



WESTERN MICHIGAN UNIVERSITY  
— Homer Stryker M.D. —  
**SCHOOL OF MEDICINE**  
INNOVATION CENTER

**2019-2020 ANNUAL REPORT**

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# WHAT WE DO

The Western Michigan University Homer Stryker M.D. School of Medicine (WMed) Innovation Center is Kalamazoo's technology entrepreneurship hub. With an abundance of wet labs, engineering labs, private offices, shared equipment, and three unique co-working programs, the Innovation Center is the perfect home for any technology company. For those who don't need physical space yet, the numerous training programs, networking opportunities, and workshops are ideal.

Since 2003 our 69,000 square foot building has been a vital component of the Kalamazoo entrepreneurial community, hosting networking events and providing meeting space for various activities. The Innovation Center is also the Kalamazoo SmartZone, a state-designated area where technology-based firms locate in close proximity to all of the community assets that assist in their endeavors. Through the SmartZone, high-tech startups can access numerous programs including the Business Accelerator Fund, the Emerging Technologies Fund, and the Small Company Internship Award.

The Innovation Center is a founding member of the Greater Kalamazoo Business Resource Network and collaborates with other support organizations such as the Small Business Development Center, SCORE, the WMU Starting Gate, the City of Kalamazoo, the Can-Do Kitchen, the Local Initiatives Support Corporation, and more. If it takes a village to raise a child, it takes an entire ecosystem to raise a startup. Here in the pages of our annual report you will learn about what makes the Innovation Center special.

### TOGETHER WE COMMERCIALIZE.

“ ”

“It is an amazing place for us to work for many reasons, we consider ourselves lucky to be here.”

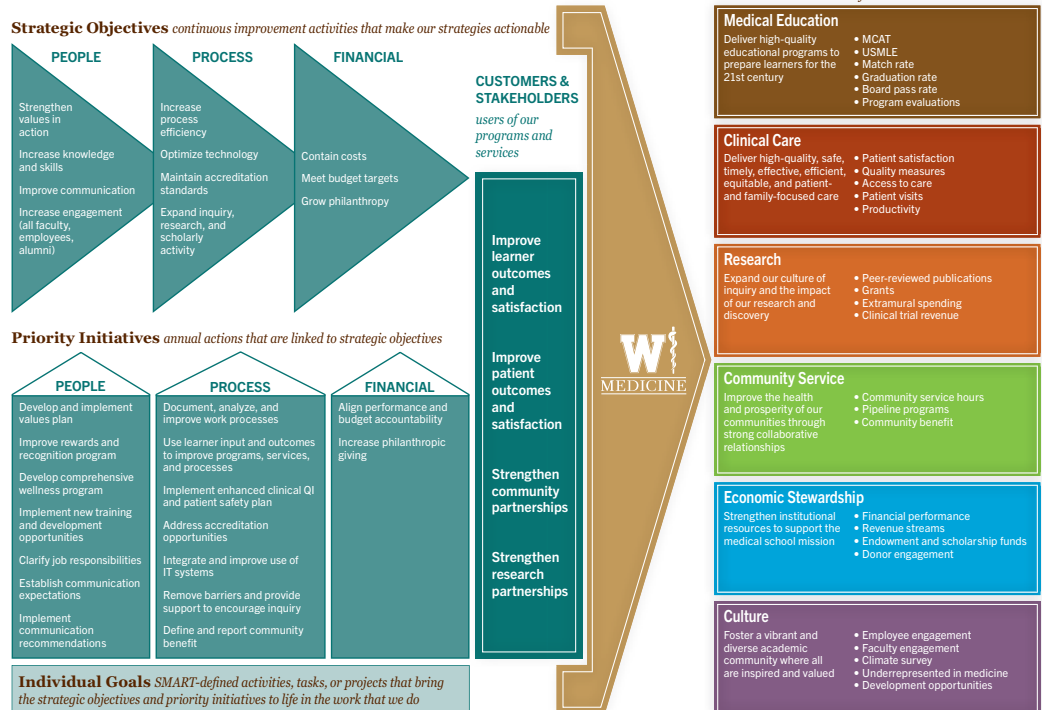


# Our Mission, Vision, and Values

## Our Guiding Principles



## Strategic Plan 2018-22: Operational Excellence





## WMED VALUES IN ACTION

These principles guide  
our actions.

### TOGETHER WE...

- Seek to understand
- Respect one another
- Serve with empathy
- Speak up to inform
- Strive for excellence
- Act with integrity
- Celebrate effort and achievement

# DIRECTOR'S STATEMENT

The coronavirus pandemic of 2020 has truly made the last part of this fiscal year one that will never be forgotten. The fear and uncertainty that plagued the entire nation from March until today eclipsed all of the successes and achievements of the previous months. While the Innovation Center clients have continued to operate, many struggled to find a way forward during the government shut-down and work-from-home orders. Perhaps it is the indomitable spirit of the entrepreneur that allowed these clients to persevere, to hold their families and their companies together in the face of unprecedented disruption. Remarkably, not a single resident client company went out of business.

