



FIRST LOOK FORUM APRIL 17, 2025

Featuring cutting-edge technologies from Marquette University, Medical College of Wisconsin, UW-Milwaukee, and Versiti.

- ✓ Learn about emerging technologies.
- ✓ Connect with business leaders, investors, & entrepreneurs.
- ✓ Help bring these innovations to market.
- ✓ Engage with visionary researchers.

3:30-4:15 pm – Arrival & Registration Check-in

4:15-4:30 pm - Welcome & Opening Remarks

4:30-5:00 pm - Presentations, Part I

5:00-5:15 pm - Remarks from Institution Leaders

- **Kimo Ah Yun**, PhD, President, Marquette University
- **Mark Mone**, PhD, Chancellor, UW-Milwaukee
- **John R. Raymond**, Sr., MD, President and CEO, MCW
- **Michael W. Deininger**, MD, PhD, Executive Vice President and Chief Scientific Officer, Versiti

5:15-5:45 pm – Presentations, Part II

5:45-7:00 pm – Table Discussions & Networking

 **Lemonis Center for Student Success, Marquette University**
1415 W Wisconsin Ave. Milwaukee, WI 53233



The Technology: BonePro



BonePro increases the capacity of stem cells to turn into bone, reducing p21 gene



RSVP [here](#)



*Jonathan Marchant,
PhD, MA, Marcus
Professor & Chair, Cell
Biology, Neurobiology
& Anatomy, MCW*

1. Novel Drugs for Treating Parasitic Flatworm Infections

Scientists in Dr. Marchant's lab have discovered two new compounds that could help fight schistosomiasis, a serious parasitic disease affecting millions of people and animals. These compounds work in a similar way to praziquantel, the current treatment, by targeting a key protein in the parasite. If successful, they could provide a new way to eliminate the disease, especially if praziquantel becomes less effective. Researchers are now studying these compounds further to see how well they work and if they could lead to better treatments for parasitic infections.



*Habib Rahman, PhD,
Professor and Chair,
Mechanical
Engineering, UW-
Milwaukee, Founder &
CEO RoboHeal, UWM*

2. Swift Robotic Manipulator Mount

Roboheal's quick-change system enables easy attachment and removal of robotic arms, saving time and improving efficiency. Originally developed for a wheelchair-mounted assistive robot, it is also compatible with similar robotic arms. This system enhances flexibility and ease of use in real-world applications. Designed, tested, and built through extensive research, it ensures reliable performance and improves the adaptability of robotic arms for various tasks.



*Walter Bialkowski,
PhD Associate
Professor of Practice,
Computer Science,
Marquette University*

3. Data Science to Optimize Hunger Relief

Despite decades of increasingly complex efforts to end food insecurity, 1 in 5 households with children in the United States still face this challenge. This initiative brings together food insecurity experts and data scientists to develop scalable, data-driven solutions. Focused on applied learning, the research leverages student-driven innovation and community partnerships, including Feeding America. This presentation will showcase two transformative technologies, MilkBuddy and Palette, which are optimizing regional food distribution and have the potential to significantly scale hunger relief efforts nationwide.



*Christian Kastrup,
Senior Investigator &
Program Leader,
Versiti Blood
Research Institute &
Professor of Surgery*

4. Long-Acting RNA Therapies for Blood Disorders

RNA therapy, a type of gene therapy, holds the potential to cure nearly all diseases. Breakthroughs in RNA therapy led to the development of the COVID-19 vaccines and form the basis of most gene editing therapies. The future of this technology hinges on advances in delivering RNA to specific diseased tissues and extending the duration of its action. The Kastrup Lab at the Versiti Blood Research Institute, along with its spin-out companies, is at the forefront of developing current and next-generation RNA therapies.



*Xiaohua Peng, PhD,
Associate Professor of
Chemistry &
Biochemistry, UWM*



*Taufeeque Ali, PhD
Postdoctoral Scholar,
Northwestern University
(UWM) & Founders of
SynXT Therapeutics*



*Tavinder Ark, PhD,
Associate Professor,
Data Science Institute,
MCW*

5. Precision Oncology Therapy Specifically Targets Tumors

A new cancer treatment pairs special tumor-targeting drugs with vitamin C to destroy cancer cells while leaving healthy cells unharmed. Vitamin C increases stress inside tumors, helping activate the drugs and trigger cancer cell death. Unlike traditional treatments that use multiple drugs and can harm healthy tissue, this approach relies on vitamin C, which is safe and well-tolerated, to improve precision and reduce side effects. In studies with mice, the therapy significantly reduced tumors without causing harm and showed promise against aggressive cancers like triple-negative breast cancer and glioblastoma.

6. Simulating a “Night on Call” for Graduating Medical Students

Night-on-Call (NOC) is a medical student training platform that evaluates near-graduates' readiness to interact with healthcare teams and perform essential patient care activities. Currently used in 7+ U.S. medical schools, NOC provides a 360° evaluation through feedback from trained actors portraying nurses, doctors, and patients. Integrated within NOC is an AI-powered tool, FeedbackAssist, that grades clinical notes, analyzes performance, and provides structured, timely feedback. Together, NOC and FeedbackAssist deliver actionable insights to improve clinical competency and ensure graduates are prepared for residency.



*Krassimira Hristova,
PhD, Professor,
Biological Sciences,
Marquette University*



*Kyle Leistikow, PhD,
Research Manager - CORE
Innovation, Microbial
Discovery Group,
Marquette University*



*William Perry, BSE,
Biomedical Engineering,
UWM, Founder & CEO,
PerryMedical*

7. New Probiotic to Weaken Multidrug-Resistant Infections

Antibiotic resistance is one of the greatest challenges in modern medicine, and *Staphylococcus aureus* is one of the deadliest threats. Our research has identified a probiotic-based solution to disrupt *S. aureus* biofilms, weaken this pathogen's ability to cause disease, and limit the evolution of antibiotic resistance. This breakthrough technology represents a powerful, natural tool to complement existing treatments to help combat one of medicine's most pressing challenges, offering new hope for both human and animal health.

8. Moving Plus Sized Patients Quickly and Safely

25% of EMTs suffer from a career ending back injury within the first 4 years of their career. Money lost to compensation insurance and training new employees from this is a significant drain on emergency medical providers. A product that reduces back injuries in EMTs is bound to not only keep people employed but also save a lot of money. After working with a wide range of EMTs and the UWM Prototyping Center we believe we have such a product.