is a start-up company focused on commercializing a patented technology for the detection of abnormal genetic variants in breast cancer patients. Since the technology has a great potential for helping with the current COVID-19 pandemic, 1-by-1 Diagnostics has pivoted their focus to develop an At-home COVID-19 test kit.

About Chip Scan

Chip Scan is a six-year-old cybersecurity company that automates the identification of hardware backdoors, implants or undocumented functionality in semiconductor intellectual property cores using patented technologies developed at Columbia University.

<https://chipscan.us/>

About Otex Protective

Otex Protective is a seven-year-old innovative arc flash safety apparel manufacturer that prides itself on an obsessive approach to garment design & manufacture. From prototyping designs to selecting the chemistries, fibers, and components, that exceed all current safety standards.

www.otexmfg.com

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