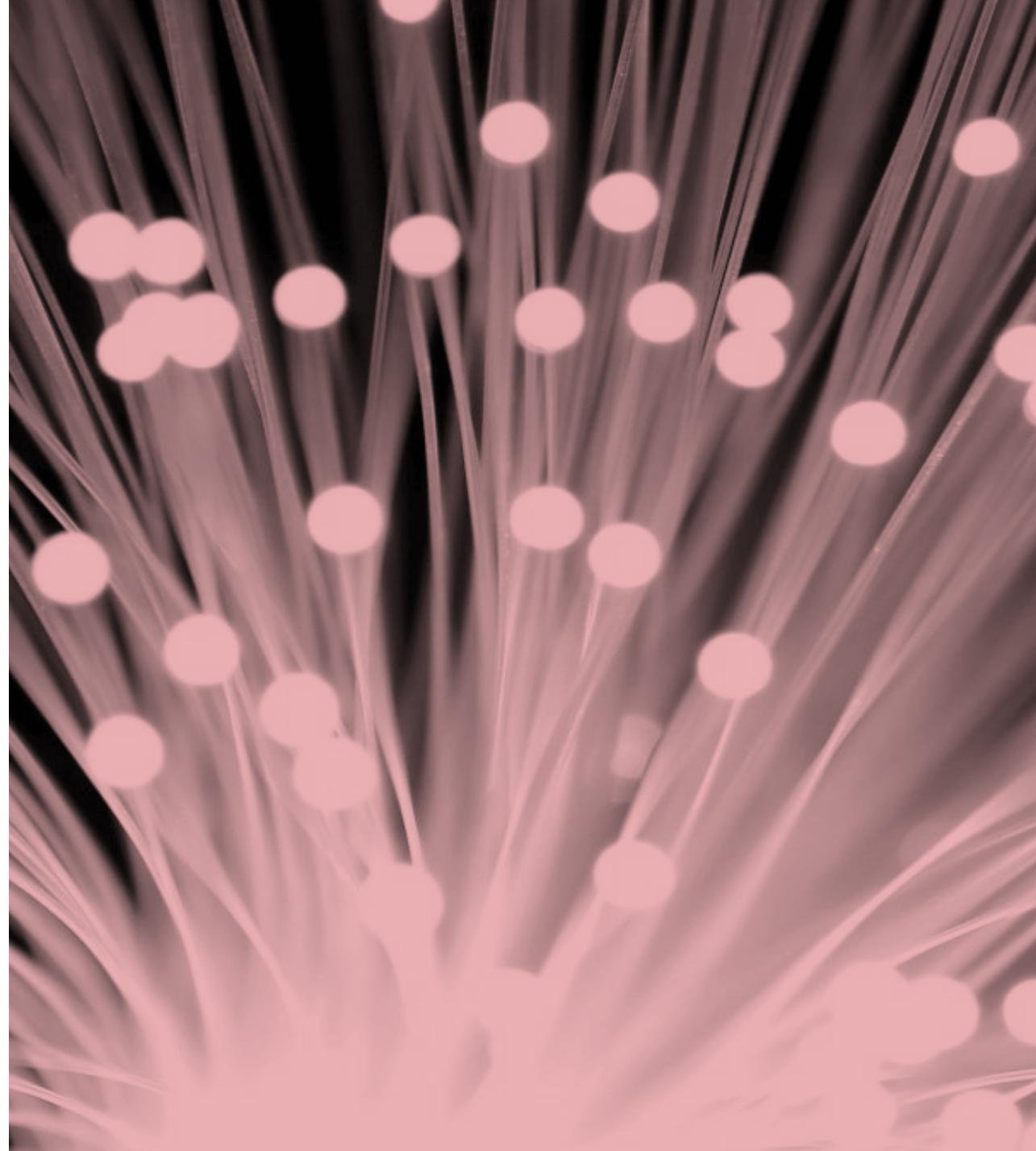


WiSys[®] Annual Report // Fiscal Year 2022

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6. Building Bridges Across the System
7. Measuring Success



WHO WE ARE

- Independent, nonprofit
- Supports research, innovation and entrepreneurship
- Serves students, faculty, staff and alumni at 11 regional UW institutions

01

WISYS PARTNERS

University of Wisconsin
Eau Claire

 UNIVERSITY of WISCONSIN
GREEN BAY

UNIVERSITY of WISCONSIN
LA CROSSE

UWO | UNIVERSITY OF WISCONSIN
OSHKOSH

UNIVERSITY OF WISCONSIN
PARKSIDE

 UNIVERSITY OF WISCONSIN
PLATTEVILLE

 UNIVERSITY OF WISCONSIN
RIVER FALLS

 University of Wisconsin
Stevens Point

UNIVERSITY OF WISCONSIN
STOUT

UNIVERSITY of WISCONSIN
Superior

 UNIVERSITY OF WISCONSIN
WHITEWATER

WHAT **WiSys**[®] DOES



Fund Research

We connect researchers to grants, supporting every stage of their research.



Market Ideas

We provide intellectual property assistance when research or ideas lead to a commercial opportunity.



Inspire Students

We better the educational experience with events and opportunities to grow research and innovation skills.



Build Culture

We think big about fostering a culture of innovation on university campuses.