I salute the fighting spirit of these determined entrepreneurs, and I look forward with hope that the coming year will be much better for us all.



## Our Team



**SANDRA COCHRANE, MBA, Assistant Dean for the Innovation Center.** Sandra coordinates and oversees all activities at the Innovation Center in support of entrepreneurship and commercialization, including technology transfer for the medical school. Her work at WMed focuses on growing the Innovation

Center into a hub for burgeoning life science, technology and engineering companies. A native of Ann Arbor, Sandra and her family have called Van Buren County home for over twenty years. In addition to holding a National Business Incubator Association's Certificate of Incubator Management, Sandra is a graduate of Michigan State University where she earned a bachelor's degree in English Education and a master's degree in Business Administration.



**MADELYN PINDER, Business Services Manager.** Madelyn has been with the Innovation Center since 2004. As Business Services Manager for the Innovation Center, she serves as the first point of contact for clients and visitors. Madelyn manages the day-to-day business activities of the Innovation

Center, receives guests for client companies, and serves as the face of the Innovation Center for everyone who comes to the facility, working to ensure that the Innovation Center is a positive experience for all. Madelyn previously served as Community and Investor Relations Specialist at Southwest Michigan First and participated in the planning and build-out of the Innovation Center. She also gained development experience at Kalamazoo College and as Program Manager for a private foundation. Madelyn completed the National Business Incubator Association's Certificate of Incubator Management in 2010.

# CLIENT SUCCESS AND SATISFACTION



## Vestaron Announced a Series B \$40M Investment and Received EPA Green Challenge Chemistry Award

In July 2019, **VESTARON CORPORATION**, a company dedicated to improving the safety, efficacy and sustainability of crop protection through its development of peptide-based biopesticides, announced its \$40 million Series B Financing, led by Novo Holdings A/S. Novo Holdings joins continuing investors Anterra Capital, Cultivian Sandbox, Open Prairie Ventures, and Pangaea Ventures.

With its proprietary platform for the optimization and production of peptide-based biopesticides, Vestaron is leading the development of a novel class of crop protection products—peptides (small proteins) that have the proven modes of action and thus the same efficacy as traditional synthetics but with the safety and environmental friendliness of biologics. These products provide an essential tool for growers as some existing products face increasing regulatory pressure due to environmental concerns and others decline in their efficacy due to development of resistance.

In addition, in June 2020 Vestaron's bioinsecticide SPEAR® earned recognition from the Environmental Protection Agency via its Green Chemistry Challenge Awards Program. Spear bioinsecticide was recognized in the Focus Area of "The Design of Greener Chemicals" within the extremely competitive Small Business Division. There have been 13 Green Chemistry Award winners in the Agriculture and Agrochemicals > Pesticides industry space since 1996. Of these winners, five were new active ingredients for insect pest management: Diacylhydrazines (1998); Spinosad (1999); Sentricon (2000); Messenger (2001); and Spinetoram (2008). Spear is the first insecticide using a novel active ingredient to be honored in 12 years.



"Great team to manage building and MEDC sponsored programs.  
A great building!"

## Tetra Therapeutics Acquired by Shinogi in a \$500M Deal

In May 2020, Shionogi, a Japanese pharmaceutical firm, agreed to acquire clinical-stage biotechnology company **TETRA THERAPEUTICS** in a deal valued at around \$500M. The deal value of \$500M will be based on the achievement of certain predetermined regulatory and commercial milestones.

The transaction will provide Shionogi with global rights to Tetra's complete portfolio of compounds, including BPN14770, to treat brain disorders associated with cognitive and memory deficits.

Both firms first signed collaboration and investment agreement in 2018, and they have expanded alliance at the starting of this year to develop and commercialize BPN14770 to treat Alzheimer's disease (AD), Fragile X syndrome (FXS) and other indications.

Tetra is currently carrying out a Phase II study in FXS, as well as recently completed a phase II study in AD in the US.

Tetra Therapeutics chairman and CEO Dr Mark Gurney said: "With over a decade of research, development and investment, Tetra has demonstrated the unique ability of allosteric inhibitors of phosphodiesterase-4D (PDE4D) to deliver disease-modifying potential in central nervous system (CNS) disorders."

The BPN14770 is a novel therapeutic agent, which selectively inhibits phosphodiesterase-4D to improve early and late stages of memory formation.

