



MARSHFIELD CLINIC RESEARCH INSTITUTE YEAR IN REVIEW

2025



WELCOME

Greetings friends and colleagues,

In 2025, Marshfield Clinic joined forces with Sanford Health, an organization with a long history and deep strengths in research. If two research institutions were ever meant to complement one another in advancing rural medicine, this partnership is it. Marshfield Clinic Research Institute's (MCRI) expertise in rural and population health, clinical trials, laboratory science and genetics aligns seamlessly with the strengths of our new colleagues.

Bridging these two research worlds feels personal to me. Many of us in MCRI have sought opportunities for collaboration, and as we meet new partners, I naturally gravitate toward getting-to-know-you questions – How long have you been at Sanford? What is your research focus? Are you from the Dakotas?

Place matters to me. After 25 years in Marshfield, this community, our people and our legacy mean a great deal. Yet I also carry deep ties to North Dakota, where I grew up in “the Valley” and where my family still lives and receives care. The thought that they may one day benefit from a clinical trial connected to this partnership adds another layer of meaning.

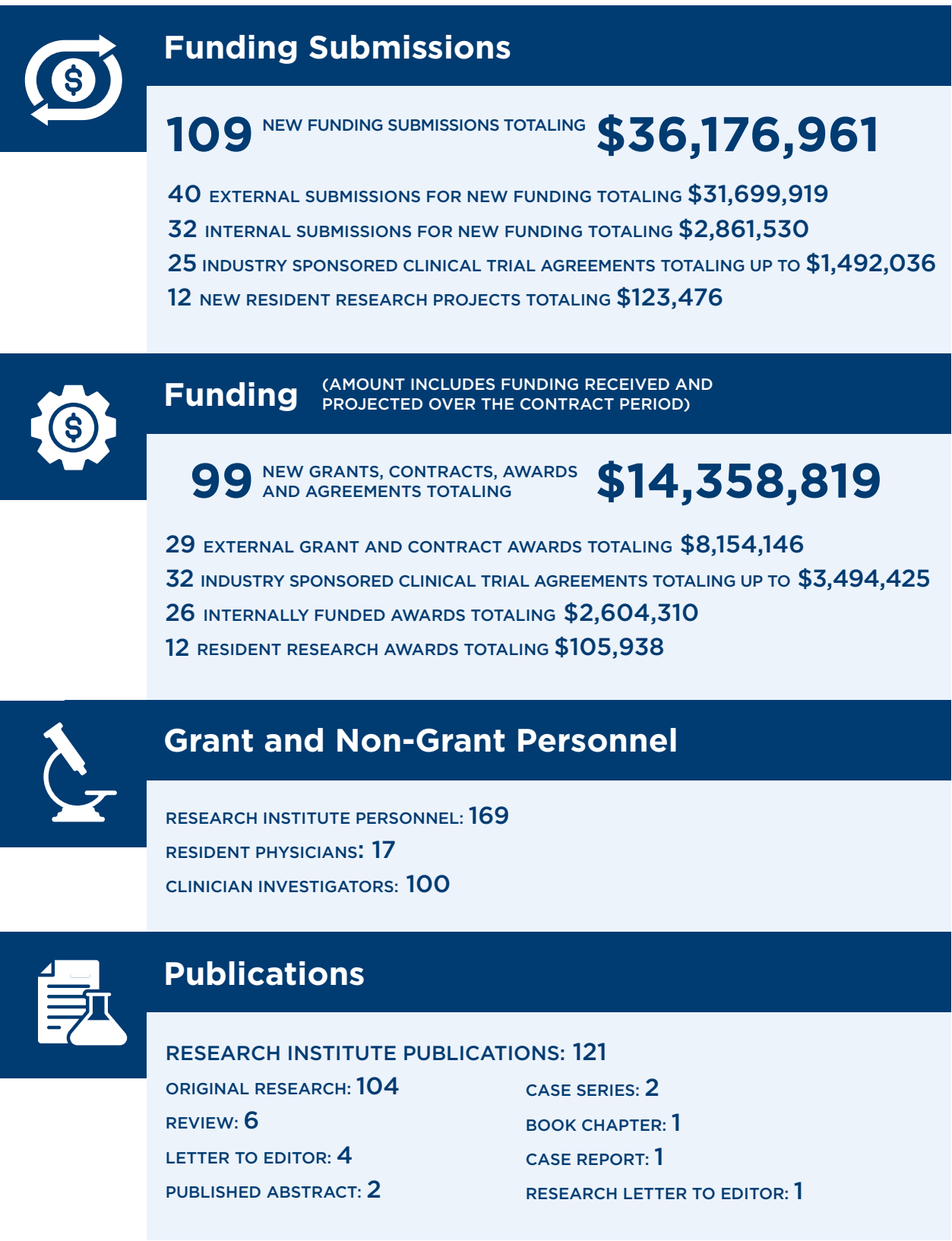
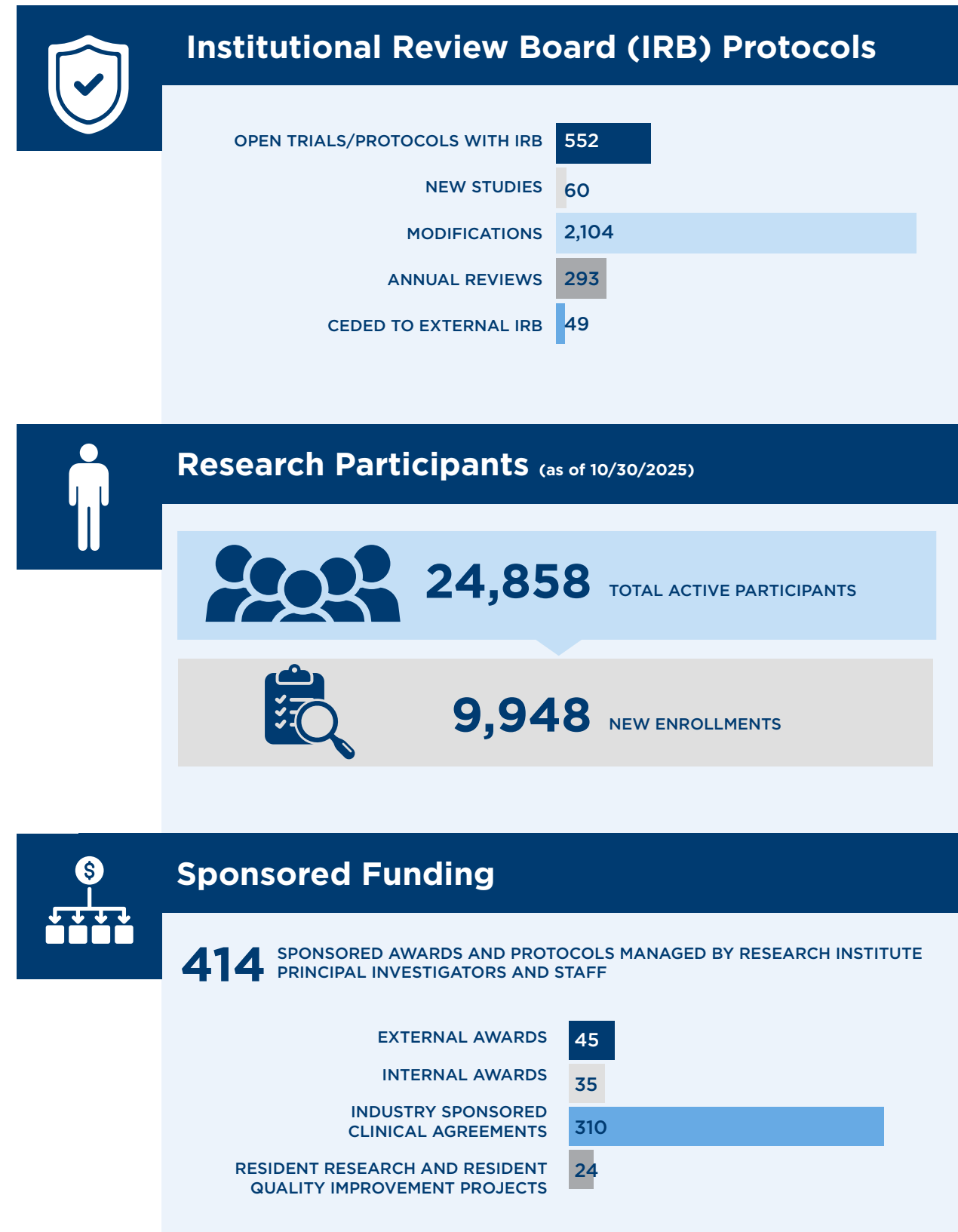
These early connections have been heartwarming. I've met colleagues who share my love for UND hockey, discovered that the dean of nursing and I attended the university at the same time, and even met a volunteer firefighter at an RF-DASH training session in Casselton, North Dakota, who once worked on my sister's farm. The world is small; the degrees of separation are few.

