

2023

# Innovation Impact Report

# **TABLE OF CONTENTS**

"The Innovation Space continues to inspire science-based startups and support entrepreneurship while showing tremendous success."

U.S. Senator Tom Carper

- 3 Letter From Our CEO
- 4 About The Innovation Space
- 10 Our Impact
- 12 Accelerating Innovation
- 16 Cultivating an Innovation Ecosystem
- 20 Driving Economic Growth
- 28 Our Companies

# **Our Founding Partners**







# **LETTER FROM OUR CEO**

Innovation does not happen in a vacuum. Collaboration and strategic partnerships accelerate innovation, with different skills, talents, and resources uniting in search of one goal: making a difference and changing the world for the better.

DuPont, the University of Delaware, and the State of Delaware recognized this fact seven years ago when they partnered together to launch The Innovation Space. Since we first opened our doors, we have leveraged collaboration and expertise across many stakeholders and market sectors to fuel early-stage science entrepreneurs with critical support. Collaboration made The Innovation Space a reality, and we are proud to show you the impact that we have made so far in our growth journey, and we are so pleased to be able to share our 2023 impact report with you.

This impact report is a first from The Innovation Space, and 2023 was an especially impactful year! It was a year that saw our portfolio of companies eclipse \$1 billion in funds raised, when Prelude Therapeutics and Versogen transitioned from work at The Innovation Space and opened their new and expanded facilities and headquarters in Delaware, and when Synnovation Therapeutics had Greater Philadelphia's largest venture capital deal of the fourth quarter of 2023, which was \$102 million. Last year was one of achieving many milestones at The Innovation Space, many of which you'll learn more about in the pages ahead.

To all our staff, partners, entrepreneurs, companies, mentors, and anyone else who has been a friend or collaborator to The Innovation Space, we want to thank you for helping to make all of this possible. Your expertise, dedication, and passion enable us to mentor, guide, and support life-changing innovations.

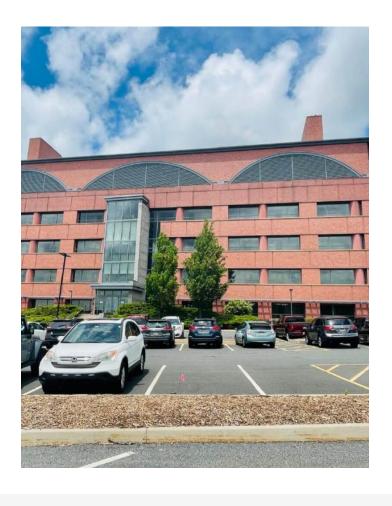


# **ABOUT THE INNOVATION SPACE**

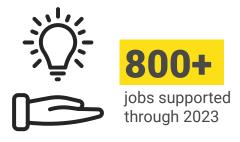
"The Innovation Space has been essential to our success. The team's guidance, support, and resources have enabled us to achieve critical business milestones."

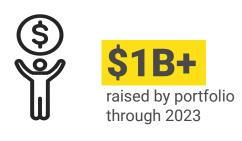
Dr. Brendan G. DeLacy Ballydel Technologies Inc., Founder and President

The Innovation Space is a not-for-profit ecosystem that works to transform early-stage science and technology startups into industry-leading companies. Based at the DuPont Experimental Station in Wilmington, Delaware, we are an outgrowth of the station's rich legacy of using science and technology to create essential innovations that enrich the world.