BOARD OF TRUSTEES



David J. Ward
Chair, Board of Trustees



David Brukardt



Carol Dahl



Deborah Ford
Chair, Advisory
Committee



Jennifer Gottwald



Erik Iverson
Treasurer



Arjun Sanga
President



Melissa Sherman



Tomas Stafford



Tom Still

WISYS STAFF



Arjun Sanga
President



Adhira Sunkara
Assistant Director



Wilson Fay
Innovative Ventures
Associate



Margot DeBaker
Regional Intellectual
Property and Licensing
Associate



Tony Hanson
Manager of Intellectual
Property and Licensing



Allee Marti
Regional Intellectual
Property and Licensing
Associate



Mike Cenci
Intellectual Property &
Contracts Associate



Gina Polito Jahn
Manager of Research
Development



Craig Sauer
Marketing and
Communications
Associate



Alicia Schiff
Executive Assistant &
Program Coordinator



Evelyn Olson
Event & Program
Coordinator



Eliot Turnquist
Marketing and
Communications Intern

WISYS AMBASSADORS



Abigail Adams
UW-Stevens Point



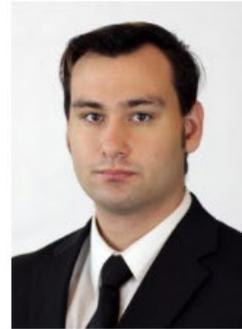
Sager Alarifi
UW-Parkside



Mallory Brask
UW-Stout



Courtney Carson
UW-River Falls



Matt Frisch
UW Oshkosh



Kyra Goedken
UW-Stevens Point



Rylie Gramann
UW-La Crosse



Haley Jacquez
UW Oshkosh



Kim Krueger
UW-Green Bay



Sidney Peck
UW-River Falls



Jake Plumley
UW-Platteville



Alissa Santana
UW-Whitewater



Jacqueline Sporie
UW-La Crosse



Brett Steck
UW-Whitewater



**Treesmorn
Tanboonrith**
UW-Eau Claire

RECOGNIZING EXCELLENCE

- Honors the best and brightest students, faculty and staff in the UW System
- Awards leaders in innovation at special banquet at the annual WiSys SPARK Symposium

02

CARL E. GULBRANDSEN

**INNOVATORS OF
THE YEAR**

NOVASCAN CRAIG DAVIS & WILLIAM GREGORY

WiSys named NovaScan CEO Craig Davis and founder Dr. William Gregory as 2022 Innovators of the Year.

NovaScan—an emerging oncology company based in Chicago that is pioneering a new low-cost point of care platform for cancer detection and treatment—completed an \$8 Million Series B financing in 2021.

WiSys holds several patents around scientific discoveries made by Gregory that form the basis for NovaScan’s technologies.

For more than thirty years, Gregory researched the electrical properties of materials. He has been involved in other startup companies and has held various academic positions.

He holds numerous patents and is widely published. He is an emeritus professor at UW-Milwaukee, where he was formerly the Dean of the College of Engineering and Applied Science.

Davis has been active in the early stage medtech community for many years as a partner at a leading family office, as a medtech investment banker and as a growth strategy consultant.

Prior to NovaScan, Davis was a partner in the two-person family office LaSalle Investments. Among others, LaSalle co-founded Merge Healthcare (IPO and sold to IBM for \$1Billion) and OrthoScan (acquired by ATON GmbH). Davis was a senior member of a team that was backed by private equity firm GTCR to roll up companies in the urologic device space.

He is also an ex-partner at Healthios, a boutique healthcare focused investment bank founded by former Baxter CEO Vern Loucks.



NovaScan CEO Craig Davis, right, accepts the award at the WiSys SPARK Symposium at UW-La Crosse in August. Co-winner William Gregory was unable to attend.

PARITYBLU

SAMUEL FITZHENRY

NICHOLAS HERSPERGER

LOGAN ICKERT

WiSys named a group of entrepreneurs with roots at UW-Eau Claire as 2022 Innovators of the Year. The team of UW-Eau Claire alums Sam Fitzhenry and Logan Ickert and UW-Madison alum Nick Hersperger received the awards for work around their Bluetooth solutions startup ParityBlu.

Taking advantage of two WiSys entrepreneurship programs, the team advanced their startup that is focused on creating parity in wireless device ecosystems throughout the home.

The young entrepreneurs first pitched their idea for ParityBlu as part of the WiSys APPStart Challenge in the fall of 2020. Their idea stood out among the 73 ideas submitted from across Wisconsin, and the team was named one of three finalists in the challenge. The team ultimately won the challenge and a prize package totaling more than \$10,000 in cash and services to help launch their business.

Building on their experience with the WiSys APPStart Challenge, the ParityBlu team applied to participate in another WiSys program designed to help startups get off the ground. In February 2021, ParityBlu was accepted into the Level Up!™ program at WiSys VentureHome®-Eau Claire.

Level Up!™ is a five-month action-oriented program to take scalable businesses or ideas to the next level. Participants learn to validate customer needs, identify go-to-market strategy, find early adopters, and demonstrate market traction, among other important steps of launching a successful technology startup.



Logan Ickert, left, Sam Fitzhenry, left middle, Nick Hersperger, right middle, receive Innovator of the Year awards from WiSys President Arjun Sanga, right, at the WiSys SPARK Symposium in August.

UW-RIVER FALLS SYLVIA KEHOE

WiSys named UW-River Falls' Dr. Sylvia Kehoe as a 2022 Innovator of the Year.

WiSys worked with Kehoe, a professor of animal and food science, to develop her idea to improve the process for dehorning calves.

Kehoe realized the need for a better method of applying dehorning paste to improve animal welfare and safety for handlers. She worked collaboratively with UW-Platteville's Dr. John Obielodan, associate professor of mechanical engineering, to develop an adhesive patch for safe and effective application.