Serving as MCRI's executive director is a privilege. This collaboration strengthens our responsibility to honor our roots while building a larger, more powerful research enterprise across Wisconsin, Michigan, the Dakotas, Minnesota and beyond.

Enjoy these stories of people, ideas and an exceptionally promising future.

Jennifer Meece, PhD
Executive Director
Marshfield Clinic Research Institute

BY THE NUMBERS



CANCER CARE & RESEARCH CENTER

Small changes, big impact: early detection and research drive better melanoma outcomes

By Scott Heiberger, research communications manager

For more than a decade, the mole on Valerie Anderson’s leg sat unchanged—flat, familiar, and seemingly harmless. Then it began to grow.

“I typically don’t like going to doctors and I didn’t have a primary care physician,” said Anderson, a postal carrier and dental assistant from Mercer, Wisconsin. “But I finally made an appointment. I wasn’t thinking cancer. I just didn’t like how it looked.”

A biopsy in July confirmed melanoma, the most serious form of skin cancer.

“It’s a shock when you hear the diagnosis. You never think it will be you,” Anderson

recalled. “Dr. Sharma was so reassuring and so thorough in explaining everything. And when we were leaving, he gave me a hug and said we’d get through this.”

“I consider my patients part of my family,” said Rohit Sharma, MD, a surgical oncologist whose own family has faced cancer. “My role is to guide them through every stage of their treatment journey.”

In addition to his clinical work, Dr. Sharma serves as vice chair of the Marshfield Clinic Research Institute Oversight Board and is active in numerous clinical trials that expand treatment options for patients like Anderson.

Anderson learned she was eligible for clinical trial S2015, which evaluates whether removing melanoma with a one-centimeter margin is as effective as the standard two-centimeter margin.

“They asked if I’d be interested in the trial, and I said definitely – if it could help others in the future and help me understand my own cancer better,” Anderson said.

Smaller margins could improve quality of life by reducing wound size and the need for complex reconstruction. Dr. Sharma performed Anderson’s melanoma excision and later completed a skin graft to repair the site.

The Cancer Care & Research Center is uniquely positioned to support such studies. Research staff are embedded directly within clinical areas, collaborating closely with departments across the system to coordinate lab work, imaging and pathology. This integrated model ensures a seamless transition from patient consent to enrollment and follow-up, ultimately supporting the delivery of the highest-quality cancer care.

An avid kayaker and camper, Anderson has become an outspoken advocate for sun safety.

“I’m on everybody I know all summer – telling them to use sunblock and wear sun-safe hats,” she said.

Melanoma is often linked to UV exposure, and cases continue to rise, particularly among younger individuals, especially women. Early detection is key, as melanoma is highly treatable when caught early.

Beyond the expertise involved in her care, Anderson said the compassion she received from Dr. Sharma and his team made the difference.

“He told me to call on his personal cell phone if I had any questions or concerns,” Anderson said. “He has been so caring.”

HIGHLIGHT

Two major National Cancer Institute studies conclude

After more than 30 years of study activity, Marshfield Clinic Research Institute’s participation in the National Cancer Institute Prostate, Lung, Colorectal, and Ovarian (PLCO) Cancer Screening Trial, and National Lung Screening Trial (NLST) concluded. The two trials helped determine whether select screening techniques were effective at reducing mortality. The studies also resulted in a major research platform that facilitated hundreds of impactful cancer studies.

Study produces highest response rates

In 2025, the Connect for Cancer Prevention Study at MCRI enrolled its 6,745th participant, on the way to a target of 11,000 by late 2027. New recruitment events bolstered those numbers. This is the highest response rate among all participating health systems, with the highest proportion of enrolled subjects completing baseline surveys and contributing biospecimens. The Marshfield Clinic team has supported collection appointments at locations in across Wisconsin including Marshfield, Lake Hallie, Weston, Minocqua, Rice Lake, Stevens Point, Wisconsin Rapids and Neillsville. More locations will see recruitment activity in 2026.

Society of Clinical Research Associates hosts conference

MCRI and the Wisconsin chapter of the Society of Clinical Research Associates (SOCRA) hosted the 2025 SOCRA Fall Research Conference. Speakers provided valuable insights about oncology and advancing scientific discovery.

Participants joined in person and virtually for a hybrid learning experience designed to inspire collaboration and innovation. Special thanks to the planning committee: Angela Bulgrin, Susan Franseen, Terrie Kitchner, Diane Kohnhorst, Mary Peterson and Angela Varsho.



