



A Year of Forward Motion

The challenges facing our world today require bold solutions. This year, we scaled our efforts to catalyze the work of individual inventors, institution-wide innovation, and entrepreneurial ecosystems.

\$1.3B

in total follow-on funding raised by early-stage ventures

\$1.4M

funding awarded by VentureWell in 2023

\$559K

in total awarded to Course & Program Grants recipients in 2023

A Message from CEO Phil Weilerstein

We are in a defining moment for our nation and the world. The need for environmentally sustainable innovation and a diverse network of entrepreneurs developing solutions that drive positive change has never been more apparent. Globally, converging crises—including climate change, and access and diversity gaps in STEM fields—have led us as an organization to further invest in transformative solutions that are shaping a more socially, environmentally, and economically sustainable future.



2023 was a year of forward motion for VentureWell. Harnessing momentum from a [blueprint that works](#), we achieved several exciting milestones, forged new partnerships, and expanded our capacity across three key spheres of impact: the individual, the institution, and the ecosystem. Each sphere is a catalyst for the next, an interwoven network that drives impact and serves as the launching point to create a more equitable landscape in innovation and entrepreneurship (I&E).

This is only the beginning, and the stories shared here are just a glimpse into all that we accomplished in 2023. As we continue to expand our influence and explore new ways to collaborate with a growing global ecosystem of partners, our resolve to confront inequality remains unchanged. We have [reaffirmed our efforts](#) to advance racial and social equity, foster inclusive innovation, and actively dismantle systemic barriers to entrepreneurship.

Together, we are forging ahead to support and empower a growing network of inventors addressing the world's most pressing challenges. The path forward is promising, and the stories here remind us of what is possible when we lead with inclusion, collaboration, and innovation at the forefront. I am grateful for your support along the way and look forward to continuing this journey together.

Phil Weilerstein

Phil Weilerstein

President and CEO, VentureWell



Individual Impact: Expanding Access and Opportunity

We are continuously equipping our rapidly growing network of emerging entrepreneurs with more skills, resources, and connections that enable them to overcome systemic barriers.

2,572

early-stage innovators trained by VentureWell

459

total follow-on funding deals made by early-stage innovators

257

verified patents granted to early-stage innovators

How the Qualcomm Innovator Stipend Is Breaking Barriers and Igniting Innovation

Just 13 percent of patent holders in the U.S. are women, [according to the U.S. Patent and Trademark Office](#)—a statistic that brings to life the effects of systemic inequity. But visionary inventor [Haley Noelle](#), an alumna of our E-Team Program and CEO of 3D Organic Polymer Silk (3D-OPS), is doing her part to shift that statistic—and she is transforming the surgical industry in the process.



Noelle is among the 10 recipients of the 2023 [Qualcomm Innovator Stipend](#), an award VentureWell offers in partnership with Qualcomm to relieve financial burdens facing student entrepreneurs as they work to bring their innovations to market. Recipients also receive mentorship opportunities to ensure they are supported every step along the way.

Motivated by a deep commitment to increasing access for underrepresented innovators in the field, VentureWell and Qualcomm have awarded a total of \$93,500 to 29 emerging entrepreneurs who identify as women, Black, Latinx, and/or Indigenous, and/or have veteran status.

For Noelle, the Qualcomm stipend allowed her team to further refine Ariadne 1.0, a device that 3D-prints biologically friendly and mechanically strong artificial tissue that simulates spider silk. Stronger than steel and more elastic than spandex, this adhesive can replace damaged human tissue like tendons, ligaments, muscle fibers, and more. These materials provide a powerful alternative to invasive surgeries, weaving a bright future for patient outcomes and surgeons' work.

Hear Noelle discuss her journey as a woman entrepreneur, her experiences navigating the patent filing process, and how participating in our E-Team Program accelerated the growth of her startup.



[The Lemelson Foundation](#), our longtime active collaborator, and [Qualcomm](#) both provide key funding for VentureWell's E-Team Program and have been critical partners in our work.

Empowering Seed-Stage Startups Through Aspire

For Brandon Martin, [whose story we featured in 2023](#), the opportunity to collaborate directly with angel investors through our [Aspire Medtech](#) program was an instant draw to apply. "Connecting with mentors was the greatest thing for us because, as a first-time entrepreneur, you only know what you know," said Martin. He's working to make contact sports safer for all children as the co-founder of [Reaction Technologies](#). He's developing a small device that wraps around a player's chest, reinforcing the proper "heads up" technique to build situational awareness and minimize head, neck, and spinal cord injuries. He wants kids to be able to play hard without risking severe injury.