WiSys helped facilitate the connection between Kehoe and Obielodan, who manages UW-Platteville's Prototyping Center, and also filed a patent for the patch that was developed.

Kehoe's work, along with that of several students, was funded through an Ignite Grant and the Dairy Innovation Hub.

"That's really important for me and here at the university, to get as many students involved as possible in this hands-on practical research stuff," Kehoe said.

The Ignite Grant Program is funded by the UW System, in collaboration with WiSys, to fund applied research for UW System faculty and academic staff to develop advanced human potential and the knowledge economy that employs that potential.

The Dairy Innovation Hub, funded by the state of Wisconsin, harnesses research and development at the UW-Madison, UW-Platteville and UW-River Falls campuses to help Wisconsin's dairy community produce nutritious dairy products in an economically, environmentally and socially sustainable manner.



UW-River Falls' Sylvia Kehoe accepts the award at the WiSys SPARK Symposium at UW-La Crosse in August.

UW-LA CROSSE SETH KING

WiSys named UW-La Crosse Physics Professor Dr. Seth King as a 2022 Innovator of the Year.

King's research at UW-La Crosse has led to several discoveries. Along with collaborators, he has disclosed two inventions to WiSys related to novel methods for synthesizing nano-composite materials.

King has also been successful in obtaining funding for his work. Over the past decade, he has been awarded more than \$143,000 in Ignite Grants. The Ignite Grant Program is funded by the UW System, in collaboration with WiSys, to fund applied research for UW System faculty and academic staff to develop advanced human potential and the knowledge economy that employs that potential.

He is an active supporter of student research, and much of his funding has been used to support student researchers, including summer research stipends and materials needed to complete projects.

"I firmly believe that research makes science real," King said. "I think it is extremely important that students get into a lab and apply the theory they learned, or will learn, in the classroom to a real-world application. It is the best teacher for illustrating that idealized theory and laboratory application are very different things."

King has also been a strong supporter of the WiSys SPARK Symposium and the opportunities it creates for faculty and students to interact and build collaborations. He served on the 2022 planning committee.

King views his work with WiSys as a way to give back. "I have enjoyed being able to join the UW-La Crosse faculty and continue on the strong tradition of undergraduate research that UW schools have built over many years," he said.



UW-La Crosse's Seth King, left, accepts the award from WiSys President Arjun Sanga, right, at the WiSys SPARK Symposium at UW-La Crosse in August.

INNOVATION CHAMPIONS

UW-PLATTEVILLE

MARCIA HARR BAILEY

WiSys named UW-Platteville's Dr. Marcia Harr Bailey as a 2022 Innovation Champion.

Harr Bailey is an associate professor of entrepreneurship at UW-Platteville.

Harr Bailey has been an important advocate for WiSys events on campus including the WiSys Innovation Mixer—a fun event for student and faculty innovators to make connections—and the WiSys Big Idea Tournament—a student business model competition.

She has also been a key partner in bringing WiSys' flagship entrepreneurship program WiSys VentureHome to the Platteville community.

The WiSys VentureHome program is launching a network of startup hubs across the state by connecting statewide resources with local initiatives to provide entrepreneurs access to a full menu of startup resources in their local communities. In other words, offering "everything your startup needs under one roof."

WiSys VentureHome-Platteville is located in the IDEA Hub Accelerator in downtown Platteville. "I'm grateful for this recognition," said Harr Bailey. "I know people from our campus and other campuses who have received this same award. I have seen what they do and how transformative they have been for other people; it feels great to be recognized."

Harr Bailey said she enjoys watching her students grow and gain confidence through her entrepreneurship courses. She is also looking forward to seeing all the creativity stemming from the Huff Family Innovation Center and Idea Hub Accelerator. "All of these various efforts are coming together into a purposeful pipeline to help new ideas become reality," she said. "We want our campus to be seen as a destination for innovation."



UW OSHKOSH

STEPHEN KERCHER

WiSys named UW Oshkosh's Dr. Stephen Kercher as a 2022 Innovation Champion.

The award recognizes UW System leaders, faculty, staff, students or community partners who have played an integral role in building a culture of innovation at a UW System regional institution.

Kercher is a history professor and director of UW Oshkosh's Office of Student Research and Creative Activity.

"Dr. Kercher has been a strong supporter of WiSys Programs and has worked passionately to expand opportunities for students at UW Oshkosh," said WiSys President Arjun Sanga. "He is a great champion for UW Oshkosh's student researchers and innovators."

Kercher has been a strong advocate for the WiSys Quick Pitch Program, which encourages students to consider the impact of their research and learn how to communicate it to the public.

The program trains student researchers how to present their research succinctly and without scientific jargon so that it can be understood better by general audiences. Presenters then compete for prizes with three-minute pitches in front of a panel of judges.

With help from Kercher, more and more UW Oshkosh student researchers have become aware and participated in the WiSys Quick Pitch. He's been involved since 2017.

Kercher has also been an active participant in planning other WiSys programming including the 2021 virtual edition of the WiSys SPARK Symposium, an annual celebration of research, innovation and entrepreneurship that features many opportunities for students to present.



SUPPORTING STUDENTS

- Inspires next gen inventors, researchers, entrepreneurs
- Grows innovation skills via exciting events and contests
- Employs top-notch students as WiSys Ambassadors

03

New WiSys program teaches students innovation skills

WiSys partnered with UW-Green Bay leaders to shakeup and improve its innovation programming for students in February.

UW-Green Bay hosted the inaugural WiSys Innovation On-Ramp™, a multi-week learning experience that gives students a chance to learn innovation skills and advance their ideas—regardless of their field or goal.