CENTER FOR CLINICAL EPIDEMIOLOGY & POPULATION HEALTH

Tick Talk: A national hub for tickborne disease research

By Maria Sundaram, PhD, associate research scientist

It's difficult to find the *Ixodes scapularis* ticks that carry Lyme disease because the nymph is only about the size of a poppy seed. It can be difficult to find the classic bull's-eye rash, which sometimes appears in hard-to-see areas like the backs of knees and sometimes never shows up at all. It can be difficult to find blood serum evidence of infection using diagnostic tests, especially early in the course of disease. It can even be difficult to distinguish between a new infection and an infection that might have occurred and resolved years ago.

When my colleague Anna Schotthoefer, PhD, and I received a grant from the Centers for Disease Control and Prevention (CDC) to estimate the true number of Lyme disease cases in central Wisconsin, we prepared to battle many sources of uncertainty.

In our work with the CDC-funded SubLyme Network, we are developing data algorithms to help identify cases across multiple health systems.

Our most recent estimate is that there are approximately 120 cases per 100,000 people per year, which is more than was reported in 2002, probably due to improved ability to find cases and an overall increase of Lyme disease.

This work comes alongside community-focused efforts by our colleagues Alexandra Linz, PhD, and Jennifer Meece, PhD, via their citizen science research project TICS (Tick Inventory via Citizen Science). The project asks citizens to send in any ticks they find. Thanks to the incredible efforts of community members, TICS has collected more than 11,000 ticks in the past two years and is currently testing submitted *I. scapularis* for the most common pathogens in the region.

In the coming years, more support will be needed to continue finding Lyme disease cases and creating more preventive options. It's an exciting time in tickborne disease research and we plan to keep "ticking" along.

HIGHLIGHTS

ECHO study staff hosts onsite visit

Members of the Research Institute's Environmental influences on Child Health Outcomes (ECHO) study hosted an annual onsite visit with regional study leads from the University of Wisconsin. MCRI has been part of ECHO for 13 years.

Senior research scientist retires

After nearly 30 years at Marshfield Clinic Research Institute, Edward Belongia, MD, an infectious disease epidemiologist and senior research scientist, retired in May 2025.



"I loved my job and the people I worked with," said Dr. Belongia. "Our vaccine and infectious disease research team has never been stronger. The scope and complexity of our research have grown over the past two decades, and our scientific teams have expanded. We have become internationally recognized for our research in respiratory virus epidemiology, vaccine safety and vaccine effectiveness. It's been a rewarding journey, and this seems like a good time to pass the torch to the next generation."

Innovation in trauma care

A research team at Marshfield Clinic, led by Heather Rhodes, PhD, won the 2025 Innovation Award from the Trauma Center Association of America for creating a groundbreaking tool called the Early Venous Thromboembolism Prophylaxis in Traumatic Brain Injury (EViTBI) algorithm.

After a traumatic brain injury, one of the most difficult choices is when to start blood-clot prevention medication. Nationally, doctors usually wait about 80 hours, even though earlier treatment is often safer. By analyzing records from over 58,000 patients, the EViTBI tool provides a clear framework that allows doctors to safely start this medication within 24 hours for nearly half of TBI patients.

To share this life-saving approach, the research team is hosting a national webinar for trauma centers and is seeking funding from the Patient-Centered Outcomes Research Institute (PCORI) to test the tool in hospitals across the country.

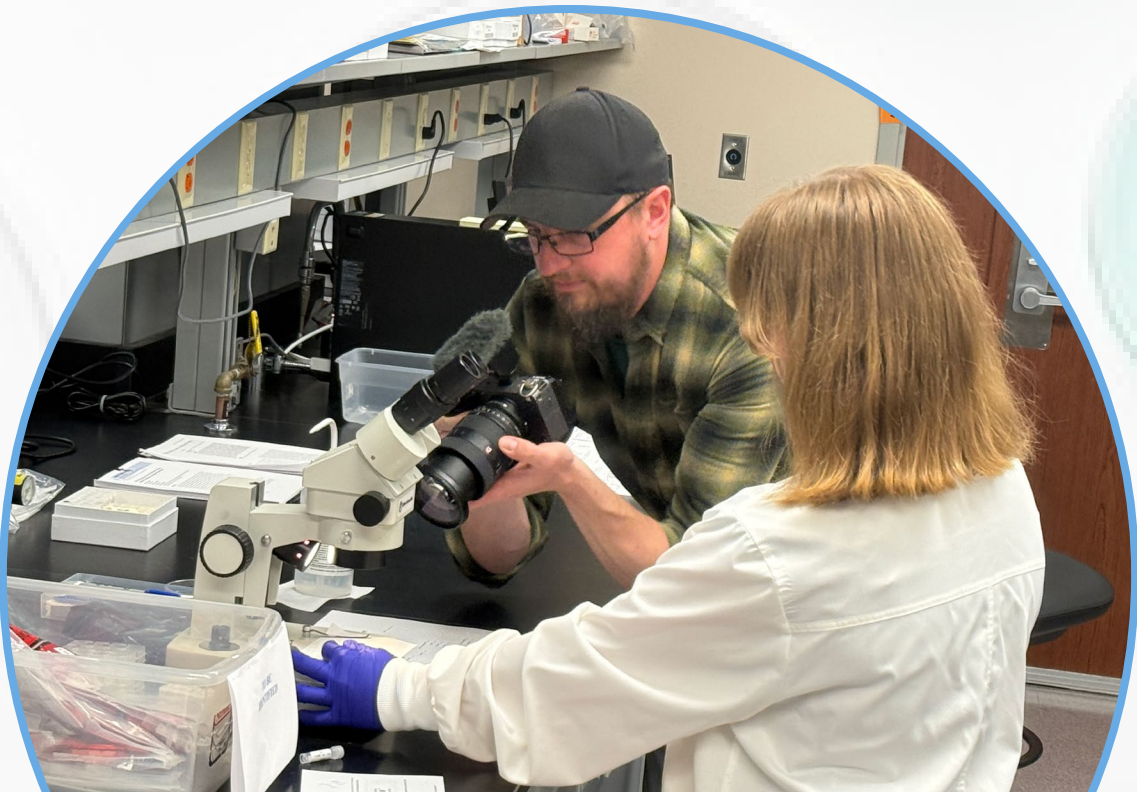
inSPIRE Study enrolls more participants

More than 4,200 participants enrolled in the inSPIRE study during its first year. The study "Surveillance Platform for Acute Illness: Respiratory and Enteric Pathogens" is determining how often different germs cause respiratory and gastrointestinal illnesses and learning the symptoms and severities of each.

This required incredible team effort:

- More than 40 research operations staff from departments across MCRI contributed to participant recruitment, enrollment and follow-up.
- Integrated Research & Development Lab staff processed thousands of respiratory samples and hundreds of stool and blood specimens.
- The Office of Research and Computing Analytics REDCap and programming teams worked to build and improve complex tools for data collection and study operations.
- Clinical staff shared their work areas and facilitated recruitment at medical centers, emergency departments and urgent care clinics throughout the Marshfield Clinic region.

Weekly updates on the circulation of numerous respiratory and gastrointestinal pathogens are publicly available at marshfieldresearch.org/inspire.