Aspire Medtech offered Martin one-to-one support from VentureWell's experienced group of investor-mentors. He joined a cohort of fellow seed-stage startups at the crucial investor engagement stage, where the VentureWell Ventures team trained these founders on the due diligence process, helped them create deal room materials, and provided guidance on developing a viable fundraising plan. "It was not always easy," he explained, "But they pushed us, and everybody there wanted to learn. To this day, we still check in with them all."

In Fall 2023, [we accepted 17 companies](#) to our Aspire Medtech program, pairing participants with a total of 13 investor-mentors who all had direct experience working or investing in the healthcare industry. Over five weeks, our cohort of mentors—including those trained in TechTown Detroit's [Catalyst Angels](#) program, managed in partnership with VentureWell—offered continuous and thoughtful feedback, culminating in a two-day in-person workshop. The Catalyst Angels program aims to educate and elevate women, Black or Latinx investors, founders, executives, and high-net-worth individuals on how to become angel investors in the Great Lakes region.

Listen as Martin talks through the challenges of being a first-time entrepreneur and the value of working directly with mentors during Aspire Medtech, all while making the game he loves safer.



The Aspire Medtech program is made possible with generous funding from [TechTown Detroit](#) and [The Lemelson Foundation](#). We are also supported by [MedHealth](#), a regional collaboration driving health innovation in Southeast Michigan and Southwest Ontario; international law firm [Cooley LLP](#); and [in2being](#), a medical product development and consulting firm located in Ann Arbor, Michigan.

Catalyzing Place-Based Innovation Through the APEC Startup Training and Pitch Competition

Natalie Duncan, CEO of [Bug Mars](#), believes the future of sustainable feed production lies in insect farming. Duncan and her team are developing AI-powered software that enhances efficiency in insect farming and promotes insect-based protein sources as a sustainable food of the future. She was among 16 trailblazing women entrepreneurs who honed their pitches leading up to the [Asia-Pacific Economic Cooperation \(APEC\) Catalyst Startup Training and Pitch Competition](#) in October 2023.



In partnership with the U.S. Department of State's Global Innovation through Science and Technology (GIST) initiative, VentureWell delivered pitch development mentorship with a focus on gender equity to Duncan and other women founders leading the charge to combat the severe effects of climate change in their own communities. The competing teams received \$56,000 in funding to further develop their climate-focused tech.

"This program has been so unique in being able to interface with global leaders. Being an entrepreneur can be lonely, and interfacing with other women can help," said Duncan. Through intensive training for the ever evolving business landscape and networking in a highly energized collaborative setting, VentureWell is helping innovators like Duncan drive future iterations of their business models.

And for Duncan, the collaboration and support have been invaluable—she won [First Place at the APEC Pitch Competition](#). VentureWell is proud to provide tangible support to the next generation of women founders who are growing climate resilience and transforming the future of sustainability.

VentureWell supports the delivery of the U.S. Department of State's [Global Innovation through Science and Technology \(GIST\)](#) initiative, which empowers emerging innovators through networking, skill-building, mentoring, and access to financing to develop startup solutions that address economic and development challenges.



Institutional Impact: Igniting Potential in Higher Education

We are shaping the future of institution-wide collaboration by empowering faculty and staff to engage and inspire the next generation of student entrepreneurs through dynamic and tailored programming.

82%

increase in Course & Program Grants applications in 2023

50%

of Course & Program Grants applicants were from HBCUs/MSIs*

694

people attended VentureWell-led conferences in 2023

Equipping a Record-Breaking Number of Faculty and Staff by Supporting Dynamic Courses and Programs

This year, faculty and staff hailing from colleges and universities across the U.S. submitted a record-breaking number of VentureWell [Course & Program Grants](#) proposals. These grants are empowering the newest class of recipients to develop dynamic initiatives that offer support and inspiration to student innovators addressing real-world challenges.

Many grantees focus their efforts on inclusive innovation, like Bayo Ogunidipe, professor and head of the Engineering department at James Madison University, [whose story we featured in 2023](#). Ogunidipe created a new campus initiative: [Peace Lab Studio](#), a launchpad for students from the U.S. and Kenya, is a studio class that challenges teams to collaborate internationally to solve critical climate challenges for the developing world.