More than 100 students participated in the event which focuses on teaching students to identify a problem, innovate a solution and eventually pitch it. WiSys expects to expand the program to additional campuses in the next few years.

LEARN MORE: wisys.org/onramp



SUPPORTING ENTREPRENEURS

- Inspires “inner-entrepreneur” in UW and community innovators
- Connects university and industry
- Mentors budding startups via WiSys VentureHome

04





WiSys VentureHome sparks local startups

- Everything your startup needs under one roof[®]
- Statewide resources, local supportive experts
- Supported 39 startups in the fiscal year
- Boosted community and ecosystem building efforts

WiSys VentureHome supports emerging entrepreneurs

The WiSys VentureHome program is helping emerging entrepreneurs gain confidence and advance their startup goals.

Dr. Emily Elsner Twesme, Empower2Retain founder, said the program was “vital” to her entrepreneurship journey—one that is often rocky for women. Female founders secured only 2 percent of U.S. venture capital in 2021, according to research firm PitchBook.

“A program like WiSys VentureHome is vital to making this process more inclusive. I really, really needed the support that this program provided, and I truly wouldn’t be here today without it,” she said.

LEARN MORE: venturehome.org



SUPPORTING GRANTSEEKERS

- Assists faculty/staff from any discipline pursue funding
- Develops better grant writers and grant proposals
- Builds research admin capacity



05



WiSys partners with four campuses to support faculty grantseeking

In partnership with the research and sponsored projects staff at UW-Eau Claire, UW-River Falls, UW-Stout and UW-Superior, WiSys will run a grant writing academy during the 2022-2023 academic year.

Starting with a virtual session in October, grantseekers will meet about every four weeks and will be asked to complete assigned projects between each successive meeting.

The participants will be grouped according to discipline, rather than their university, giving them increased opportunity to build collaborations with faculty from another campus.



WiSys grant writing webinars benefit faculty grantseeking

- Trains hundreds of faculty and staff to be better grant writers
- Explores external funding opportunities
- Provides expert advice on the art of grant writing

BUILDING BRIDGES ACROSS THE SYSTEM

- **Partners with 11 regional universities to nurture innovation**
- **Innovation doesn't just happen in big cities and in big universities**
- **The ENTIRE system is full of success stories**

06

UW-EAU CLAIRE

Blugold wins WiSys innovation showcase

EAU CLAIRE—Student Maya Frodl won a \$750 prize for the research presentation “3D Printing to Improve Patient Outcomes: An Analysis on Mini-Thoracotomy Aortic Valve Replacements” at a WiSys innovation showcase.

The project was part of the UW-Eau Claire and Mayo Clinic research agreement, which WiSys supports, that aims to unite the strengths of clinical organizations and academic institutions to create innovative research opportunities.

Students Laura Glenna and Saige Tichy were additional team members for the project. The faculty advisor was Dr. Doug Dunahm, professor of Materials Science and Biomedical Engineering.

LEARN MORE: wisys.org/spark



UW-GREEN BAY

Hillhouse researches new drugs for addiction and depression

GREEN BAY—In April, UW-Green Bay Assistant Professor of Psychology Todd Hillhouse was named a 2022 Regent Scholar Award recipient. The award comes with a one-time grant to pursue a project in the recipient's field of study.

Hillhouse's project is "Targeting Nociceptin and Kappa Opioid Receptors for Treatment of Cocaine Addiction and Depression."

This recognition also assisted in the establishment of a new research lab on the UW-Green Bay campus that focuses on developing talented local students for the biomedical industry.

LEARN MORE: [wisconsin.edu](https://www.wisconsin.edu)



UW-LA CROSSE



UW-La Crosse Chancellor Dr. Joe Gow welcomes attendees to UW-La Crosse for the WiSys SPARK Symposium.

UW-La Crosse hosts WiSys' statewide symposium

LA CROSSE—Nearly 200 people from across the UW System attended the WiSys SPARK Symposium at UW-La Crosse, July 31-Aug. 2.

Half of those that attended were students.

The symposium is where research, innovation and entrepreneurship collide. The annual event brings together the best and brightest faculty, staff, students and alumni from the across the UW System to network, collaborate and celebrate great ideas.

Sponsors included UW-La Crosse, UW System, Boyle Fredrickson, WARF, WEDC and NCUR at UWEC 2023.

UW OSHKOSH

Chan researches new treatments for flatworm infections

OSHKOSH—In April, UW Oshkosh Assistant Professor of Chemistry John Chan was named a 2022 Regent Scholar Award recipient. The award comes with a one-time grant to pursue a project in the recipient's field of study.

Chan's project is "A Novel Chemotherapy to Treat Parasitic Flatworms Causing Human and Animal Disease." Currently, broad spectrum control of parasitic flatworm infections in both human and animal health markets is dependent on one drug, praziquantel. No new drugs have been developed since the 1970s and reliance on one drug presents a serious threat of emerging drug resistance.

LEARN MORE: [wisconsin.edu](https://www.wisconsin.edu)



UW-PARKSIDE

WiSys supported UW-Parkside in landing \$1.2 million grant

SOMERS—WiSys grant writing experts assisted UW-Parkside in a successful federal grant application, leading to \$1.2 million from the U.S. Dept. of Education to help more adults in region complete four-year college degrees.

The project aims to serve 850 participants annually and will be staffed with three full-time employees who will be hired by UW-Parkside.

WiSys provides strategic, capacity-building activities designed to assist faculty and staff from any discipline in their pursuit of external funding to support creative and innovative research and scholarship.