The advanced mechanism of action is believed to enhance cognitive and memory function in CNS disorders such as FXS, AD and other dementias such as learning/developmental disabilities and schizophrenia.

## Client Satisfaction Survey Highlights

The Innovation Center strives to provide the most supportive environment possible for the most number of clients. While not perfect, the Innovation Center succeeds in meeting the needs of the vast majority of companies in residence. The annual client satisfaction survey completed in August 2020 revealed...

**100%**

would recommend the WMed Innovation Center to another entrepreneur

**94.5%**

say the WMed Innovation Center has made a positive difference in their emerging enterprise

**76.5%**

say that the involvement of the Innovation Center's staff with their company is "just right"

# OUR PARTNERS AND SPONSORS

The Innovation Center is fortunate to have the support of several organizations from across the state of Michigan. These partners and sponsors provide refreshments and snacks for events, content for educational workshops and seminars, and free and reduced cost services to the clients of the Innovation Center. Partners and sponsors enrich our entrepreneurial community.



# PROGRAMS

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## SBA Growth Accelerator Fund Award

The WMed Innovation Center focused on female entrepreneurs as the recipient of a \$50,000 Growth Accelerator Award from the U.S. Small Business Administration. The \$50,000 award was part of \$3 million the SBA allocated across 39 states and territories to 60 accelerators and incubators to support startups and entrepreneurs researching and developing STEM-related innovations, company formation and awareness and education on the Small Business Innovation Research and Small Business Technology Transfer programs. The Innovation Center used the award money in 2020 to double the number of SBIR/STTR workshops it offered, implemented a mentoring program, and planned a Boundless Women Confab, which will now take place in June 2021.

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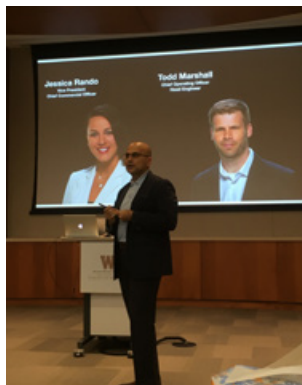


## 1 Million Cups

**1 MILLION CUPS** is a free, nationwide program designed to educate, engage and accelerate early-stage startups. We believe in the notion that entrepreneurs can discover solutions and thrive when they collaborate over a million cups of coffee. The Kalamazoo community of innovators and entrepreneurship enthusiasts come together each month to connect and support our local startups. Meetings are held on the first Wednesday of every month from 8:00 to 9:00 AM and are always free and open to the public.

# WORKSHOPS AND EVENTS

- Monthly Client Lunches and Hangouts
- Warner Norcross + Judd Legal Lunch-and-Learn Series
- SBIR/STTR Workshops
- Introduction to Customer Discovery Program
- Medical Entrepreneur Speaker Series
- Various SBDC and SCORE workshops including Scale Kalamazoo, Team SBA Roundtable, and Intro to SBDC Services
- Kalamazoo Venture Tuesday