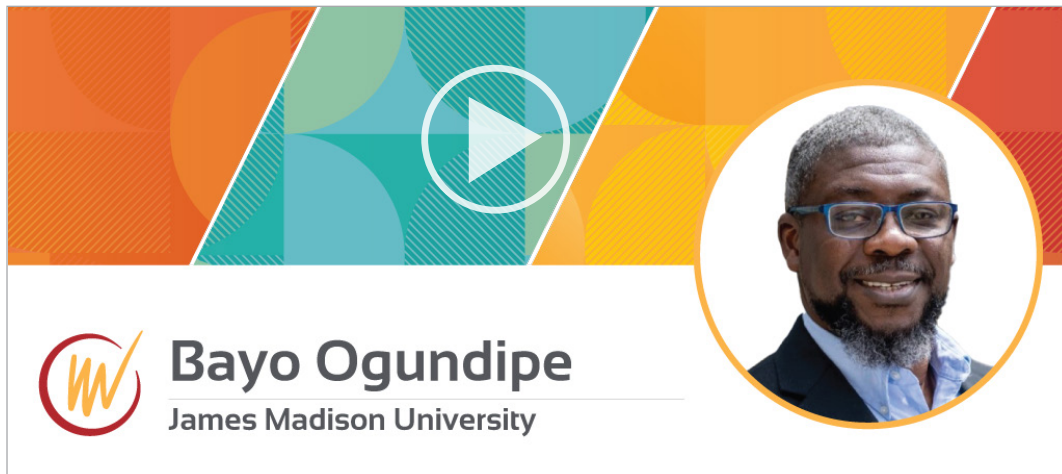


“There are very few sources of support and funding for these kinds of projects... receiving the Course & Program Grant provided validation of the proposed work to all the stakeholders and partners,” said Ogunidipe.

[Peace Lab Studio](#) is among the dynamic courses and programs funded by our higher-education-focused grants, which have served more than 27,000 students across 265 institutions to date.

Ogunidipe discusses how he leveraged our support to engage his students at the intersection of innovation, entrepreneurial thinking, and sustainability.

*Historically Black Colleges and Universities/Minority Serving Institutions



Fostering Connection and Thought Leadership Through In-Person Convenings at OPEN and the Deshpande Symposium

Nearly 300 I&E faculty, administrators, researchers, and practitioners convened for our flagship [OPEN](#) conference in March 2023. OPEN kicked off with three pre-conference workshops that focused on inclusive innovation; tools for fostering belonging in higher education settings; and reimagining STEM I&E by centering diversity, equity, and inclusion. Our theme, “Connecting For Impact,” exemplified the overall spirit of this year’s OPEN conference, where we centered emerging research and leading-edge best practices to [equip attendees with tools](#) to strengthen their I&E ecosystems. We were pleased to award the [2023 Sustainable Practice Impact Award](#) to Dr. Sylvia Robles of the University of Texas Rio Grande Valley, whose Adopt-a-Startup model empowers students and entrepreneurs from underrepresented backgrounds in their pursuit of entrepreneurship.



“One of the things I appreciate most about OPEN is the learning process of how to make your classes more dynamic and relevant,” said Mari Luz Zapata Ramos, professor at the University of Puerto Rico at Mayagüez. “And of course, the chance to network with people from all over the country.”

We also managed the 12th Annual [Deshpande Symposium](#) in June in partnership with the Deshpande Foundation and the [University of Massachusetts Lowell \(UMass Lowell\)](#), welcoming nearly 200 academics, policy planners, and practitioners across the I&E higher education ecosystem at Arizona State University. “Cultivating University Innovation Ecosystems” was the thematic driving force behind engaging sessions focused on fostering inclusive innovation, broadening participation in entrepreneurship ecosystems, and empowering agents for commercialized innovation on-campus.

OPEN attendees weigh in on the value of the conference to their work and the impact it has on their students and institutions.



Training Faculty To Leverage Transformative Approaches To Teaching Innovation and Entrepreneurship

In response to pressing environmental needs, we are joining forces with the University of Hawaii (UH) in its efforts to spur technological solutions for marine conservation. With [less than 3 percent](#) of the ocean protected, this work is vitally important, and we are eager to propel their capacity-building efforts through training in the lean startup methodology. As part of a \$2.4 million project funded by the U.S. Department of Defense’s Office of Naval Research, we are delivering strategies to help engineering faculty embed I&E into their courses, develop new ways to engage their students, and stimulate more robust cross-disciplinary partnerships.