LEARN MORE: uwp.edu



UW-PLATTEVILLE



Levenstein researches new approaches to crop protection

PLATTEVILLE—In April, Associate Professor of Biology Mark Levenstein was named a 2022 Regent Scholar Award recipient. The award comes with a one-time grant to pursue a project in the recipient's field of study.

Levenstein's project is "Aryl Fluorinated Ethers to Develop the Next Generation of Agrochemicals." It focuses on the development of new agrochemicals for crop protection, an increasingly vital area of research. Pesticide resistance is particularly important in Wisconsin where agriculture contributes significantly to the economy and accounts for nearly 12 percent of the state's workforce.

UW-RIVER FALLS

WiSys grant funds ag med storage research

RIVER FALLS—UW-River Falls Assistant Professor of Animal and Food Science Michelle DeBoer received a \$5,800 WiSys Spark Grant to develop an innovative insulated medication container.

The initial project goal was to provide better storage of temperature-dependent equine medications used at the UW-River Falls Campus Farm. However, this product could have many additional uses for other medications, according to DeBoer.

The grant, which is meant to support small-scale, proof of concept research, also helped employ undergraduate students in the university's Agricultural Engineering Technology program to assist with prototype development.

LEARN MORE: wisys.org/grants



UW-STEVENSON POINT

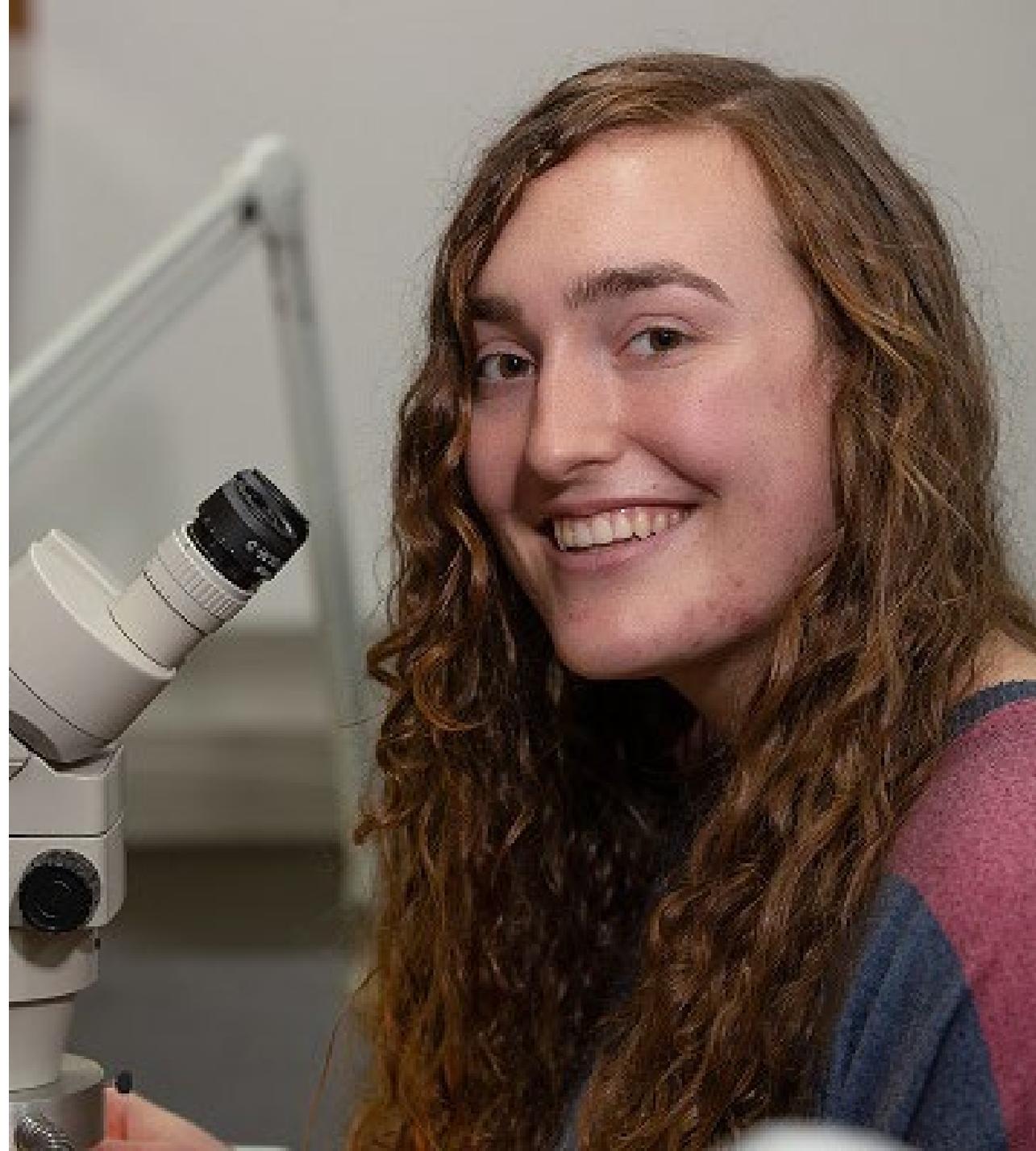
WiSys contest helps student researcher understand impact

STEVENS POINT—A promising young researcher from UW-Stevens Point credited WiSys with making her think bigger about her university research experiences.

Isabel Dunn, a fisheries and water resources major that graduated in December, said her participation in the WiSys research communication contest, known as WiSys Quick Pitch, allowed her to connect the dots.