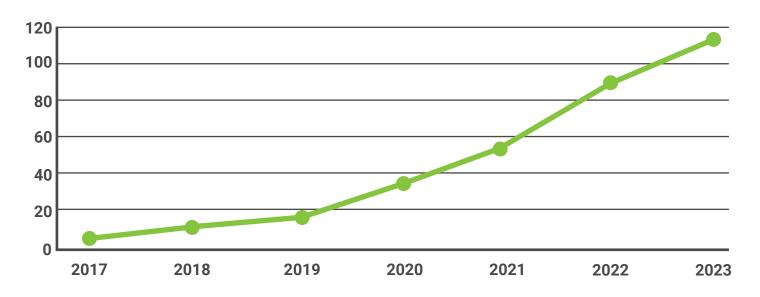








#### **Portfolio Growth from 2017 to 2023**



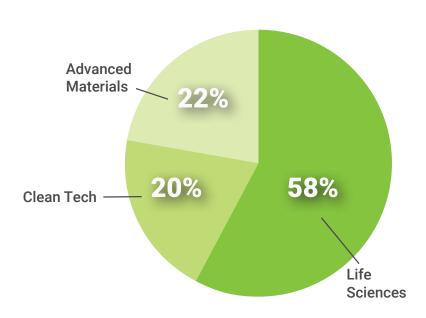
### **Our Mission**

To accelerate the formation and growth of science-based startups by cultivating a world-leading innovation hub that offers cutting-edge facilities and equipment, essential funding, a collaborative community, and comprehensive support.

### **Our Focus Area**

The Innovation Space's core focus areas are integral in shaping solutions to some of the world's most pressing and complex problems:

### **Companies by Focus Area**



#### Life Sciences - Pioneering Advancements in Health and Medicine

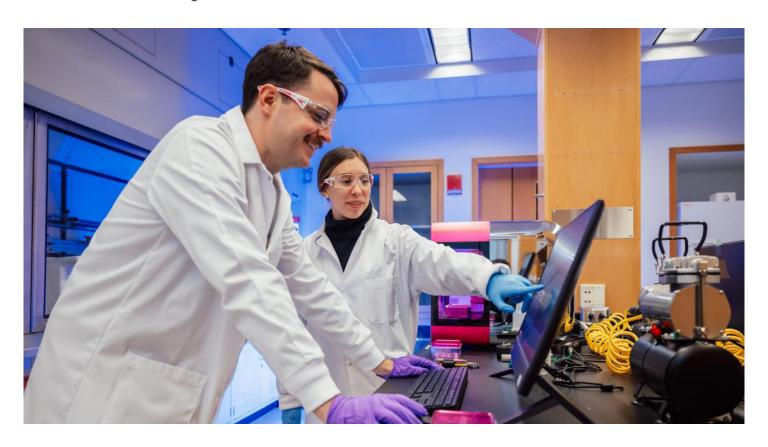
Life science startups supported by The Innovation Space are advancing significant medical break-throughs, from targeting cancer (ex. Prelude, Synnovation, NKILT) to combating rare diseases (ex. Ren Bioscience, Prizm Therapeutics). They're pioneering in areas such as gene therapy (ex. Neuronity, OncoXome) and advanced drug delivery systems (ex. Extrave, VeraMorph) significantly impacting fields like immunotherapy (ex. Cellergy) and the treatment of chronic diseases (ex. Edulis).

#### Clean Technologies - Driving Sustainable Solutions for a Greener Future

Our clean tech companies are developing solutions to some of the biggest problems facing our planet today, including making scalable green energy a reality (ex. Versogen, Elyte Energy), carbon capture (ex. Carbon Reform, Lectrolyst), developing sustainable chemical and raw material manufacturing processes (ex. Lakril, Lignolix, Sironix), and improving the way we grow our food (ex. Napigen, MicroMGX).

# Advanced Materials – Developing Innovative Materials to Revolutionize Industries and Improve Everyday Life

The Innovation Space's advanced materials startups are at the cutting edge of modern industry, developing innovative solutions to enhance a variety of applications. They are creating breakthroughs in areas such as high-performance materials for electronics and aerospace (ex. Sindri Materials, Ballydel), developing advanced materials and processes for improved durability and efficiency (ex. Zero Valent NanoMetals, SAS Nanotechnologies), and pioneering new materials for medical devices and biotechnology applications (ex. Inventia, Novaurum, HARTLON). These companies are not only pushing the boundaries of material science but also contributing to the evolution of industries and technologies critical for future advancements.



### **Diversity, Equity, and Inclusion**

Diversity, equity, and inclusion are at the heart of our work. We strive for a diverse ecosystem where everyone, regardless of background, can thrive and innovate. Our focus on diversity enriches our operations and culture, ensuring equal access and fostering collaboration and respect.