The program itself, known as [Faculty Fellows](#), has identified six engineering faculty from key disciplines at UH to spearhead the future of innovation education in their department and beyond. “We look forward to [building] an active and collaborative ecosystem of innovation educators and academic entrepreneurs throughout the state,” said Vassilis L. Syrmos, vice president for Research and Innovation at the University of Hawai’i.

The Faculty Fellows program is funded by [a \\$2.4 million grant](#) from the Office of Naval Research to develop and advance energy, marine, and other blue economy technologies and opportunities in Hawai’i.



Ecosystems Impact: Advancing Equitable Solutions for Systemic Change

We are supporting resilient and thriving entrepreneurial ecosystems to accelerate revolutionary advancements in science and technology and transform public health as we know it.

7B

COVID-19 tests produced through the RADx® initiative

139

spokes as part of the Investor Catalyst Hub

19

innovator training programs led alongside the National Science Foundation

Mobilizing a Powerful Nationwide Network To Accelerate Commercialization of Biomedical Solutions

Advancing commercialization, affordability, and medtech innovations to improve health outcomes for all Americans is more important than ever. Given our breadth of experience supporting the full cycle of health commercialization activities, VentureWell was selected by the Advanced Research Projects Agency for Health (ARPA-H) to serve as the consortium management firm for the [Investor Catalyst Hub](#), a public-private partnership between ARPA-H and VentureWell in support of the [ARPANET-H](#) nationwide health innovation network.



Based in the Greater Boston area, the Investor Catalyst Hub is convening a dynamic [ecosystem of spokes](#) designed to accelerate the commercialization of life-changing medical and science breakthroughs, bringing these necessary solutions out of the lab and into the hands of the American people. We [welcomed over 100 guests](#) to the [official launch event of the hub](#) in October 2023, with attendees including Maura Healey, governor of Massachusetts; Edward Markey, senator for Massachusetts; Michelle Wu, mayor of Boston; William “Mo” Cowan, chair of the Board of Directors at MassChallenge; and Renee Wegrzyn, director of ARPA-H.

In collaboration with ARPA-H, we are leveraging our extensive network to ensure that performers and other innovators overcome market challenges, develop commercially viable business models, and successfully bring their products to market—revolutionizing the way we imagine healthcare for all Americans.

The [Investor Catalyst Hub](#), part of the [Advanced Research Projects Agency for Health \(ARPA-H\)](#), connects researchers, entrepreneurs, and investors to accelerate the development of innovative healthcare solutions.

Building On Success To Deepen Partnerships and Forge Connections for Accelerated Impact

November 2023 marked another important milestone: We were selected as one of [four \\$500,000 grand prize winners](#) of the U.S. Department of Energy Office of Technology Transitions (OTT)'s American-Made Energy Program for Innovation Clusters (EPIC) Prize Round 2 for the demonstrated success of our [Ascend Energy & Mobility Accelerator](#) program, offered in partnership with [TechTown Detroit](#).



Designed to help entrepreneurs bridge the gap between customer discovery and commercialization, VentureWell's Ascend program is spurring the robust growth of regional energy innovation ecosystems across Michigan. The [inaugural cohort of 10 Michigan-affiliated companies](#) was handpicked through a competitive application process, where each startup demonstrated the positive impact of its innovations. Solutions include the adoption of zero-emission vehicles, addressing challenges in energy storage and charging, and improving safety and/or energy efficiency in transportation.

Increasing resources for mobility- and energy-based entrepreneurs is both timely and critical to the work of positioning Southeast Michigan as a powerful contributor in this space," said Dawn Batts, former director of Growth Capital at TechTown Detroit.

The EPIC Prize will enable us to run more Ascend Energy & Mobility programs in Michigan this coming year and beyond. Critical to TechTown's work as the lead for the Mobility Accelerator Innovation Network, our partnership has allowed us to be part of a thriving regional ecosystem.

Providing Equitable Access To Support Programs Through Our Partner Network

At VentureWell, we believe that achieving excellence in I&E includes cultivating a more diverse and representative pipeline of leaders. Recognition and award-based funding from the U.S. Small Business Administration (SBA) made it possible for us to launch another new initiative this year to do just that.