"It was a good exercise to communicate to a non-scientific audience. It did challenge me to make the connection that water quality is important globally," she said. "Water is the most precious resource, so it is really critical we know how to protect it."

LEARN MORE: wisys.org/quickpitch



UW-STOUT

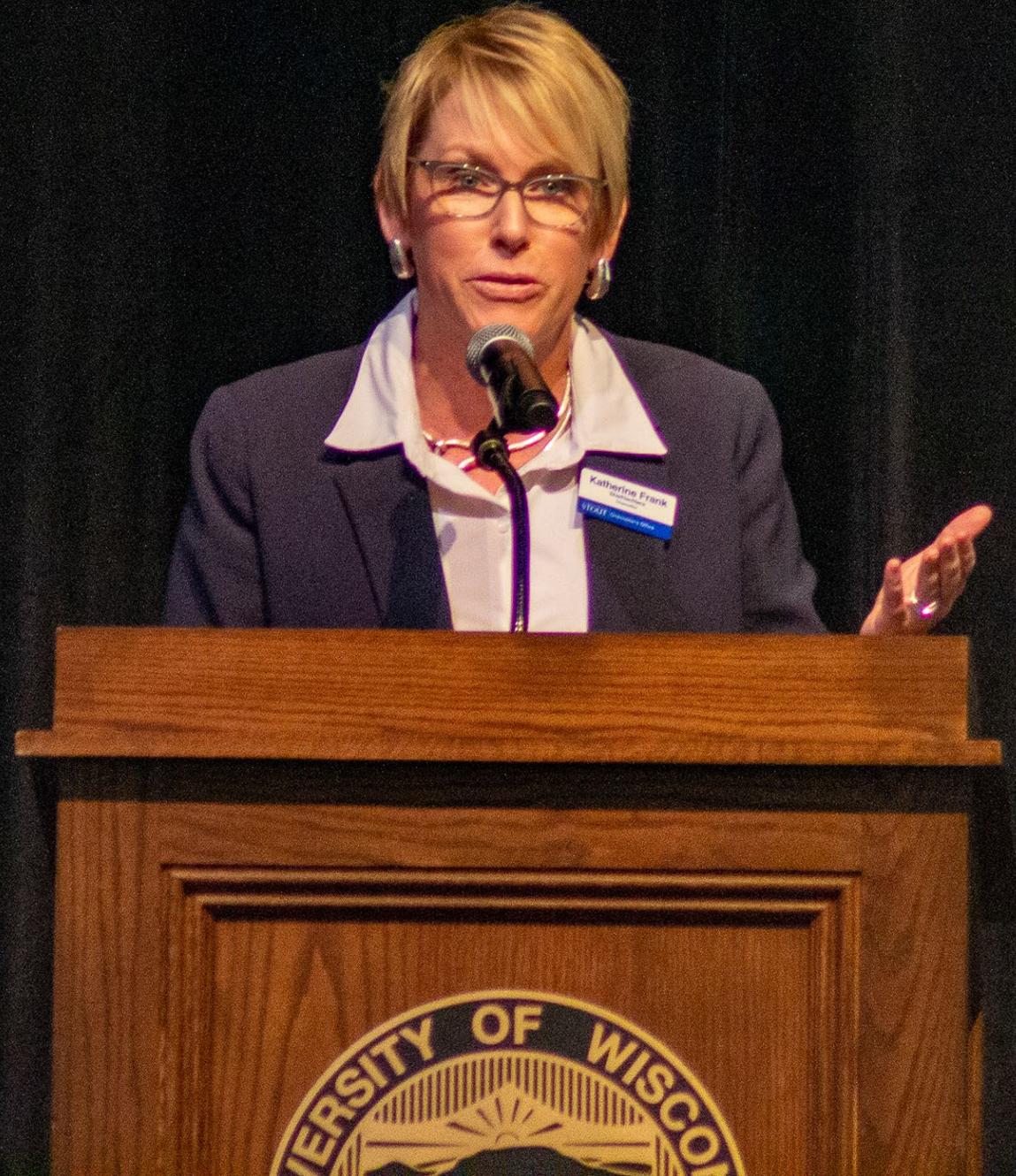
Chancellor volunteers to moderate WiSys Quick Pitch State Final

MENOMINEE—Recognizing the value of WiSys' statewide research communication contest known as WiSys Quick Pitch, UW-Stout Chancellor invested her time and energy to make sure it was a success for UW-Stout students and students across the UW System.

Frank moderated the WiSys Quick Pitch State Final, with students from throughout the state, at the WiSys SPARK Symposium at UW-La Crosse during the Summer of 2022.

Frank also served as a judge at the UW-Stout qualifier for the state final earlier in the year.

LEARN MORE: wisys.org/quickpitch



UW-SUPERIOR



Photo Courtesy of
Superior Telegram

Superior readies for WiSys startup hub

SUPERIOR—Superior leaders, along with WiSys, are organizing to support local entrepreneurship.

The city renovated an old Post Office, turning it into a space that supports economic development. It will also house WiSys' flagship entrepreneurship program, WiSys VentureHome, which is creating a network of startup hubs that combine statewide resources with community initiatives to provide local entrepreneurs with access to resources in their communities.

“We’re really trying to bring some of those regional and state resources to Superior to really enhance what entrepreneurs want to see and help get them to grow,” Andy Donahue of the Small Business Development Center told the *Superior Telegram*.

UW-WHITewater



Hendrix wins WiSys' statewide research presentation contest

WHITEWATER—UW-Whitewater's Michael Hendrix won the 2022 WiSys Quick Pitch State Final.