CENTER FOR PRECISION MEDICINE RESEARCH

Advancing precision health through innovative research

By Sanjay K. Shukla, PhD, Center for Precision Medicine Research director

Marshfield Clinic researchers and CPMR investigators are using state-of-the-art analytic approaches. Their projects are patient-oriented and translational in nature, aiming to improve clinical decision-making, and ultimately enhance patient outcomes. They are working hard to bring precision medicine from the lab to the bedside.

They collaborate with top-notch investigators from prestigious U.S. academic centers and around the world to expedite research findings. Scientists and staff in CPMR are grateful to patients who consent to participate in their research and to the many generous donors and foundations in the community for their philanthropic support.

Sanjay K. Shukla, PhD, the Center director, is employing an integrated approach to untangle multiple sclerosis (MS), enrolling more than 250 MS patients from Wisconsin. He is utilizing experimental tools like PheWAS (phenome-wide association study) and polygenic risk score to predict MS long before diagnosis. He has shown an association between polygenic risk score and an imbalance in the gut microbial community of MS patients, which could lead to digestive issues or more serious conditions. Shukla is further expanding the cohort of patients and plans to look at the role of ketogenic diet in MS.

Srinivasulu Sathipati, PhD is developing minimally invasive, blood-based microRNA tests for early disease detection and risk prediction. He is collaborating with Rohit Sharma, MD, on breast cancer research and with Param Sharma, MD, on atrial fibrillation research. The microRNAs are like molecular dimmers, fine-tuning how much of a given protein will be made.

Using All of Us data, **Scott Hebbring, PhD**, showed that familial glucosuria, excess glucose in the urine, is a more common genetic condition than once thought. Some people naturally expel glucose in their urine

without an indication of diseases like diabetes. A clinical trial conducted at Marshfield Clinic demonstrated that the genetics of familial glucosuria may impact how people respond to a new and popular class of anti-diabetic medication (SGLT2 inhibitors).

Elliot Hwang, MD, teaming up with his cardiology colleagues and CPMR researchers, has enrolled 100 patients in his CYP2C19 study. This research followed how gene markers guided de-escalation of antiplatelet therapy in patients undergoing coronary stenting for acute coronary syndrome as measured by predefined ischemic and bleeding outcomes. CYP2C19 is an enzyme, or protein, in the liver that helps the body process and break down many common medications.

Zhi Wen, MD, PhD, was engaged in understanding how nuclear receptor NR2E3 could be a promising therapeutic target for cancer treatment.

Richard A. Dart, MD, MACP, emeritus research clinician, is engaged in defining large arms for blood pressure device testing standards, understanding the relationship between obesity and hypertension, and the role of oral health in quality of life in congestive heart failure.



Our researchers leverage genetic and lifestyle data from:

- All of Us research project
- Human Genome Project
- Human Microbiome Project
- Personalized Medicine Research Project
- TriNetX
- UK Biobank

HIGHLIGHTS

Predicting multiple sclerosis before diagnosis



Sanjay K. Shukla, PhD, is working to develop a composite risk score for multiple sclerosis (MS) patients. MS is a multisystemic, neurodegenerative disorder of the central nervous system

in which patients start exhibiting debilitating symptoms months and sometimes years before a diagnosis can be made.

This donor-supported research is made possible via an internally funded award. Shukla is using the genetic data and longitudinal electronic health records (EHRs) of thousands of MS patients from national and international health care databases, including:

- Personalized Medicine Research Project, a biobank of 20,000 Marshfield Clinic patients with about 150 MS cases
- All of Us, with more than 860,000 participants and approximately 3,500 MS cases, a program from NIH
- TriNetX, a database containing more than 250 million EHRs from more than 120 health care systems, including about 3,000 MS cases

Shukla is examining years of health records and clinic diagnoses to create a phenotypic risk score (PheRS). He is also looking at the quantitative genetic risks for MS and will create a polygenic risk score (PRS) from their genome. He plans to combine the PheRS and PRS to create what would be called a composite risk score for MS patients. This approach might help predict susceptibility in patients years before disease appears.

Provisional patent filed for approach to detecting breast cancer

A provisional patent has been filed on using microRNA(miRNA) expression profile in combination with AI/machine learning tools for early detection of breast cancer. This provisional patent focuses on developing a blood-based approach for early breast cancer detection by combining miRNA profiles with advanced evolutionary learning methods.

Found in blood, miRNAs are small molecules that can reflect early biological changes associated with cancer. The patented method uses data-driven algorithms to identify diagnostic signatures that may overcome limitations in current diagnostic and screening methods, particularly in detecting early disease. This strategy has the potential to support early diagnosis, improve risk assessment and inform clinical decision-making.

Advancing precision medicine across disciplines

CPMR researchers are working towards improvements in patient care and advancing precision medicine with the following innovative genetic and translational research.

- Collaborating with Marshfield Clinic cardiologists, neurologists and fellows to accelerate translational research for biomarker discovery.
- Linking health system patients to family data extracted from public obituaries.
- Demonstrating that people who have a genetic predisposition to urinate sugar may respond abnormally to a certain class of diabetes medication.
- Completing enrollment of patients in a study of pharmacogenetic testing guided de-escalation of antiplatelet therapy in patients with acute coronary syndrome who are undergoing percutaneous coronary intervention.
- Publishing on orphan nuclear receptor NR2E3, a potential new tumor suppressor that works by activating protein p53.

FRITZ WENZEL CENTER FOR CLINICAL RESEARCH

Learning and doing: Dr. Haselby ‘emeritus’ in name only

More than 50 years ago, Ray Haselby, DO, began his career as an infectious disease physician with Marshfield Clinic. Dr. Haselby served in leadership roles and was the principal investigator for many pivotal clinical trials.

Ask Dr. Haselby to discuss his career and he’ll talk about the present and future: the latest in vaccine research, an article he’d read or a recent journal club topic. Dr. Haselby is in constant learning and doing mode.

A decade ago, Dr. Haselby announced his transition to emeritus clinician researcher. He has served in his emeritus role as the principal investigator (PI) for two Lyme disease vaccine cohort studies and a *Clostridium difficile* (C-diff) treatment and prevention trial. He was the PI on the Embrace study, a vaccination study for prevention of Invasive Extraintestinal Pathogenic *Escherichia coli* disease. He was also the sub-investigator on the “Invested” study, an influenza vaccine study comparing high-dose influenza vaccine to standard-dose vaccine investigating the time to first occurrence of death or cardiopulmonary hospitalization over multiple enrolling seasons.

When MCRI was approached to run concurrent cohorts for an important vaccine study, one in Weston and the other in Marshfield, Dr. Haselby routinely shuttled the 50-mile distance for a year. When approached to add a cohort in the second year on the Marshfield campus, he simply stated, “Let’s do it!” More studies continue to onboard in 2026 with Dr. Haselby at the helm.