We believe diversity drives creativity, equity opens doors to equal opportunities, and inclusion nurtures collaboration. For us, diversity is more than a moral choice; it's a strategic advantage, driving scientific breakthroughs and a more equitable future.



35%

of companies have one or more female founders\*



47%

of companies have one or more founders of color\*\*



<sup>\*\*</sup> Based on self-reported information from 99 portfolio companies

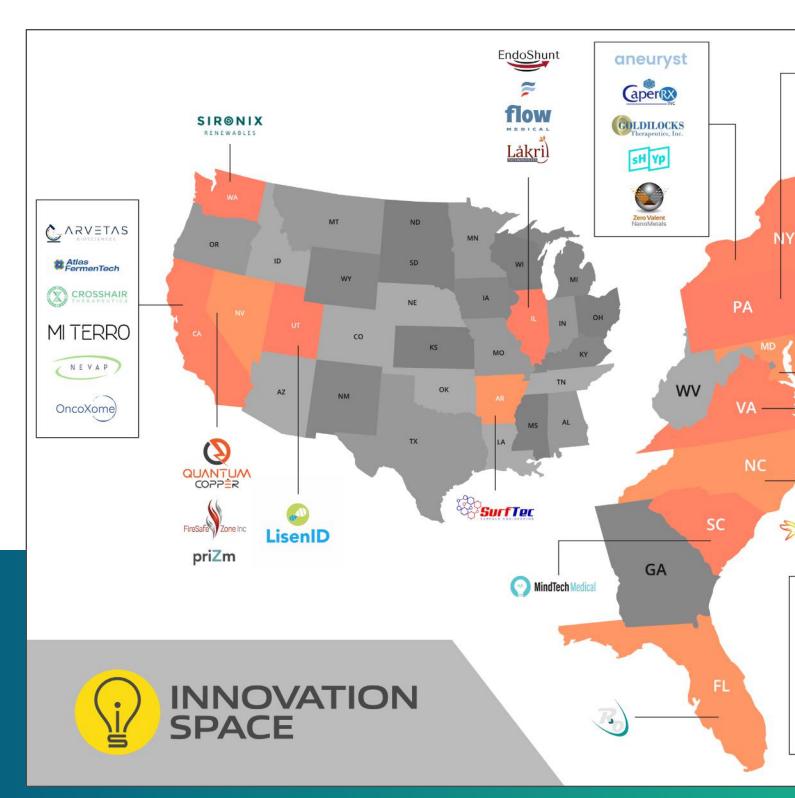




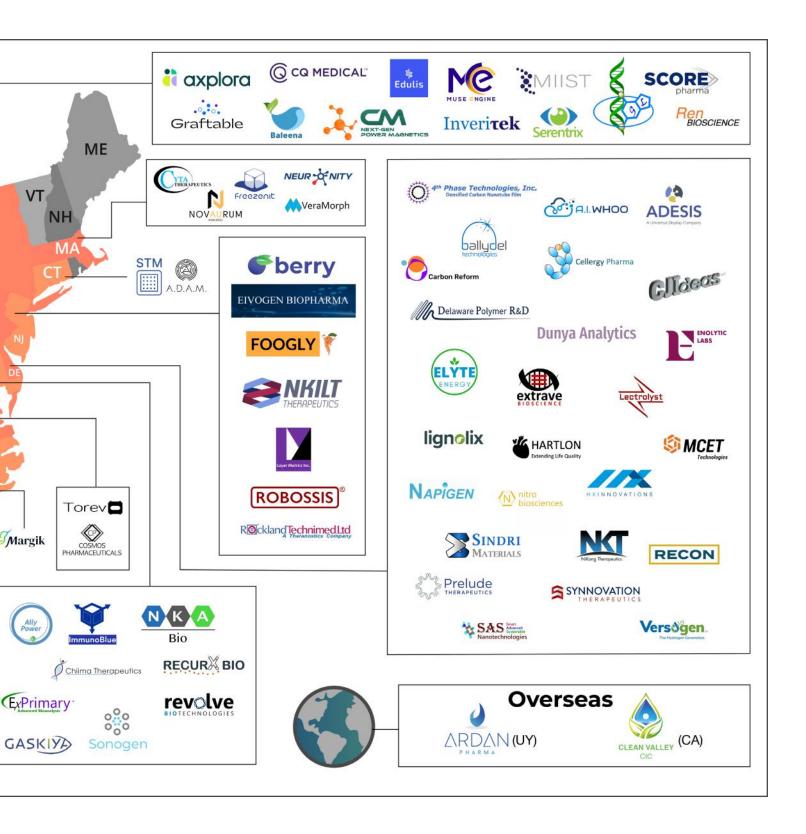


### **Our Geography**

Innovation is everywhere; so are we. The Innovation Space portfolio inclu 20 companies elsewhere across the U.S. and the globe.



