



GUIDING INNOVATION | FOSTERING PARTNERSHIPS ON THE PROWL: THE RESEARCH REVIEW

April 2024

Support UWM Ingenuity During 414 Giving Days

As our city celebrates all things Milwaukee on 414 Day (April 14), we at UWM Research Foundation will celebrate the powerful impact of UWM ingenuity during the fourth annual 414 for UWM Giving Days. With your donation to this year's Giving Days campaign, we know there will be many UWM innovations to celebrate in the future.

The UWM Research Foundation is dedicated to bringing ideas and discoveries from UWM innovators to the world through commercialization activities. With a robust portfolio of intellectual property in hand, our team aims to engage with industry partners and ignite UWM-founded startups to help game-changing technologies and creative works see the light of day.

This is a long game. The path to market for new innovations has many steps, and the UWM Research Foundation guides this journey. In the early stages, we offer grants to researchers for proving initial concepts and to startup founders for achieving critical commercial milestones. Building upon that, we assist entrepreneurs in accessing federal grants to keep momentum going. In later stages, we offer straight-forward licensing programs that are designed to minimize barriers for startup and industry partner participation. And our mentor program featuring seasoned business leaders helps throughout the journey.

Please make your gift today. During 414 for Giving Days, we ask you to help the UWM Research Foundation continue guiding innovation and fostering partnerships through a generous donation. To increase your impact, several lead donors have promised to match gifts.

Remember to share the link to donate to the UWM Research Foundation

[414 for UWM Giving Days 2024 | UWM Research Foundation \(uwm414day.org\)](https://www.uwm414day.org)

UW-Milwaukee Innovative Weather Moves to Great Lakes Weather Service

The Innovative Weather Center at UWM has been a well-respected regional weather forecasting staple since 2007. Starting this month, the Innovative Weather brand and services will move to Great Lakes Weather Service,

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a Stetsonville, Wisconsin-based company that has been providing site-specific weather forecasts to clients in the Midwest and beyond for more than 50 years.

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Dr. Paul Roebber, Innovative Weather Center Director expects the transition to be seamless and successful, stating that, "Innovative Weather and Great Lakes Weather Service have had a complimentary role over the past decade with several former Innovative Weather employees and students going on to skillfully work for the company."

Great Lakes Weather Service is led by owner and Chief Meteorologist, Tony Schumacher, who has been forecasting for over 30 years. The company's meteorologists combine their extensive knowledge and experience of weather patterns with cutting edge technology and data to deliver reliable customized weather forecasts. Schumacher said, "Great Lakes Weather Service has earned a reputation for giving our clients critical weather answers when they need them, and we are thankful for the opportunity to provide that same level of service to our new Innovative Weather clients." Looking at the bigger picture, Schumacher sees the Innovative Weather brand acquisition as an important piece of the strategy to expand his company's reach.

The agreement for the deal was facilitated by the UW-Milwaukee Research Foundation. According to UWMRF President, Jessica Silvaggi, "We are excited that Innovative Weather found a new home. After considerable discussions with all parties over the past several months, we truly believe Great Lakes Weather Service is ideally suited to carry on the Innovative Weather torch."

Panther Partner Spotlight Paul Roebber: Risk Modeler – From Weather to Sports

by Brian Walsh

Perhaps Paul Roebber, UWM Professor of Atmospheric Sciences, is best known for founding the Innovative Weather Service (see related story above). That program, however, represents just one facet of his expertise. Roebber also has background in machine learning, agent-based modeling, and artificial intelligence. In this interview, he shares how his knowledge and skills can be applied to real-world situations. Be sure to read all the way to the final fun fact. Because, well, it's fun.

What kinds of projects are you working on now, and what led to them?

I recently finished a project with the National Oceanic and Atmospheric Administration (NOAA), which oversees all the centers, labs, and individual offices of the National Weather Service. They asked me to perform a review of machine learning activity across all these entities and identify obstacles to future progress.

That work led to some follow-up projects, which could be commercially interesting. One is developing a flash-flood agent-based model that will assist in emergency management. Another project applies this type of modeling to fire weather disasters – forecasting conditions that are conducive to ignition, spread, and behavior of wildfires.

[Read full article here.](#)

Expertise Highlights: How can Paul help you?



Fields of interest:

- Weather systems (climate, extreme weather events, fire weather)
- Machine learning applications
- Agent-based modeling

Skills & Resources:

- Weather forecasting
- Model development
- Data analysis
- Machine learning techniques and tools
- Strategic thinking, using the best tools available

Partnering Ideas:

- Insurance and reinsurance companies interested in understanding and managing extreme weather events, including wildfire

Partnering Arrangements:

- Consulting
- Sponsored research

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UWMRF Mini-Grants Help Entrepreneurs Take Critical Next Steps

Since 2022, fifteen startups have received mini-grants from the UWM Research Foundation. These grants provide up to \$5,000 to help fledgling companies advance to the next level in their journey to commercialization. Provided by Wisconsin Economic Development Corporation (WEDC), the funds can be used to hire consultants, test minimum viable products, and hire qualified mentors for customer discovery programs. To be eligible, startup teams must successfully complete the [Milwaukee I-Corps](#) program.

Learn more about [UWMRF mini-grants](#).

Mini-Grant Recipients

- Wearable Technologies
- Sunflower Ecotech
- Ubitrix International
- HIPL for aquaculture
- Bone Pro
- Better Play Studios
- PerryMedical
- RoboHeal
- STEAM Milwaukee
- Sorem
- Preserver Tech
- Shepherd Traffic
- Fluid Flow Experiences
- Net Surplus
- Midlife Midwife MKE

Events and Deadlines

Annual First Look Forum

[RSVP](#)

DATE: April 18, 2024

TIME: 4-7pm

LOCATION: WEC

[231 W Michigan St.,
Milwaukee, WI 53203](#)



Learn about groundbreaking innovations that promote bone healing, increase the life of power electronics, continuously disperse scents, introduce next-generation Lyme disease vaccines, and more at the Annual First Look Forum. The event will showcase the highlights of seven projects led by researchers from UW-Milwaukee, Marquette University, and the Medical College of Wisconsin. Seven leaders from the Wisconsin innovation and venture investment community will also be on hand to encourage and elevate conversations around the technologies.