More importantly, Dr. Haselby is a proud father and grandpa who relishes time with family. His son, Cyrus, also an accomplished physician, interned with the Integrated Research and Development Laboratory many years ago.

“Dr. Haselby is a friend and colleague. We thank him for his contributions to our past and our present,” said Jennifer Meece, PhD, MCRI executive director. “His talents are immeasurable and his kindness immense.”



HIGHLIGHTS

Heartland Study aims to understand pesticide exposure

The Midwest is the heart of U.S. agriculture, and the use of weed-killing herbicides is rising. People can be exposed to pesticides through food, drinking water, air and dust particles. Exposure to pesticides may impact public health, with links to cancer, reproductive problems and developmental delays. The Heartland Study will help explain how herbicide exposure may impact pregnancy complications and outcomes.



“The Heartland Study will help us understand the effects of herbicide exposures during pregnancy,” said Peter Johnson, MD, obstetrician-gynecologist at Marshfield Medical Center.

“With our patient population being mostly rural and agricultural, the participants we enroll will greatly contribute to the goals of the study.”

The study enrolled 202 participants from the Marshfield Clinic region in 2025, including 54 fathers, which is the highest number in the nation.

Study seeks improvement in cardiovascular care



Milind Shah, MD, interventional cardiologist at Marshfield Medical Center, began enrolling participants for the MAGICAL ISR Study, a U.S. Food and Drug Administration trial to evaluate the safety and

efficacy of the investigational MagicTouch™ sirolimus drug-coated balloon in the treatment of coronary drug-eluting stent in-stent restenosis. In-stent restenosis occurs when the coronary artery re-narrows within a previously placed drug-eluting stent.

Dr. Shah, along with sub-investigators Boban Mathew, MD, and Sudhakar Girotra, MD, have a goal to enroll up to 20 participants during the study, which is sponsored by Concept Medical Inc.

INTEGRATED RESEARCH AND DEVELOPMENT LABORATORY

Thriving with new challenges

The lab started an entirely new line of testing in taking on acute gastroenteritis (AGE). Acute gastroenteritis is an inflammation of the stomach and intestines, usually caused by viruses, bacteria or parasites, leading to diarrhea, vomiting, cramps and fever, often called stomach flu.

Pivoting to acute gastroenteritis was a major undertaking. The team needed to find the right test or analysis (assay) that would meet the needs of scientists and collaborators. They also had to define the performance characteristics of the assay. In addition, they trained new staff on workflows, set up laboratory spaces, and built reporting environments.

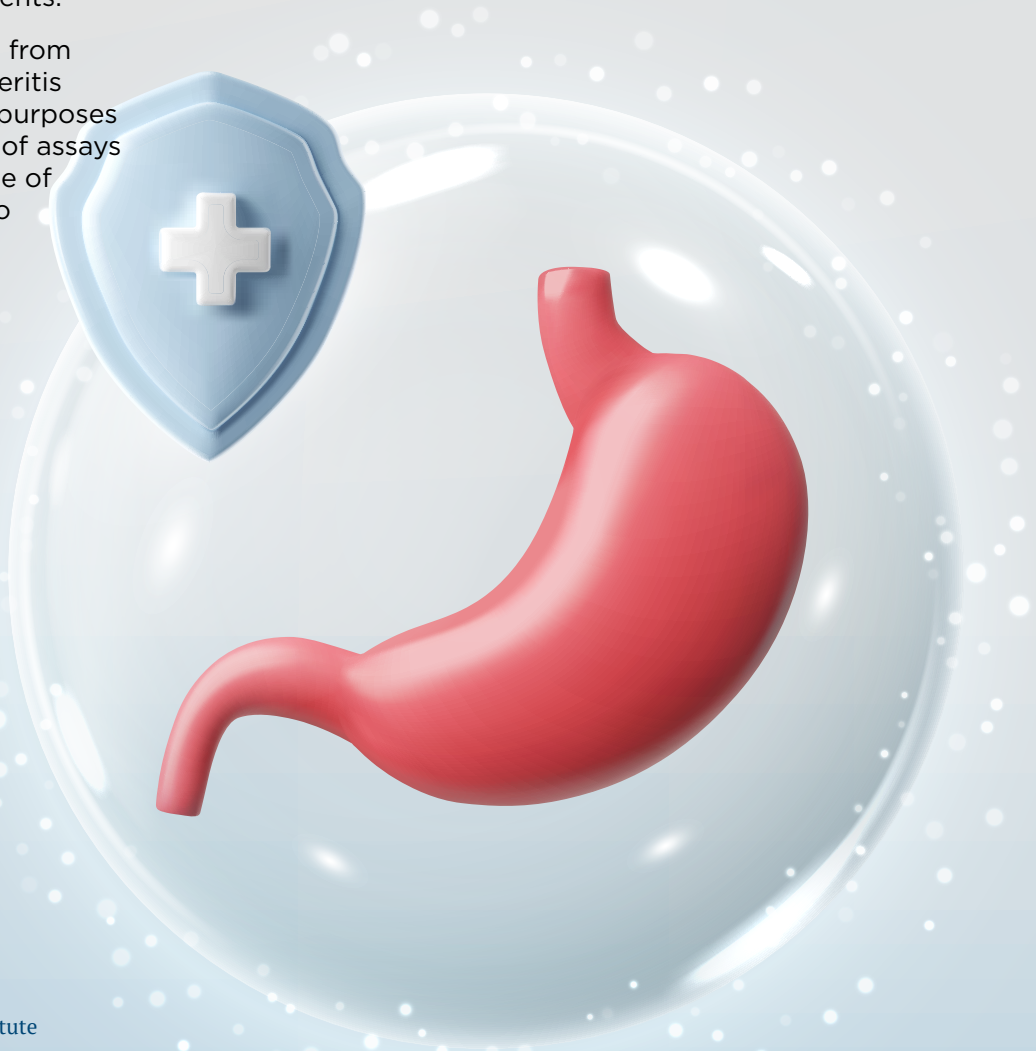
The lab has since moved from offering acute gastroenteritis test results for research purposes only to returning results of assays accredited by the College of American Pathologists to patients and partners under the direction of Sophie Arbefeville, MD, and Taylor Wahlig, PhD, in Marshfield Labs.

During 2025, IRDL supported two large industry-sponsored projects in the Center for Clinical Epidemiology and Population Health and two additional collaborative studies involving other health system and industry partners.

IRDL has tested over 2,500 samples for myriad viral and bacterial gastrointestinal pathogens, with norovirus among the most important.

Fortunately, IRDL is filled with talented innovators who embrace challenges. The IRDL team thrives on being nimble and agile while seeking new opportunities that are driven by the needs of our patients, our partners and national and global communities.

IRDL scientists and staff are eyeing their next innovations. Stay tuned!