The student "pitch" competition inspires UW System students to consider the impact of their research and effectively communicate it to the public. Students have three minutes to impress a panel of judges with their research pitch. To compete in the WiSys Quick Pitch State Final, students had to win a campus-level WiSys Quick Pitch.

Hendrix won a \$750 prize for the presentation "Identification of Neutralizing Antibody Response in Early Human Immunodeficiency Virus-1 Infection."

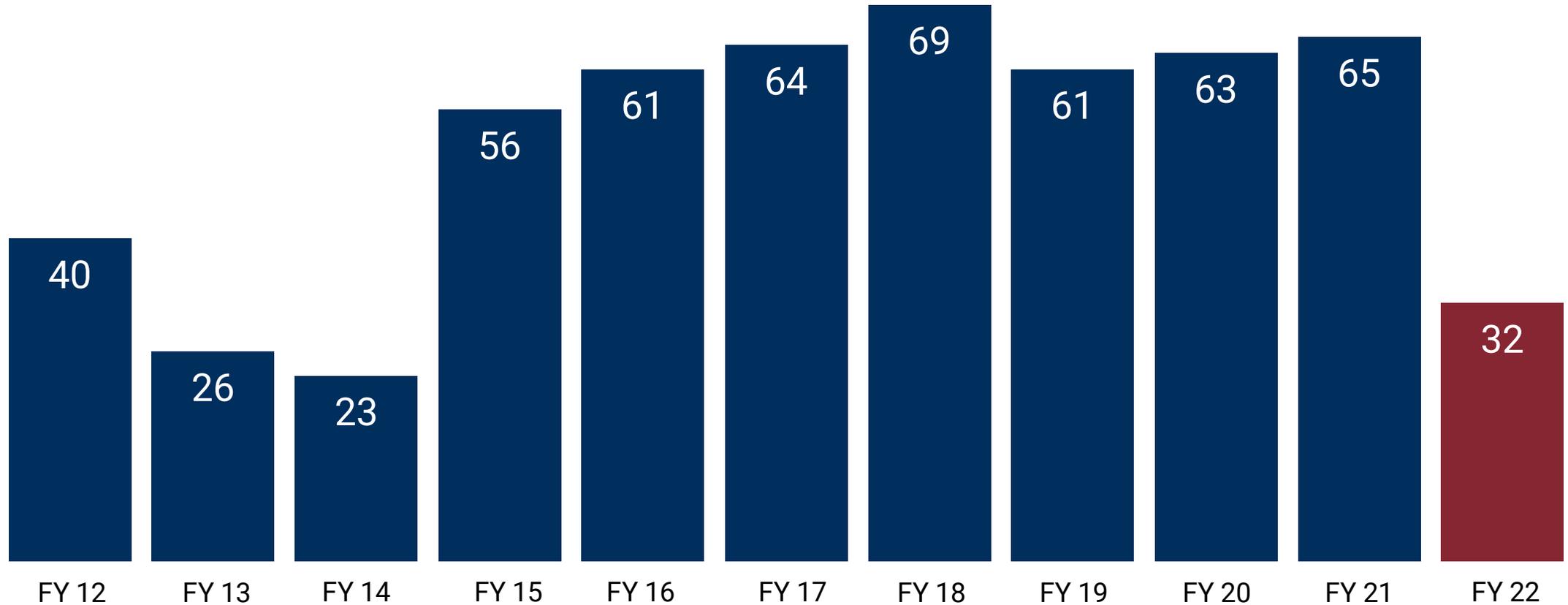
LEARN MORE: wisys.org/quickpitch

MEASURING SUCCESS

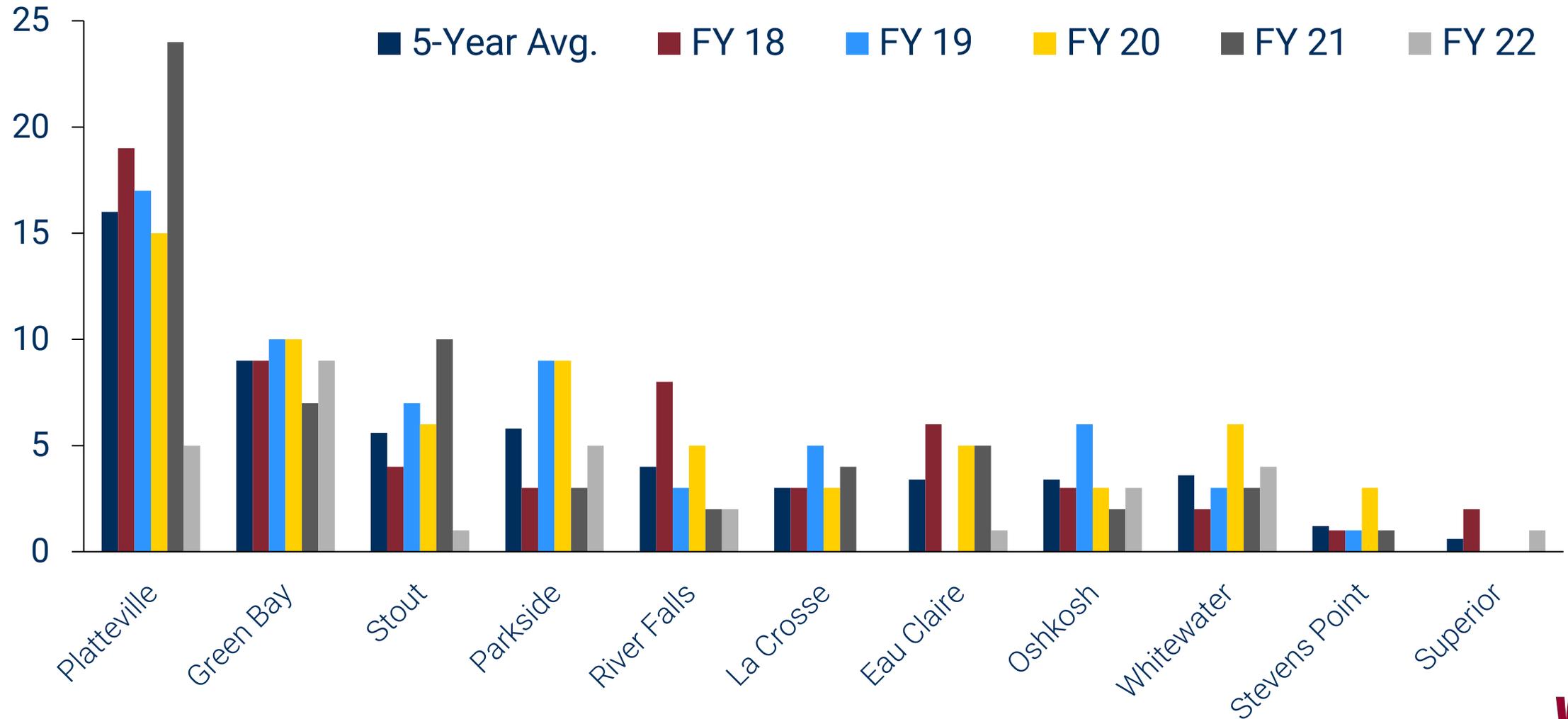
- Evaluated 32 inventions submitted to WiSys for intellectual property protection
- Filed 17 patents applications, received 6 patents
- Facilitated \$908,809 in grants to further UW System ideas

