

Innovation: Delaware's New Introduction

»» Innovation is more than just creating a new product, program or device. It's a mindset that challenges conventional thinking. It's an environment that celebrates fresh perspectives and transformative thinking. True innovation doesn't occur in a vacuum, but by taking what already exists and making a substantive, potentially disruptive change to maximize outcomes.

That's a pretty good way of describing what's going on right now at the University of Delaware Science Technology and Advanced Research Campus. From the game-changing research undertaken by UD faculty to the businesses that are discovering the many benefits of being located here, the STAR Campus is driving sustainable economic change in Delaware.

For more than 200 years, Delaware's identity was dependent on the companies who called the state its home. Changing financial dynamics, including the merger of DuPont with Dow Chemical and the closure of two car manufacturing plants, have prompted the First State to seek a new economic identity.

STAR is a leading force in the development of that identity. In just four years, the STAR Campus has become a hub for innovation. Built upon the site of the former Chrysler plant, STAR has created an ecosystem that enhances collaboration, provides space to ideate



and prototype while feeding discovery and serving the community.

When you walk into the STAR Health Sciences Complex, it's hard to believe this open, welcoming space is the former Chrysler administration building. As you enter, you see the Translation Hallway, with research labs on the right side of the building and patient clinics to the left.

But these aren't parallel spaces that will never intersect. Our research directly feeds into clinical care in the areas of chronic disease, mobility, rehabilitation and more. A great example can be found in the Move to Learn Lab, where graduate students studying biomechanics work with fashion students to create wearable technologies

for children and adults with mobility impairments. In the past year, the lab has four patents pending.

By bridging and connecting research and clinical care, the College of Health Sciences at the University of Delaware was able to help more than 5,000 patients last year across 30,000 visits. These visits for primary care, physical therapy, speech language and hearing, and prevention and wellness services are key to keeping our Delaware community healthy and vibrant.

STAR's redevelopment of a manufacturing property into a top-flight academic health center makes it a natural space for collaboration and collision with industry partners.

Independence Prosthetics-Orthotics, which offers custom-developed prosthetics and orthotics as well as ready-to-wear products, opened its fifth location at the University of Delaware STAR Campus.

With embedded treadmills for research and testing, STAR has been the ideal location for IPO to innovate. The experience has been so impactful owner John Horne has invested his own money into prosthetics and orthotics research at UD so his company and the university can continue to explore and innovate together.

The South End of the STAR Health Sciences Complex also includes the mix of wet lab incubator companies through the Delaware Technology Park. With companies that focus on cancer therapeutics, agriculture, composite materials and more, DTP offers growth opportunities for the greater Newark area and state of Delaware.

While business and academic endeavors stay busy inside the Health Sciences Complex, it's the flurry of construction on the rest of the STAR Campus that has recently attracted the most attention.

When finished, the Tower at STAR, the Chemours Research and Development Headquarters and the Biopharmaceutical Innovation Building, along with the Newark Regional Transportation Center, will provide the proper introduction to the region and country.

As healthcare delivery changes, the College of Health Sciences continues to offer the latest technology and advancements so our students are prepared to be leaders in the field upon graduation. The Tower at STAR, slated for completion in September, will showcase the science of health, backed by education and research.

We expect the Tower at STAR to ignite the "butterfly effect," based on the idea that small changes can have a dramatic impact on a larger system – in this case, the health of Delaware and beyond. The building itself has been designed to allow for interaction on all floors through connecting "neighborhoods" designed with stairways and easy elevator access. A 300-person auditorium will be available for events, meetings and lectures, along with a demonstration kitchen for nutrition and dietetic students.

Near the tower, construction is underway for the Biopharmaceutical Innovation building, which will make the state of Delaware the hub for efforts to mass produce cutting-edge biopharmaceuticals.

Two stories of this six-story building will serve as headquarters for the National Institute for Innovation in Manufacturing Biopharmaceuticals. The NIIMBL project partners more than 150 universities, private companies and nonprofit organizations from around the country. Directed by Kelvin Lee, NIIMBL's focus is to bring safe drugs to market faster while also developing workforce training.

Scientists from around the country will have the opportunity to collaborate in this shared laboratory space. The other four floors will be dedicated to UD-led science and technology programs.

Given the activity at STAR, it's no surprise Chemours decided to build its Research and Development Headquarters here. Its 312,000-square-foot building is expected to be completed in 2020 and will focus on new process, titanium and fluoropolymer products and application developments to better meet customer and market needs.

With a \$150 million investment

and hundreds of new jobs expected, Chemours is making STAR its place for discovery.

But it's not just building new spaces. Transportation options also are critical for companies that would like to find their next location as well as people deciding which community to make their home.

Bringing the area together – and beyond – is the soon-to-be-finished Newark Regional Transportation Center. Located between Washington, D.C., and New York City, the transportation center will give Delaware and STAR Campus even greater access to markets and partnerships. This center will be an economic development driver for the entire state of Delaware.

As you can see, Delaware is being revitalized at the University of Delaware STAR Campus. I encourage you to visit us and walk the halls of the STAR Health Sciences Complex. Come for the grand opening of the Tower at STAR and see all of these projects in motion.

STAR brings the critical piece of innovation together. It bridges gaps between education, research and industry. Discovery breathes invention through customer and patient access. Problem solving becomes interdisciplinary engagement for the real world.

Come find Delaware's new economy at the STAR Campus.



Michael F. Smith
Director of Strategic Initiatives
College of Health Sciences
University of Delaware