HIGHLIGHTS

Sebold Fellowship honoree named

Retired microbiologist and pathologist, and current emeritus researcher Thomas Fritsche, MD, PhD, is the 2025 Gwen D. Sebold Fellowship recipient. The fellowship recognizes an outstanding medical researcher and supports their research. It began in 1988 in memory of Gwen D. Sebold, a former medical stenographer at Marshfield Clinic.

Dr. Fritsche is an internationally known expert in academic pathology and clinical microbiology with expertise in pre-clinical, clinical and post-marketing phase antimicrobial development. He has contributed substantially to understanding antimicrobial resistance in numerous medically important pathogens, including *E. coli*, enterococci, staphylococci and streptococci. In addition to researching antimicrobial resistance, Dr. Fritsche is well known in laboratory diagnostics.



Blastomycosis outbreak investigation published

As long-time partners with public health in studying blastomycosis outbreaks, the IRDL contributed the first findings of an investigation into the largest known blastomycosis outbreak, which happened at a paper mill in Escanaba, Michigan. The Morbidity and Mortality Weekly Report article showed the importance of collaboration of public health authorities with managers and workers to start rapid case detection and implement prevention measures. IRDL is working on additional publications focusing on the environmental sampling approach and lessons learned. Visit cdc.gov/mmwr/volumes/73/wr/mm735152a2.htm to read the article.

Examining Lyme disease surveillance practices

Anna Schotthoefer, PhD, led an MCRI team contributing to an article in the journal Emerging Infectious Diseases. The study, done with the Centers for Disease Control and Prevention, examined Lyme disease testing patterns in the Marshfield Clinic region. Results suggested that 6% to 15% of tests done each year are repeat positives, meaning that surveillance estimates based on laboratory reporting may be overestimating the number of new Lyme disease cases each year. Visit cdc.gov/eid/article/31/7/25-0009_article to learn more.

NATIONAL FARM MEDICINE CENTER

Building safer communities with farmers and firefighters

By Scott Heiberger, research communications manager

The National Farm Medicine Center’s innovative Rural Firefighters Delivering Agriculture Safety and Health (RF-DASH) program reached more people than ever in 2025.

The program welcomed its first full-time trainer with support from the CHS Foundation and the Upper Midwest Agricultural Safety and Health Center. Tim Zehnder, whose background combines farming, rescue and emergency preparedness, provided training events throughout the U.S. and helped implement the program on farms and ranches requesting assistance.

“It was an exciting year for the RF-DASH program,” said Casper Bendixsen, PhD, principal investigator of the project. “We have had so much interest in the training modules from around the country.”

Building upon research showing that rural emergency responders are highly trusted sources of safety information, RF-DASH trains and equips rural fire departments to advocate for emergency preparedness and hazard reduction. The RF-DASH team recently launched a monthly virtual Community of Practice meeting to build connections between RF-DASH trainers across North America.

In addition, RF-DASH rolled out its online course, which introduces firefighting and EMS personnel to the program, provides

instruction and discusses two technological tools (Farm MAPPER and SaferFarm.org). Those who complete the course will receive a certificate, which they can submit to their department requesting continuing education credit. The course is open to everyone at no cost at rfdash.org/courses/rf-dash-online-course/ through the RF-DASH website.

Online course development was funded through the Institute for Clinical and Translational Research at University of Wisconsin-Madison and supported by the Clinical and Translational Science Award program, through a NIH National Center for Advancing Translational Sciences grant. The RF-DASH program is funded through the Upper Midwest Agricultural Safety and Health Center by the National Institute for Occupational Safety and Health.

The RF-DASH team is focused on building custom grain harvesting, handling and storage modules for the program, concentrating in the U.S. grain belt.

In order to inquire about firefighter training or implementing the program on your farm or ranch, contact rfdash@marshfieldresearch.org. Visit rfdash.org/rf-dash-training/ for more information.

RF-DASH program by the numbers

- 10 years
- 17 states
- 5 Canadian provinces
- 260 first responders trained

How the National Farm Medicine Center supports agricultural safety and health

- Distributes free slow-moving vehicle signs to Wisconsin farmers in partnership with Rural Mutual Insurance Co., H&S Manufacturing and Nasonville Dairy
- Offers rebate incentives for farmers to retrofit old tractors with life-saving roll bars through the Wisconsin Rollover Protection Structure Rebate Program
- Trains emergency responders to safely handle agricultural hazards
- Provides skin cancer screenings at farmer-focused events
- Supports mental health initiatives in the farming community
- Supports AgInjuryNews.org, an online database of agricultural injury report

HIGHLIGHTS

Barbara Lee, PhD, earns top safety award



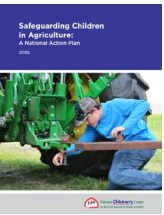
The International Society for Agricultural Safety and Health presented Barbara Lee, PhD, with the Maynard Coe Professional Achievement Award during its annual conference in Portland, Maine. Lee was awarded the society’s highest honor in recognition of her lifetime of achievement, deep commitment to professional excellence and transformative impact on the field.

“This is a really special award that I share with a lot of people,” Lee said. “I have had the good fortune of working with so many talented and passionate people, and together we have had a positive impact on childhood agricultural injury prevention.”

Recently, Lee transitioned from her full-time role to emeritus scientist. Lee was the first full-time employee of the National Farm Medicine Center in 1987.

Updated national plan guides safety of youth

The National Children’s Center for Rural and Agricultural Health and Safety published “Safeguarding Children in



Agriculture: An Updated National Action Plan.” The plan will influence research proposal requests and private sector funding of not-for-profit organizations.

“The ultimate goal is to ensure safe participation of youth in agriculture,” said Andrea Swenson, PhD, director of the National Children’s Center. “The plan emphasizes local input and strong partnerships in addressing the complexities of childhood agricultural injuries. This approach can help ensure solutions are comprehensive, evidence-based and tailored to the diverse needs of the nation’s agriculture communities.”

Skin cancer screenings for farmers

The National Farm Medicine Center partnered with Marshfield Clinic dermatology to provide skin cancer screenings during the Wisconsin Potato and Vegetable Growers Association conference in Stevens Point. Elliot Franczek, MD, and Rebecca Colwell, MD, screened 75 people. The screening received support from funds raised by the Auction of Champions. Each person received printed resources, sunscreen samples and other skin products to help keep their skin safe while working outside.





OFFICE OF RESEARCH COMPUTING AND ANALYTICS

REDCapCON brings global collaboration to Stevens Point

MCRI's research electronic data capture (REDCap) team is one of the best in the world, and their expertise helped bring the annual international conference to Wisconsin in 2025. For four days in September REDCapCON 2025 transformed Sentry World in Stevens Point into a hub of innovation and global collaboration. The event showcased the power of technology, research and shared purpose.

"Hosting this conference was a huge feather in the cap of our team," said Lynda Kubacki-Meyer, director of research IT and Technology Solutions at Sanford Health. "Congratulations to everyone involved in securing this opportunity to showcase our health system and research institute."