ides more than 80 companies based in the mid-Atlantic, and more than



# **OUR IMPACT**

"At the University of Delaware, research, innovation, and entrepreneurship have always been part of our DNA. We are proud that the partnership we founded with DuPont and the State to launch the Innovation Space has been so successful in transforming discoveries into innovative companies, and ultimately the economic development of our entire state and region."

Dennis Assanis University of Delaware, President Chair of the Board of Directors, The Innovation Space

2023: A Year of Impact

100+

jobs created by our portfolio

20+

new companies added to our portfolio

300+

jobs supported

50+

companies supported through lab space and/or programs

\$240N raised by

our portfoli



Innovation is critical to creating jobs, opportunity, and prosperity for our state. In 2017, we partnered with DuPont and the University of Delaware to create the Innovation Space and offer state-of-the-art laboratories, premium lab equipment, and quality office space.

### The Innovation Space @DE\_Innovates · Sep 27, 2023

\$1. Billion. Raised. Today, we celebrate our portfolio companies hitting a major milestone of over \$1 billion raised in funding. We're proud to work with each & every one of these teams & know the future holds even larger accomplishments together! innovationspace.org/blog/innovatio...

800+ jobs and 100+ companies supported. More than \$1 billion raised. The Innovation Space ecosystem has worked tirelessly over the last seven years to make this impact a reality. **And we're just getting started.** 

But the true impact of what we do at The Innovation Space goes beyond the numbers presented here. It's seeing companies like Prelude Therapeutics and Versogen move into their own dedicated headquarters. It's the partnerships that Inventia Life Sciences, Lectrolyst, and others

have forged to accelerate progress. And it's the success that Synnovation Therapeutics and others have achieved with significant fundraising and financial backing from external investors.

As we look over the last year and plan for the future, our vision remains clear: enabling impactful change through innovation and entrepreneurship. We're not just helping startups grow and prosper; we're helping to advance science that has the power to change the world.

# **ACCELERATING INNOVATION**

Accelerating startups to commercialization is not a task: it's a journey. And the journey only happens when companies have access to critical support elements, from lab space and mentorship to capital. At The Innovation Space, we're proud to provide our companies with the resources and support they need to advance progress and grow.

At The Innovation Space, we have more than two football fields worth of labs common space from which companies like Prelude Therapeutics and Versogen grew, and where current residents like Synnovation Therapeutics and others are making their impact known. We augment our physical offerings with programming designed to support early-stage science startups in building their businesses so that they can accelerate the commercialization of innovations that have the potential to change the world.



### **Our Lab Space & Equipment**

130,000 square feet of lab space

90 lab spaces

**\$1M+** invested in capital improvements

**63,000+** hours logged on leveraged equipment

**3,000+** hours of personalized support delivered to residents

## **Our Programs**





Science Inc.™ is a dynamic virtual accelerator offering a tailored curriculum, expert mentorship, and strategic networking to propel startups in life sciences, clean tech, and advanced materials forward. With the guidance of Entrepreneurs-in-Residence startups develop essential strategies for company growth, supported by business models, financial projections, and market assessments, as well as access to a vibrant community of founders, mentors, and industry leaders at The Innovation Space.

#### Science Inc. Impact: 2020-23

60+ startups

**100+** hours of instruction per cohort

200+ weekly workshop hours

750+ one-on-one coaching hours

13,000+ connections enabled



#### 2023 Successes

Advanced Materials: Ballydel Technologies Inc., a Science Inc. and Spark Factory alum headquartered at The Innovation Space, is developing novel materials and manufacturing processes for industries including aerospace and life sciences. In 2023, the company received a \$1.25 million Phase II Small Business Innovation Research grant from the U.S. Department of Defense to develop scalable and safe processes to manufacture MXenes for aerospace applications.







