

CONTACT:

Susan Lee
susan.lee@wisc.edu

**PARTNERSHIP ACCELERATES TRANSITION OF UW-MADISON TECHNOLOGIES
FROM LAB TO MARKET**

Discovery to Product Awards Funds to Seven Campus Startups

Madison, Wis., September 23, 2024—Innovative technologies created at UW–Madison are set to benefit from financial support through an on-campus grant program managed by UW’s [Discovery to Product \(D2P\)](#) alongside a matching grant of \$250,000 from the [Wisconsin Economic Development Corporation \(WEDC\)](#).

The annual State Economic Engagement and Development (SEED) program, coordinated by D2P, will facilitate the advancement of groundbreaking research and the commercialization of technologies from seven companies founded by UW–Madison researchers. Technologies and industries include healthcare and personalized medicine, cleantech, and high-speed wireless communications. WEDC’s contribution, provided through its Capital Catalyst program, offers additional seed funding to accelerate innovation within the state and attract further investment in Wisconsin’s emerging companies.

“This grant will provide crucial support to these outstanding early-stage companies as they advance their innovative technologies towards market readiness. This initiative is not only about technological development but also about fostering the growth of these companies within Wisconsin,” said D2P Interim Director Abram Becker. “We are deeply grateful for WEDC’s matching support for the SEED program and its commitment to promoting innovation across the state.”

SEED program applications are assessed based on their technical innovation, relevance to a broad economic sector, and potential to contribute to Wisconsin’s industrial and economic development in the near term. The selected projects range from ultra-efficient carbon removal technology to 3D printing of customized prostheses and an improved cardiac monitor.

“Collaborating with our universities to advance new technologies is one of the most impactful ways to support the growth of early-stage startups in Wisconsin,” said Missy Hughes, secretary and CEO of WEDC, the state’s lead economic development agency. “By providing funding for these companies, we can boost their potential for successful commercialization and contribute to the economic development of our state while also creating a supportive environment for entrepreneurs.”

Awardee Scott Reeder, professor of radiology at UW–Madison, says: “I’m thankful for this funding which will enable Calimetrix to enhance the quality of cardiac MRI testing tools. It is crucial to have advanced tools such as robust phantoms to ensure quality assurance and facilitate comparison of imaging results across various MRI systems, sites, and vendors. These strategies play a vital role in enabling quantitative cardiac MRI to realize its potential in diagnosing and monitoring cardiovascular disease.” Calimetrix teams have participated in D2P’s Igniter cohorts, Wisconsin Alumni Research Foundation’s Accelerator, and National Institutes of Health’s SBIR and STTR programs.

The UW–Madison projects selected for funding by the SEED program in FY2025 are:

Scott Reeder (Professor of Radiology), with **Calimetrix**, will develop a quantitative test object (phantom) for cardiac MRI to enhance early detection and treatment monitoring of cardiovascular disease. This project addresses the critical need for reproducibility and quality assurance across different MRI systems, sites, and vendors, ensuring consistent and accurate quantitative cardiac imaging.

Nick Von Bergen (Professor of Pediatrics) and Vikas Singh (Professor of Biostatistics and Medical Informatics) will work with **Atrility Medical’s** AtriAmp device to address inadequacies in current cardiac monitoring techniques, especially for pediatric patients. Current monitors could miss 30%-50% of post-operative arrhythmias. Using the AtriAmp, they seek to develop a higher-quality heart signal display to improve detection, diagnosis, and care for critical pediatric cardiac patients.

AJ Boydston (Professor of Chemistry) will work with **Si3H’s** WARF-licensed 3D printing technology, Heating at a Patterned Photothermal Interface (HAPPI), to enable direct printing with FDA-approved silicones of highly customized prostheses and orthotic braces, enhancing patient comfort and reducing production time and costs.

Walter Block (Professor of Biomedical Engineering and Medical Physics and Radiology), Andrew Alexander (Professor of Medical Physics), and Azam Ahmed (Associate Professor of Neurosurgery and Radiology) will test the safety and productivity of **Saf-T-Drape**, a semi-rigid, disposable liner designed to easily fit MRI and CT scanners, withstand patient movement with minimal procedure interference, and help prevent hospital-acquired infections.

Luke Mawst (Professor of Electrical and Computer Engineering) and Dan Botez (Professor of Electrical and Computer Engineering) will work with **Intrabrand, LLC** to develop quantum cascade laser (QCL) transmitter prototypes to deliver fast, powerful, and secure wireless data transmission for use in free space optical (FSO) communication links. The products developed would address unmet needs in both the defense and commercial sectors.

Eric G. Schmuck (Research Assistant Professor and Director of Research, Center for Biomedical Swine Research and Innovation) with **Cellular Logistics** will evaluate a biomaterial's potential to reduce post-heart attack damage and restore cardiac function in a swine model. Data from this UW–Madison and Cellular Logistics collaboration is crucial for supporting FDA filings for a first human clinical trial.

Bu Wang (Associate Professor of Civil and Environmental Engineering) and **Robert Anex (Professor of Biological Systems Engineering)** utilize an ultra-efficient carbon removal technology in their startup, **Earth Repair**, now rebranded as **Alithic Carbon Solutions, Inc.** They will work to advance the commercialization of this technology by developing new feedstock, such as mining wastes and natural minerals, thereby enhancing its carbon removal potential.

Link to press release: <https://innovate.wisc.edu/partnership-accelerates-transition-of-uw-madison-technologies-from-lab-to-market>

###

About Discovery to Product (D2P)

Discovery to Product (D2P), the cross-campus innovation and entrepreneurship office within the Office of the Vice Chancellor for Research (OVCR), provides entrepreneurial training programs, direct mentoring, and grants to campus innovators. D2P annually serves 330 UW faculty, staff and students, provides over \$1.4 million in funding, and has helped launch or grow more than 140 UW startups. For more information, visit d2p.wisc.edu and innovate.wisc.edu.