

The Future of Business in Pittsburgh

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Robotic Vertical Farming Pioneer Fifth Season Grows, and Expands

Fifth Season, a Carnegie Mellon University spinout that markets ready-to-eat salads with greens grown using their proprietary, robot-enabled vertical farms, has announced that they will be expanding and are building a brand new 180,000 square foot farm in Columbus, Ohio.



Fifth Season's founders inside their Braddock farm.

The company, which was founded as RoBotany in 2016 by students at Carnegie Mellon, uses robotics and artificial intelligence to revolutionize indoor farming. Ultimately their goal is to have the farming process entirely automated, but for now humans are collaborating with the robots - and taking instructions from them. This is something that Brac Webb, the company's co-founder and CTO, explained during a recent event with the Pittsburgh Robotics Network. "We're never going to tell the system what it's going to be doing, it's always going to be telling us what it's going to do and asking for help, which means as soon as we make it so it no longer asks for help, that's the next evolution in that design," he said.

Fifth Season's completely controlled indoor environments also enable them to be able to customize their greens for flavor and longevity, creating consistent taste and quality at any time of year (which is where the name Fifth Season comes from). Sustainability is also core to their mission, and they say that their smart vertical uses 97% less land and 95% less water than traditional farming.

You can learn more about Fifth Season at https://www.fifthseasonfresh.com/, or read more from their recent Pittsburgh Robotics Network event HERE.

RK Mellon Foundation Awards \$3.39 Million to Social Good Companies

The Richard King Mellon Foundation, which invests in the future of Southwestern Pennsylvania, has announced the winners of its first-ever Social-Impact Investment Pitch Competition. The competition was designed to "utilize the creativity and scalability of publicly-minded for-profit businesses to advance the philanthropic goals of the Foundation's Strategic Plan" - through which the Foundation plans to award \$1.2 billion by 2030.

The 1st Place (\$500,000) winner, Fabric Health, seeks to improve access to health care for people in need through strategic engagement at laundromats. 2nd Place (\$300,000) Gus Gear manufactures medical devices and supplies that help patients live safer, more active lives while they are receiving treatment, and 3rd Place (\$250,000) Module manufactures modular housing that positively addresses the affordable-housing shortage, while advancing energy efficiency and environmental sustainability.

Thirteen other social good companies split an additional \$2.34 million in funding, including: Behaivior, which uses wearable technology to help predict and prevent addiction relapses bosWell, a free web app to help organizations handle spreadsheets and data Brightway Health, which provides live virtual classes for brain injury rehabilitation Civic Champs, a solution for nonprofit volunteer management and engagement DisSolves, environmentally-friendly drink mix pods

<u>Farm to Flame Energy</u>, which builds biomass generators

<u>Lumis</u>, which uses augmented reality for healthcare education

NuMoola, a banking app

<u>Safe Space Technologies</u>, which uses robots for disinfection

<u>Toyz Electronics</u>, which prepares students for STEAM jobs

<u>Trek Gum</u>, a plant-based chewing gum
<u>Rubitection</u>, which created technology to
monitor and manage skin conditions
<u>PHRQL</u>, an Al-powered meal-planning system



Safe Space Technologies, which creates disinfecting robots, was among the award winners.

Pittsburgh Business News and Updates

- Metafy Gaming Coaching Platform Closes \$25 Million Series A
 (https://techcrunch.com/2022/02/01/metafy-lands-25m-to-scale-its-gaming-coaching-platform/)
- CoPilot Fitness Coaching Platform Closes \$6 Million Series A
 (https://flyoverfuture.com/featured-ff-interview/fitness-coaching-company-empowers-through-technology/)
- Carnegie Mellon Paved the Way for Self-Driving in the 1980s
 (https://www.digitaltrends.com/cars/first-self-driving-car-ai-navlab-history/)
- US Steel & Carnegie Foundry Partner on Advanced Robotics & Automation
 (https://www.businesswire.com/news/home/20220125006271/en/United-States-Steel-Corporation-Announces-Strategic-Investment-in-Carnegie-Foundry-to-Accelerate-Advanced-Robotics-and-Autonomy-Capabilities)
- Pitt Researchers Develop New System for Quantum Computers
 (https://www.bizjournals.com/pittsburgh/inno/stories/news/2022/01/27/pitt-researchers-quantum-computer-qubits-system.html)



About Ryan

Ryan O'Shea is a JETRO Investment Advisor focused on connecting Japanese companies to opportunities in Pittsburgh, Pennsylvania. He is the host of Future Grind, a podcast that explores the ethics and impact of emerging science and technology, and also works with the Pittsburgh Robotics Network. In 2017, Ryan cofounded an artificial intelligence startup that was named a Top 10 team in the IBM Watson AI XPRIZE. Ryan has represented NASA and CalTech's Jet Propulsion Laboratory as a Solar System Ambassador and serves both as a World Economic Forum Global Shaper and an ambassador for Pittsburgh AI. He is a graduate of the University of Pittsburgh & serves on the boards of multiple non-profit organizations.