Spark Factory™ is a virtual pitch event that connects founders to expert business and technical mentors to help advance their businesses. Leading up to the event, founders receive support from The Innovation Space team to refine their pitch and develop key questions to discuss live with mentors during the event. After the Spark Factory pitch, founders are directly connected with interested mentors for one-on-one follow-on guidance.

#### **Spark Factory Impact: 2020-23**

40+ participants

150+ hours of pitch coaching

550+ mentoring hours donated

**750+** mentor connections

#### **2023 Successes**

Clean Tech: Innovation Space resident and University of Delaware spinout, Lectrolyst, uses electricity to convert carbon dioxide emissions into essential chemicals. In 2023, the Science Inc. and Spark Factory alum joined a consortium funded by the Bill & Melinda Gates Foundation and the Novo Nordisk Foundation to use carbon dioxide to produce proteins for food. Lectrolyst also expanded its team and lab space within The Innovation Space to further develop and scale its carbon dioxide hydrolyzer technology.







#### 2023 Successes

**Life Sciences:** NiKang Therapeutics, a clinical-stage biotech company headquartered at The Innovation Space, leverages The Innovation Space's lab space and equipment to develop innovative small molecule drugs for difficult-to-drug oncology targets. In 2023, the company partnered with Roche on a liver cancer drug clinical study, the third of its kind for Roche's NKT2152 small molecule drug.



Through The First Fund™, startups can be considered for up to \$200,000 in cash, lab space, and support services via convertible note. Funding is released in six-month tranches based on successful progression of business milestones.

First Fund Impact: 2020-23

200+ applications2% selection rate\$400,000 invested

### **CULTIVATING AN INNOVATION ECOSYSTEM**

"The Innovation Space will continue to lead the way for entrepreneurs and changemakers for years to come."

Delaware Governor John Carney

### **Mentor Community**



### **Events and Attendees**



20+

events in 2023 held at The Innovation Space 10

lunch and learns in 2023 on subjects including fundraising, grant strategy, and business strategy 900+

attendees across Innovation Space-hosted events

### **NASA Climate Tech Startup Studio Showcase**

In October 2023, The Innovation Space partnered with FedTech to host the NASA Climate Tech Startup Studio showcase. The showcase featured pitches from a cohort of entrepreneurs who applied existing NASA technologies toward new commercial climate-focused solutions. The startup studio drew on the region's strong technical and business expertise, while benefitting the ecosystem through increased awareness and additional collaboration.



### Science Inc. Day

Two Science Inc. Day events in 2023 saw us bring our spring and fall cohorts to The Innovation Space for days filled with collaboration, mentorship, and networking. Cohort members toured our space and connected with our community, learning what makes Delaware a vibrant place for science-focused entrepreneurs and startup companies.

### **Partnering for Impact**

Recognizing the need for a strong multi-dimensional, resource-rich entrepreneurial innovation ecosystem in Delaware and the Greater Philadelphia region, our founding partners came together to launch The Innovation Space in 2017. With their guidance, expertise, and resources, we work toward our vision of enhancing quality of life in our community and worldwide by cultivating a global hub enabling high potential startups that commercialize breakthrough scientific innovations.

### **Our Founding Partners**







#### **Other Partners**



The Innovation Space has partnered with Silicon Catalyst, the world's only incubator and accelerator focused on semiconductor solutions, to co-incubate early-stage science-based enterprises focused on advanced materials and other enabling technologies critical for the semiconductor industry. Through this collaboration, startups gain access to the best-in-class science labs, mentorship, and customized programming available from The Innovation Space alongside Silicon Catalyst's start-

up development expertise and its comprehensive ecosystem of strategic partners, advisors, and in-kind partners, providing a unique opportunity to drive business growth.



We're proud to sponsor and serve on the planning committee for Startup302, Delaware's premier pitch competition for technology-enabled startups led by underrepresented founders. This annual event offers startups from across the U.S. a chance to compete for non-dilutive funding and an access point to mentorship and invaluable industry connections, helping to level the playing field in the tech startup ecosystem.