*Salah Huwais presents at a Medical Entrepreneur Speaker Series event*



*Kalamazoo Venture Tuesday, October 2019*



# OUR CLIENTS

- **Arcadia Supplements, LLC** formulates and distributes fulvic-mineral-based health and wellness products.
- **AureoGen Biosciences, Inc.** is focused on the development of novel chemistry and genetic engineering methodologies for the modification of cyclic peptide-based compounds.
- **Epredia** is a global precision cancer diagnostics company working to improve patient outcomes by providing groundbreaking technologies. Powered by trusted brands such as Richard-Allan Scientific, Microm, Shandon, Menzel Gläser and Erie Scientific, Epredia has a wide breadth of solutions that have and will continue to transform the anatomical pathology market.
- **Hibiskus Biopharma Inc.** is an early stage drug discovery company utilizing proteasome inhibitor technology that may have significant activity in solid tumors; in particular, renal carcinoma.
- **IONTOX, LLC** is a biotechnology company dedicated to providing expertise to the area of in vitro toxicology, with a mission to build improved methods for predicting human adverse effects from chemical exposure.
- **Kalsec** is the leading global producer of natural spice and herb flavor extracts, colors, antioxidants, and advanced hop products for the food and beverage industry.
- **Metabolic Solutions Development Company, LLC** is developing innovative therapeutics to treat and prevent age-related metabolic diseases such as diabetes.
- **Microbiologics FKA Micromyx** is a microbiology services company specializing in anti-infective discovery and development for the pharmaceutical, biotechnology, and animal health industries.
- **Next Stage Labs** focuses on the ornamental plant industry. They help clients who are in the development phase of a new variety, bringing material to market and needing to ensure their genetics stay disease free.
- **Northern Biomolecular Services** is a contract research organization specializing in advanced molecular biological techniques for the determination of biodistribution, persistence, and gene expression of cell and gene therapy products in biological samples through real-time qPCR quantification analysis.
- **PharmOcular, Inc.** is working on a topically active COX-2 inhibitor for treatment of Age-related Macular Degeneration (wet-AMD).
- **Proteos, Inc.** provides a wide range of expression platforms, purification methods, protein analysis tools and assay services to life science companies and research labs across the world.
- **RealBio Technology, Inc.** provides leading-edge cell and tissue culture technologies that support the growth, expansion, differentiation, and collection of human and non-human cells.
- **SafeSense Technologies, LLC** is a sensor technology company providing innovative solutions using flexible hybrid electronics for the Sports Performance, Physical Therapy and Medical Diagnostics markets.
- **Separation Solutions / SepSol Process Solutions** is a manufacturer's representative and distributor of equipment for filtration and separation, powder and bulk processing, dust collection and packaging.
- **Single Source Procurement, Inc.** staffs and stocks an on-site scientific supply storeroom and coordinates ongoing routine procurement for companies, as well as coordinating instrument repair and researching and negotiating one-time purchases.
- **StatLab Medical Products** has been supplying the anatomic pathology laboratory for over 30 years as a leading developer and manufacturer of cost-effective histology, cytology and immunohistochemistry diagnostic supplies.
- **Tetra Therapeutics** develops therapeutics to treat memory loss and cognitive impairment by improving how the brain processes and stores information, to improve the quality of life for patients suffering from Alzheimer's disease, dementia, traumatic brain injury, major psychiatric disease, and neurodevelopmental disorders.
- **Vestaron Inc.** is a leader in the development and marketing of safe and effective bioinsecticides derived from naturally occurring peptides found in spider venom.
- **Videka** captures the best of two leading global companies, Diana Pet Food and Kalsec®, to better serve the rendering and pet food industries with natural protection solutions.

# ECONOMIC IMPACT

Nothing speaks to success like the hard numbers. We are proud to report the annual economic impact of the Innovation Center achieved through the efforts of our client companies for the past 12 months (4/1/2019–3/30/2020).

<b>New Companies Created</b>	<b>5</b>
<b>Number of Companies Expanded</b>	<b>8</b>
<b>Number of Companies Served</b>	<b>45</b>
<b>Jobs Created (Number of FTEs)</b>	<b>54</b>
<b>Average Annual Salary of Jobs Created</b>	<b>\$44,750</b>
<b>Jobs Retained</b>	<b>109</b>
<b>Average Annual Salary of Jobs Retained</b>	<b>\$86,160</b>
<b>MEDC Funds Awarded to Companies</b>	<b>\$3,500</b>
<b>SBIR, STTR, and Other Federal Funding</b>	<b>\$2,000</b>
<b>Venture Capital Raised</b>	<b>\$20,000,000</b>
<b>Angel Funds Raised</b>	<b>\$1,057,633</b>
<b>Bank/Loan Financing</b>	<b>\$0</b>
<b>Owner Investment Made</b>	<b>\$2,465,088</b>
<b>New Sales (Increase in Revenue)</b>	<b>\$429,706,879</b>
<b>Total Dollars Invested into Companies</b>	<b>\$418,761,880</b>
<b>People/Companies Attending Events</b>	<b>1,383</b>
<b>Patents Applied For</b>	<b>8</b>
<b>Issued Patents</b>	<b>5</b>
<b>Licensing Agreements</b>	<b>5</b>
<b>Commercialized Products</b>	<b>55</b>

*Data collected from the annual Innovation Center grant report to the MEDC, October 2019 and April 2020*



“Thank you! Your facility is really an essential part of the startup process. I don’t know what we’d have done without you.”

# NEXT YEAR (2020-2021)

Here's to "The New Normal," whatever that means. As the COVID-19 pandemic rages on and companies continue to redefine business as usual, we all must find ways to create opportunity, to grasp happiness, to foster community, and to live life to its fullest. While we mourn the thousands who have lost their lives, we also need to take time to celebrate the everyday joys, like the many more thousands who have recovered from COVID-19. May the coming year see a return to some semblance of normal in the world, to office meetings and staff parties, to networking events and live conferences, to business trips and family vacations, to the hiring of new employees, to the landing of big customers, to the continuation of remote working and the still-hysterical episodes of a Zoom-bombing dog or child.

Together, we will get through this. Hang tough, my friends.

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“If it were not for the WMed Innovation Center, Tetra would not exist today. The biology laboratory and cutting-edge tools available to me, along with support from incubator staff, were the catalyst for the company's future success in the industry.”



*Innovation Center table at STEM Career Fair, WMU, February 2020*