The Cornell Center for Materials Research Announces the Spring 2016 JumpStart Funded Companies

Ithaca, NY - The Cornell Center for Materials Research JumpStart program, funded by Empire State Development’s Division of Science, Technology and Innovation (NYSTAR), is designed to assist New York State small businesses develop and improve their products through university collaborations; the ultimate goal is revenue growth and job creation. 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 its inception, 71 companies have benefited from this program. During the upcoming semester, four companies have been awarded funding and will participate in the following collaborations:

- **Advanced Design and Consulting Inc.**, Lansing, NY, will collaborate with Professor Stuart Leigh Phoenix, Mechanical and Aerospace Engineering, on the development of a new synthetic rope to replace the steel cables currently used by Navy Aviation Rescue Swimmers in their rescue hoists.

- **Dynamic Boundaries Inc.** will collaborate with Professor Brett Fors, Chemistry and Chemical Biology, to scale up the synthesis of a brush-like copolymer that mimics Lubricin, a protein found on the surface of joint cartilage. The new synthetic lubricant will harness the abilities of the natural protein to treat Osteoarthritis.

- **Mayo Linoleum**, Port Morris, NY, will collaborate with Professor Anil Netravali, Fiber Science and Apparel Design, and engineers at the Hudson Valley Technology Development Center, on the reformulation and manufacturing of a natural linoleum material for writing and work surfaces.

- **XS4, Inc.**, New York, NY, will collaborate with Professor Rumit Singh Kakar, Department of Physical Therapy and the Movement Analysis Laboratory, Ithaca College, in the development a standardized test that will compare the load carrying efficiency of their patented harness design to a traditional double strap harness design used by first responders and fire personnel on Self Contained Breathing Apparatus (SCBA) equipment.

**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 start-up technology companies. [www.esd.ny.gov/nystar/](http://www.esd.ny.gov/nystar/)

**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. This objective is pursued 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](http://www.ccmr.cornell.edu/industry)
About ADC USA Inc.
About the company: ADC USA, located near Cornell University in Ithaca, New York, is a leading developer and supplier of complex scientific components and instruments for large government laboratories and corporations around the world. Founded as a privately held company in 1995, ADC has grown into one of world’s leading technology companies and has enjoyed 18 straight years of business growth and profitability with more than 500 customers located in over 26 countries. ADC’s vision is to be a global leader in the development and manufacturing of innovative products for scientific and research markets. For more information on "ADC" please go to: http://www.adc9001.com

About Dynamic Boundaries Inc.
Dynamic Boundaries is a startup company commercializing a Cornell technology that offers an injectable treatment for osteoarthritis.

About Mayo Linoleum Works, LLC
Mayo Linoleum is a 2-year-old company developing a natural linoleum materials intended for use in interior living and work environments.

About XS4 Inc.
xS4, Inc. has a patented harness design that lifts weight more efficiently by reducing the pull on the wearer's shoulders and increasing the load carriage stability while in motion. The xPk® harness can be a direct replacement for almost any product line presently using a double strap harness design.

About the Ithaca College Movement Analysis Laboratory
The Movement Analysis Laboratory fosters collaborative scientific research to answer the most current and clinically relevant questions. The laboratory has a variety of sophisticated equipment including motion capture, force plates, plantar pressure analysis, electromyography, isokinetic dynamometry, balance testing, and metabolic measurements. For more information on The Movement Analysis Laboratory please go to: http://www.ithaca.edu/hshp/clinics/movementlab/