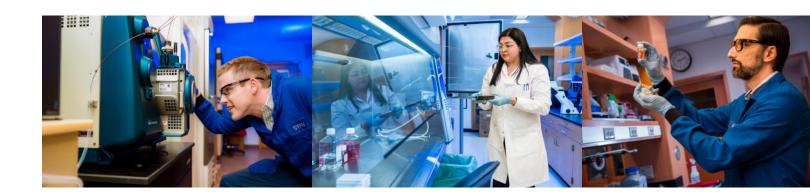
The Innovation Space is a "Greater Impact Partner" of The Fourth Effect, a market network on a mission to close the gender power and wage gaps by diversifying boardrooms and cap tables. Through the Greater Impact Partnership, startups in The Innovation Space ecosystem receive an annual membership to the The Fourth Effect community and Al-powered matching

platform, which provides access to The Fourth Effect's network of well-qualified and diverse board candidates, investors, mentors, and job candidates.



The Innovation Space joined the federal Advanced Research Projects
Agency for Health (ARPA-H) Investor Catalyst Hub as a Spoke Member to
lend expertise in advancing, funding, and supporting innovative new
healthcare solutions that can make a difference in the lives of millions of
Americans. The Investor Catalyst Hub fosters collaboration between public,

private, federal, and academic institutions to speed the development and delivery of healthcare solutions nationwide, focusing on "advancing ARPA-H's mission of activating and accelerating revolutionary advancements in science and medicine to improve health outcomes for all Americans."



# DRIVING ECONOMIC GROWTH

"The link between market insights and technological advancements is crucial for sustainable innovation. DuPont's commercialization expertise combined with the entrepreneurial ecosystem of The Innovation Space offers dual benefits: scientific discoveries enhancing the human experience combined with economic development and private sector returns, thereby sustaining the innovation economy."

Alexa Dembek, PhD DuPont, Chief Technology and Sustainability Officer The Innovation Space, Director



#### **Employment**

800+ jobs supported to date

**700+** jobs supported in the mid-Atlantic

500+ job supported in Delaware

**450+** jobs supported onsite at The Innovation Space

**140+** jobs added by portfolio companies over the last 12 months

**16+** full-time and part-time team members on staff

#### **Capital Impact**

**\$1B+** raised by companies after joining our portfolio

**\$240M+** in funds raised in 2023

#### **Greater Philly/Delaware Economic Impact**

\$1B+ raised in Delaware

\$55M+ raised in Philly





### **DRIVING ECONOMIC GROWTH:**

### PRELUDE THERAPEUTICS

"We continue to gain value from [The Innovation Space's] entrepreneur-first business focus and flexible engagement strategies which have provided us with the framework to expand our company with them from five employees in 2017 to over 100 employees today."

Kris Vaddi, PhD
Prelude Therapeutics, Founder & CEO
Source: Technical.ly Media



#### **Prelude's Novel Solution**

Prelude Therapeutics is addressing the critical need for new cancer treatments, focusing on patients with underserved cancers that have a SMARCA4 mutation for which there are currently

no effective therapies. Prelude discovers and develops small molecule therapies to precisely target the key drivers of cancer cell growth.



#### Prelude's Impact

Prelude's therapies have the potential to improve outcomes for individuals with the most challenging to treat cancers. Phase 1 clinical trials are underway with PRT3789, a therapy targeting SMARCA4 mutant patients, and PRT2527, a CDK9 inhibitor for hematological conditions.

The impact of Prelude's work extends to the regional economy. The company has grown from less than ten employees in 2017 to over 120 employees as of December 2023, and has brought over \$619M in investment into the Delaware and Greater Philadelphia innovation ecosystem.

#### **Recent Milestones**

In 2023, Prelude reached two significant milestones:

- A \$25 million private placement, which will allow the company to advance development of precision therapies as well as to help cover the company's operating fund into 2026.
- A new 100,000 square foot headquarters facility at the Chestnut Run Innovation and Science Park (CRISP), which will allow for the space needed to host expanded labs that support ongoing research and discovery and support employees.