Highlights included the insightful keynote address by MCRI executive director Jennifer Meece, PhD, about how the institute leveraged REDCap for rapid development abilities during the COVID-19 pandemic. Through REDCap implementation, the Integrated Research & Development Lab was able to support large-scale testing efforts, processing more than two million samples at the height of the pandemic.

Dr. Paul Harris, creator of REDCap and director of the Vanderbilt University Office of Research Informatics, described it as "one of the most inspiring talks I've ever heard," underscoring the emotional and intellectual impact of Meece's message.

In addition to facilitating the conference, the ORCA delivered 12 presentations, including software engineer Krishna Upadhyay's demonstration of the ORCA self-scheduling module during the External Module Showcase. His presentation drew praise for its clarity and innovation, offering attendees a glimpse into the future of user-driven scheduling tools. Upadhyay also led a practical, engaging session on Vue.js, an open-source, progressive JavaScript framework for building user interfaces.

"REDCapCON is where data meets purpose and learning feels like celebration," said Keshave Kumar from Washington University.

Attendees shared stories of how REDCap has transformed their workflows, improved data integrity and empowered research teams around the world. The conference served not only as a learning opportunity but also as a celebration of the community's shared mission.

"REDCapCON 2025 was a resounding success. The future of research technology is brighter thanks to the innovation and collaboration showcased throughout the event," Kubacki-Meyer said.



REDCapCON had
315 attendees from
41 states
15 countries

REDCap is a web-based, secure application used to handle data collected with surveys and forms. Today more than 8,000 collaborating institutions use it worldwide.

HIGHLIGHTS

Major conversion of data infrastructure

The research analytics team completed a major conversion of the outdated Data Warehouse infrastructure to RedShift. At the same time, they continued to support analytical needs, maintain common data models and automate enrollment activities for high-enrolling, complex and revenue-generating studies. These studies may require near real-time enrollment at point of care, electronic consenting, lab tracking, initiation and tracking of study incentives and analytical analysis.

Billing expedited for clinical trials

ORCA implemented Advarra Clinical Research Process Content charge master, fully integrating with OnCore and Epic for clinical trials. Charges are applied with consistency and precision, reducing errors and ensuring compliance. This improves billing, reducing turnaround times and streamlining financial workflows for clinical research.

OFFICE OF RESEARCH AND SPONSORED PROGRAMS

Internship program celebrates 51 years

The Summer Research Internship Program (SRIP) presented work at the Research Symposium in August. SRIP is open to full- or part-time continuing college or university undergraduate and graduate students, including graduating seniors who have applied to graduate or medical school. The primary goal of the program is to provide a mentored, hands-on research experience for students considering a career in research.

Visit marshfieldresearch.org/srip/2025-students to watch the student presentations. Students worked with a research scientist on an independent project and contributed to all aspects of the research process.

“Interns gain valuable experience at MCRI by being immersed in research activities,” said Seth Langreck, SRIP program administrator. “A large part of the SRIP is taking feedback from past interns and integrating it. From that feedback we have added workshops from grant writing fundamentals to public speaking.”

The Summer Research Internship Program is supported by the Frank and Betty Koller Trusts and other donors and is celebrating 51 years of providing real-world experience for undergraduate and graduate students.



GIVING BACK

“We are fortunate to work with peers who value helping our local children stay warm and nourished,” said Krystal Boese, assistant manager of the Integrated Research and Development Laboratory. “When federal funding for support programs was paused this year, members of the Research Institute embraced the opportunity to donate food and hygiene items for all ages in our community.”

Donations in 2025

- \$1,325
- 918 food items
- 223 essential clothing items
- 37 warm clothing items
- 478 household and hygiene items
- More than 100 school supplies

SUPPORTED PROGRAMS

Keep Kids Warm

A clothing drive by Marshfield Area Community Foundation to provide warm outdoor gear.

Community Food and Hygiene Drive

A program from Soup or Socks, a food and clothing pantry, that supplements the food pantry with food and hygiene items.

Best First Day

Led by Soup or Socks, this program provides clothing to school-aged children.

Best Snow Day

A program from Soup or Socks that provides families with warm pajamas and outdoor gear.

Supplies 4 Success and Fresh Start 4 Kids

A program from Marshfield Area United Way that gives backpacks, school supplies and hygiene items to kids.

NOW Food Drive

A program by Marshfield Area United Way that provides children with healthy, ready-to-eat foods over the weekend.

SANFORD HEALTH FOUNDATION

Sanford Health Foundation in the Marshfield region connects businesses and individuals to opportunities to support MCRI through annual events, special campaigns and planned giving. The Foundation plays a vital role in research by providing essential funding and resources enabling scientists to pursue discoveries that improve lives.

Sold! Auction rallies support for healthier agricultural communities

By Scott Heiberger, research communications manager

Mix an elegant evening gala with the excitement of a livestock sale barn and you get the Auction of Champions. This tradition has raised more than \$6 million to support the National Farm Medicine Center’s safety and health programs, vital in our agricultural communities since 1982.

The 2025 auction raised a record-high \$342,000 from live and silent auction packages including sailing trips, whiskey tastings, vacation getaways, jewelry, artwork, sporting goods and utility task vehicles. Local businesses purchased thousands of dollars of champion livestock from 4H and FFA youth. The high-quality meat packages were also auctioned at the event, with proceeds going back to the

young exhibitors to support their college and career goals. This year’s Fund-A-Need effort raised \$80,000 to support the National Children’s Center for Rural and Agricultural Health and Safety research and programs.

The impact of the auction is made possible by many dedicated individuals and businesses. Miron Construction, Inc. continues its ongoing commitment to the auction as a Champion Sponsor. A special thank you goes to the sponsors, auction item donors and market animal donors for their generosity and commitment to the agricultural community.

A heartfelt tip-of-the-hat to Brad Guse, who served 10 incredibly successful years as Auction of Champions committee chair.

HIGHLIGHTS

Cruise for a Cause – \$175,750 raised

Founded by Dan Neve and his wife, Linda, Cruise for a Cause was born out of Linda’s own breast cancer journey. Dan travels the country in a Shelby Mustang to inspire hope and raise awareness and funding. His passion is fueling research that’s happening in our backyard and helping patients everywhere.

Golf for Research – nearly \$64,000 raised

Golf for Research, presented by Boldt and Solarus, helps advance cancer research and provides vital resources for improved cancer screening, diagnosis and treatment. In 2025, we were honored to be joined by many cancer survivors, including Ryan Dieringer who shared his story and celebrated 10 years strong since his diagnosis.

New Cancer Center in the Upper Peninsula – \$3 million capital campaign

Residents of Michigan’s Upper Peninsula now have access to enhanced treatment options close to home at Marshfield Medical Center-Dickinson Cancer Center. Because of the Foundation’s campaign and the community’s generosity, the new Cancer Center has specialized equipment, innovative technology, a patient-centered design and access to nine new clinical research trials.