INVENTION DISCLOSURES

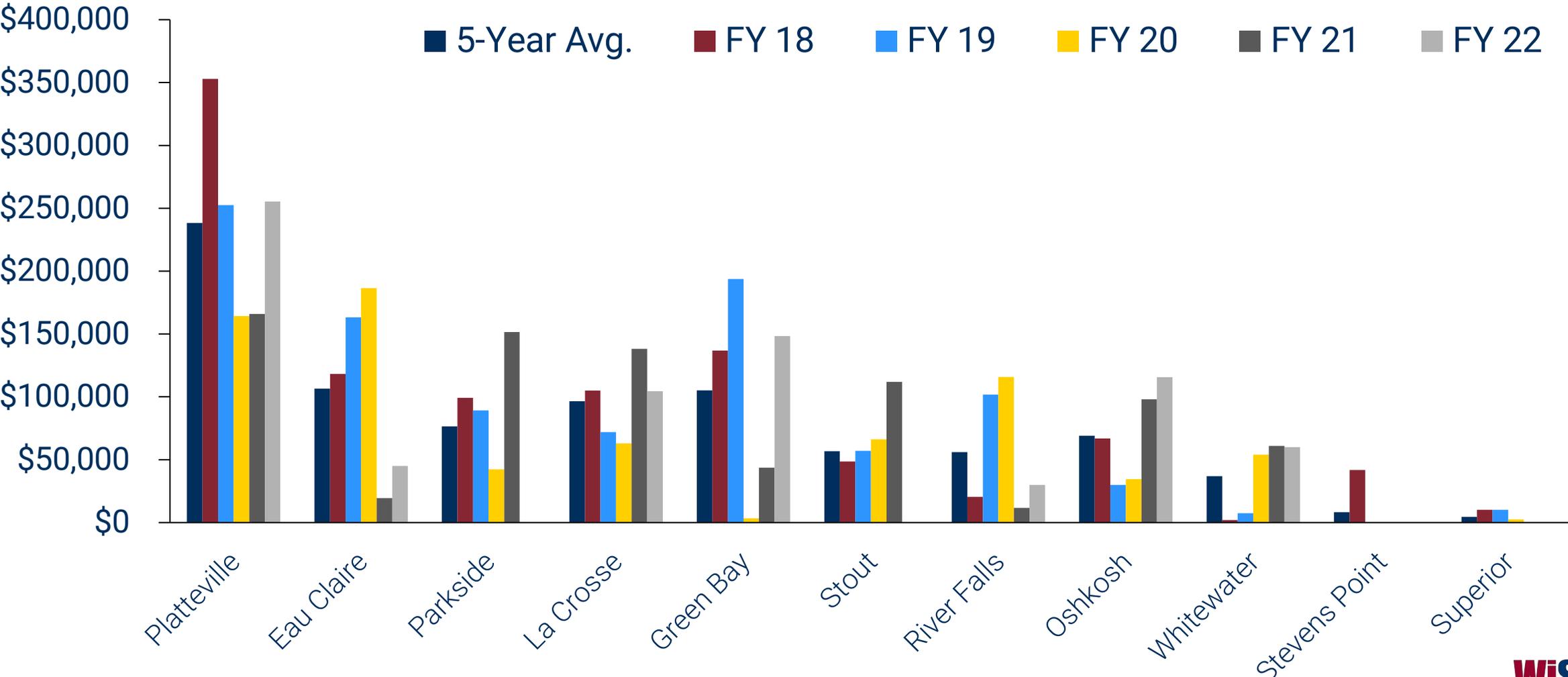
Inventions submitted to WiSys, FY12-FY22



DISCLOSURES BY CAMPUS



GRANTS BY CAMPUS





Eureka isn't a moment. It's a process. ®