#### **Our Role**

The Innovation Space is proud to have contributed to the growth of Prelude from a small startup with a team of five, to one of the greatest success stories of the Delaware ecosystem. The Innovation Space facilities at the Experimental Station provided leveraged access to state-of-the-art lab space, institutional resources, and a vast network of expertise bringing companies to scale.

Prelude founder and CEO Dr. Kris Vaddi credits the resources and support provided by The Innovation Space as a contributing factor to the company's success.

As he told the Delaware Business Times in 2022, "The ecosystem that we are fortunate to be a part of, which is The Innovation Space and the DuPont Experimental Station, is truly a big part of what we've been able to do so far."



### **DRIVING ECONOMIC GROWTH:**

#### **VERSOGEN**

"Innovation Space provides a warm family environment, with analytical equipment at minimum or no cost. We had equipped and safe lab space that enabled Versogen as a young company to focus on our technology without the need to worry about infrastructure."

Sharon Perl, PhD, MBA, Versogen, Director of Membrane Production



#### Versogen's Novel Solution

Green hydrogen has the potential to accelerate our transition to a clean-energy economy, but conventional production methods come with a high carbon footprint. Innovation Space portfolio

company Versogen is changing that equation. Spun out of the University of Delaware by Professor Yushan Yan (pictured below), Versogen's technology aims to produce hydrogen without releasing carbon dioxide, addressing the need for more sustainable and environmentally friendly energy sources.



#### Versogen's Impact

Versogen's specially developed membranes are used in electrolyzers to split water into hydrogen and oxygen, creating zero-emission green hydrogen with the potential to reduce global carbon emissions significantly.

The technology also finds applications in carbon capture, seawater electrolysis, fuel cells, and lithium extraction, a variety that has yielded the company over 170 customers worldwide as of July 2023.

Within its home state of Delaware, Versogen has been scaling up production and in fall 2023 completed a \$4.8M expansion project. Now headquartered in a 10,000 square foot facility at the FMC Corporation Stine Campus, Versogen's 30+ employees work on the next phase of this innovative technology.

#### **Recent Milestones**

In 2023, Versogen reached a membrane production capacity of 1 gigawatt per year, demonstrating a growing ability to meet the needs of its 170+ customers worldwide and of the clean energy economy.

In addition, the company became an anchoring partner in the Mid-Atlantic Clean Hydrogen Hub (MACH2™), which was selected as one of seven winners of the DOE's Regional Clean Hydrogen Hubs Program in October 2023, with the potential to receive up to \$750 million in funding to support the development of a network of hydrogen producers, consumers, and infrastructure in Delaware, Pennsylvania, and New Jersey.

#### **Our Role**

In 2019, Versogen (then W7Energy) was the first recipient of The Innovation Space's Fast Pass program for University of Delaware startups, which provided a grant of lab space and support to move the startup out of the University and into their own lab.

While at The Innovation Space, Versogen scaled up with the support of our core team and resources, raising over \$14.5 million and expanding rapidly.



# DRIVING ECONOMIC GROWTH: SYNNOVATION THERAPEUTICS

"The Innovation Space has been an amazing partner in helping us to accelerate our drug discovery and nurture our growth."

Dr. Wenqing Yao Synnovation Therapeutics, Founder and CEO



#### Synnovation's Novel Solution

Synnovation focuses on creating small molecule therapies that target well-validated disease pathways in cancer. Their approach emphasizes increased potency, selectivity, and

optimized pharmacological properties, aiming to offer better treatment options than current standards of care. The mission of Synnovation is a personal one for co-founder Wenqing Yao, PhD, who is a cancer survivor of almost 10 years. Dr. Yao also lost both his parents, cousins and a close colleague to cancer. He and the rest of the Synnovation team hope to make medicines less toxic for cancer patients.



#### Synnovation's Impact

Synnovation's approach to developing treatments has the potential to overcome limitations in current cancer treatments and significantly improve patient outcomes, reshaping standards of care in oncology. They are currently working on three cancer drugs in parallel, with the potential to have all three in the clinic by 2025.