Nursing scholar award winner named

Congratulations to Samantha Mathwich, RN, recipient of the sixth Mary Ann Wenzel Nursing Scholar award. Thanks to the generous support from Fritz and Tom Wenzel, this award is presented each year to an employee of Marshfield Clinic pursuing education in nursing.

Save the date
2026 Auction of Champions
Thursday, Sept. 17

Marshfield's 100-year contribution to the future of medicine

This article was originally posted Oct. 12, 2016, on the National Library of Medicine's "Circulating Now" blog. It was written by Rachel V. Stankowski, PhD, scientific research writer at Marshfield Clinic Research Institute, offering a view of Marshfield Clinic on its 100th anniversary.

The National Institutes of Health (NIH) and its National Library of Medicine (NLM) are widely recognized as representing the best of the best in biomedical research in the United States. Less well known is how the rise of the NIH is inextricably linked to a medical clinic started more than 100 years ago by six local physicians in rural Wisconsin.

Founded in 1916, the Marshfield Clinic was novel in its origin as one of the first group practices in a nation full of single-doctor offices. Over the last 100 years, Marshfield Clinic has grown into a premier multi-specialty treatment and research facility with more than 60 centers located throughout Wisconsin and Michigan's Upper Peninsula. Growth of both the Marshfield Clinic and NIH is due in no small part to the efforts of former Wisconsin Congressman Melvin Laird.

Moving from Omaha, Nebraska, to Marshfield, Wisconsin, with his family in the 1920s, future Congressman Laird found himself tended to and mentored by numerous physicians from the new Marshfield Clinic, including Drs. Stephen Epstein, Ben Lawton, Dean Emanuel,

George Magnin, Russell Lewis, and Stanley Custer. This mentorship ultimately instilled in Laird a deep sense of appreciation for frontiers in medical research. When Laird was elected to Congress in 1952, Dr. Epstein urged him toward a role on the Health, Education and Welfare Appropriations subcommittee. Though unglamorous, Laird saw in this committee an opportunity to make a real and lasting impact.

Meanwhile, the Honorable John Fogarty, a Democratic Congressman from Rhode Island, also found himself on the Health, Education and Welfare Appropriations subcommittee. Though seated across the aisle, Laird and Fogarty were fast allies. Laird helped to stoke a fire under Fogarty related to funding for medical research by bringing Fogarty back to Wisconsin for meetings with Marshfield Clinic physicians. After one such meeting, Laird and Fogarty carried the words of Dr. Lawton that would inspire their future work back to Congress: "The future of medicine without research is no future at all." Making good on their colleague's pronouncement, Marshfield Clinic researchers met with James Shannon, Director of the NIH, at the invitation of Laird

in 1958, which ultimately led to the first two NIH grants awarded to the Marshfield Clinic Research Foundation under the oversight of Drs. Epstein and Emanuel and Fritz Wenzel.

Over the next 15 years, Laird and Fogarty would catalyze an astounding increase in the amount of federal money dedicated to medical research. This led to the rise of the modern NIH, Centers for Disease Control, numerous regional cancer centers and the National Library of Medicine. Laird and Fogarty worked tirelessly to maintain a bipartisan partnership unheard of in 21st-century American politics. They campaigned for one another's reelection and crossed party lines not for personal or political advantage, but for the benefit of medical research. They promoted polio vaccination, smallpox eradication, and treatments for tuberculosis, cancer, mental illness, and a host of other diseases.

Traveling the world together in search of information and advice about the best use of federal resources for medical research, Laird and Fogarty routinely found themselves back at the Marshfield Clinic. For Laird, there was never any irony in the fact that a medical clinic in rural Wisconsin was the font of such wisdom. Even its creation in 1916 was radical at a time when a skeptical American Medical Association was calling these new group practices "Medical Soviets." Further growth of Marshfield Clinic, NIH, and other medical research and treatment facilities was due in no small part to the mutual admiration between Laird and the physicians he and Fogarty continued to consult in Marshfield.

The tenure of Laird and Fogarty ended suddenly in 1967 with the death of Fogarty and Laird's later appointment to serve as Secretary of Defense. This period is still regarded as the golden era for medical research funding. Laird was not finished, however, and continued to promote the training of military doctors, dentists, and nurses from within the Department of



Defense. Even in retirement, Laird began fundraising in earnest for the Laird Center for Medical Research, which opened on the campus of the Marshfield Clinic in 1997.

At 94, Laird continues to be an enthusiastic supporter of medical research and believes that future congressional support will be based primarily on two important issues. Namely, does the research reduce healthcare costs, and can the results be implemented in a timely fashion? As we embark on the next hundred years, remembering the maxim upon which growth of the Marshfield Clinic and NIH was based will serve us well: The future of medicine without research is no future at all.

Editor's note: Melvin Laird died Nov. 16, 2016, at age 94 – one month after this article was originally posted. The full article can be found at <https://circulatingnow.nlm.nih.gov/2016/10/12/marshfield-clinics-100-year-contribution-to-the-future-of-medicine/>

JOURNALS

Clinical Medicine & Research launches new website

The new site offers a modern look with mobile functionality, more responsive features and a refreshed logo. In 2025, Clinical Medicine & Research received more than 100 original articles, and after a rigorous peer review process, only 29% of submissions were accepted for publication. At the end of 2025, Clinical Medicine & Research had an H index of 64, an SJR of 0.358 and a two-year Cites per Doc of 1.254.



- The Clinical Medicine & Research team:**
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 - Rohit Sharma, MD, associate editor
 - Jamiu Busari, MD, PhD, associate editor
 - Sherry Salzman Scott, senior editor

Clinical Medicine & Research is a peer-reviewed, indexed medical research journal owned and published by Marshfield Clinic. Visit clinmedres.org/ to read the journal.

Journal of Agromedicine sees record downloads

The Journal of Agromedicine has been edited since 2004 by scientists and staff of the National Farm Medicine Center. In 2025, the journal had its highest number of article downloads: 140,000. The journal’s audience includes rural health care providers, agricultural health and safety practitioners, academic researchers, government agencies and policy makers.



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The journal relies on an international panel of associate editors to guide papers through peer review and advise on journal strategy. Visit tandfonline.com/journals/wagr20 to learn more.

Future of Rural Medicine and Research

In 2025, Marshfield Clinic Health System and Sanford Health completed a merger and are now one nonprofit integrated health system. As the largest rural health system in the U.S., we are dedicated to transforming health care through cutting-edge science. Marshfield Clinic Research Institute looks to the future with excitement as it connects with new partners and forges new collaborations. We also reflect on the legacy that shaped us. Rooted in a tradition of research, science and medicine, we move forward with a renewed promise to strengthen the lives of our patients and communities.





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