In September 2023, the SBA announced VentureWell as [a Stage Two winner](#) for the 2023 Growth Accelerator Fund Competition (GAFC), granting us \$150,000 to develop the [Equity Ecosystem Partner Network](#). With the GAFC award, we are expanding pathways to participation across all [VentureWell Accelerator](#) programs, reaching an increasing number of underrepresented innovators and entrepreneurs.

Our founding partners include [Clinton Global Initiative University](#), the [HBCU Founders Initiative](#), [Positive Deviancy](#), [Browning the Green Space](#), and [SEED SPOT](#). "A diversity of perspectives, backgrounds, and approaches is essential for excellence in research and innovation in science and technology," said VentureWell Director of National Venture Programs Tricia Compas-Markman.

We are building out a larger network to cultivate specific regional, sector-based partnerships. This foundation will enable ongoing collaboration with partners to develop and deliver on-the-ground support programs for entrepreneurs and small businesses.

We are grateful for the support of the [U.S. Small Business Administration](#), and we look forward to continuing to create opportunities that provide early-stage innovators with essential support, resources, and funding through this award.

Accelerating Public Health Solutions At Scale

The RADx® (Rapid Acceleration of Diagnostics for COVID-19 Testing) initiative has spurred the development of [seven billion COVID-19 tests](#) since its inception in 2020. We mobilized hundreds of consultants and vendors to eliminate challenges associated with rapid diagnostics development, with 55 tests authorized by the Food and Drug Administration (FDA), including the first over-the-counter product for at-home use—a process that would normally take years, shortened to months.



As the Commercialization Center for the RADx® Tech Innovation Funnel programs funded by the National Institutes of Health (NIH)'s National Institute of Biomedical Imaging and Bioengineering (NIBIB), we leverage our expertise and network in medtech and diagnostics commercialization to move NIH-funded innovations quickly through the commercialization pathway and, in the case of COVID-19 tests, onto shelves for U.S. consumers. We are working directly with companies to negotiate, award, and manage subcontracts for the RADx® Tech initiative, which has been essential in increasing testing capacity in the U.S. as the COVID-19 public health crisis evolves. This underscores our value in providing technical input with rigor and speed, along with efficient and effective contracting mechanisms.

Extending beyond COVID-19, in collaboration with NIBIB and various partners, we have been leveraging the rapid development and deployment of diagnostic tests to bring medical technologies and diagnostic devices to market. These efforts span diverse health sectors, encompassing maternal and fetal health through the [RADx® Tech for Maternal Health and Fetal Monitoring Challenges](#), addressing communicable diseases such as HIV and HCV, and tackling disorders of the nervous system through the [Blueprint Medtech Program](#).

VentureWell serves as the National Institutes of Health (NIH)'s [National Institute of Biomedical Imaging and Bioengineering \(NIBIB\)](#) Innovation Funnel—Commercialization Center. We are proudly working with our partners to solve emerging healthcare challenges through innovative technologies and by nurturing entrepreneurial ecosystems.



Looking Ahead

As we look at the road ahead, we are eager to build on the momentum of 2023 and continue fostering collaboration for an even greater impact in the coming year.

Evolving in Pursuit of Positive Change

Nearly three decades since our founding, we remain unwavering in our mission to build a world in which science and technology early-stage entrepreneurs have the support, training, and access to the networks and resources they need to solve critical global challenges.



In 2023, we were inspired by the enduring determination [and success](#) of our **innovators**, who are bringing groundbreaking solutions to life. We were motivated by the collective commitment of **institutions** that foster invention across their campuses, many of which are facing [historic challenges](#) in creating inclusive opportunities. And we celebrated the thriving **ecosystems** built through strengthening our long-standing partnerships and forging new ones across the nation and globally.

As a learning organization, we are consistently iterating and evolving in pursuit of positive change. We invite you—our vibrant network of passionate leaders, innovators, champions, and changemakers—to join us in the work of propelling innovation into 2024 and beyond.



Thank You To Our Partners

Our work in 2023 has been a collaborative effort, proving the power of partnerships. We are grateful for the support of our funders, who ensure that the momentum—and impact—of our work continues.



Join Us for a Year of Innovation in 2024!

STAY CONNECTED