Synnovation is making an indelible mark on the Delaware and Greater Philadelphia biotech startup ecosystem. In 2023, they

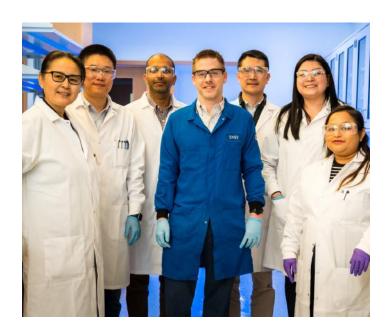
raised the largest Q4 financing round in greater Philadelphia with \$102 million in Series A funding led by Third Rock Ventures and with participation from Nextech, Lilly Asia Ventures, and others.

#### **Recent Milestones**

Synnovation's \$102M Series A raise paved the way for the company to initiate a Phase I clinical trial for SNV1521 and continue developing SNV4818 and other candidates in their pipeline.

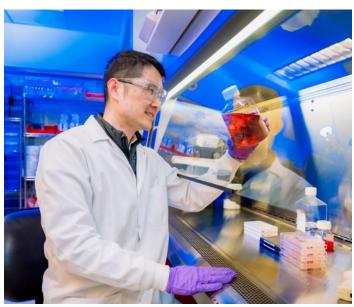
#### **Our Role**

Synnovation is headquartered at The Innovation Space, where we provide infrastructure, resources, and a collaborative environment. From lab space to personalized support from our core team, The Innovation Space has been there from the start.









# **OUR COMPANIES**

### **Advanced Materials**

4th Phase Water Technologies

Adesis

**Apollodyne** 

Ballydel Technologies

CJ Ideas

**CM Materials** 

Delaware Polymer

Gaskiya

Elven

Layer Metrics

Lignolix

**MCET** 

Muse Engine

Resonant Orbital

SAS Nanotechnologies

Sindri Materials

SurfTec

Unsmudgeable

Zero Valent Nanometals

### **Clean Technologies**

**Ally Power** 

**Amalgent Therapeutics** 

Baleena

Carbon Reform

Clean Valley CIC

**Dunya Analytics** 

**Eco Carbon** 

Elyte Energy

**Ephemeral Devices** 

**Green Spear** 

**Lakril Technology Corporation** 

Lectrolyst

Margik

Mi Terro

MicroMGX

sHYp

Silisium Tech

Sironix Renewables

**Torey Motors** 

Versogen

Watt Miles

### **Life Sciences**

Acro Biosystems

A.D.A.M Aneuryst

Ardan Pharma

**Arvetas Biosciences** 

Atlas FermenTech

Axplora

BioXplor

CaperRX Cellergy

Chiima Therapeutics

Cosmos Pharmaceuticals

**Crosshair Therapeutics** 

CQ Medical

Cyta Therapeutics

**Edulis Therapeutics** 

Eivogen BioPharma / TavoTek

EndoShunt

**ExPrimary** 

**Extrave BioScience** 

Flow Medical

FreezeNit

GeneLancet Biosciences

Graftable

**HARTLON** 

**HX Innovations** 

**ImmunoBlue** 

**ImmuNovX** 

Incyte

Inveritek

Inventia

LisenID

Lygos

**MIIST** 

MindTech Medical

Napigen

**Neuronity** 

Nevap

NiKang Therapeutics

Nitro Biosciences

**NKA Bio** 

**NKILT Therapeutics** 

Novaurum Bioscience

NucleoTech Inc.

OncoXome

**Prelude Therapeutics** 

PriZm

RecurX

Ren Bioscience

Revolve Biotechnologies

Robossis

Rockland Technimed Ltd.

Score Pharma

Serentrix

Simmbion

SingleTimeMicroNeedle

Sonogen Medical

Synnovation Therapeutics

Veramorph Materials

# **CONNECT WITH US**

Schedule a Tour to learn about our lab space, equipment, and technical capabilities.

Contact Us to learn more about The Innovation Space, including our programs, portfolio companies, and community.

Subscribe to our Newsletter to stay up to date on news and events from The Innovation Space and our companies.



InnovationSpace.org

200 Powder Mill Rd. BLDG E500 Wilmington, DE 19803 info@innovationspace.org (302) 200-8600