



8733 W Watertown Plank Road,
PO Box 2178, Milwaukee, WI 53201-2178

BRIghtLights

March 2019



The Blood Research Institute is now Versiti Blood Research Institute

A fusion of scientific curiosity and precision medicine, BloodCenter of Wisconsin is now Versiti.

Ultimately, the meaning of our work is found in the lives we save and the people we serve. To that end, Versiti unifies what is now Versiti Blood Center of Wisconsin and its blood services, Diagnostic Laboratories, Medical Sciences Institute, and The Blood Research Institute with community blood centers and services in Indiana, Michigan and Illinois. We are also proud to announce that beginning July 1, Versiti Blood Center of Ohio will provide blood products and specialty lab services to The Ohio State University Wexner Medical Center—a nationally recognized hospital system. Together, we can better serve people's urgent need for healthcare, strengthen and restore the health of our communities, and continue to conduct ground breaking research.

As a non-profit, we remain committed to our mission of service. For more than 70 years, we've been home



to the world-renowned Blood Research Institute, which attracts leading blood health researchers from around the world who are passionate about advancing personalized medicine. Our people are driven by a relentless curiosity. Our focus on research in areas like transfusion medicine, vascular biology, cellular therapy, immunology and gylcomics to unlock the healing potential of blood is stronger than ever. As Versiti, we will continue to make discoveries that contribute to better patient care. We are a beacon of hope, care and innovation in the communities we call home.

Investigators Develop New Life-Saving Treatment for Heparin-Induced Thrombocytopenia

Heparin-induced thrombocytopenia (HIT) is a devastating condition that 10 million American patients are exposed to annually. It is caused by an immune reaction to the drug heparin, a common blood thinner often given to patients undergoing heart surgeries. HIT attacks platelets, causing abnormal blood clotting that can lead to organ failure, stroke and even death.

The Blood Research Institute's Anand Padmanabhan, MD, PhD, and Richard Aster, MD, have developed an innovative, groundbreaking new treatment for HIT patients called IVIg (intravenous immunoglobulin) that calms platelets and reverses HIT's deadly clotting

symptoms. IVIg has recently saved the lives of several patients across the United States, providing the first evidence worldwide that this innovative treatment can effectively save those with a fatal blood disease.

"This treatment, based on years of pioneering research conducted by the Blood Research Institute, is the first convincing demonstration of the efficacy of IVIg in HIT patients anywhere in the world," said Dr. Padmanabhan. "Our hope is that this leads to further advances in HIT diagnoses and treatment that saves the lives of patients in the United States and beyond."

BRIghtLights

BRIghtLights is a quarterly newsletter published by the Versiti Blood Research Institute Foundation. Interested in learning more? Please contact the Foundation office: 414-937-6799.

Innovations in Research

Blood Research Institute Senior Investigator Receives Health Care Heroes, Lifetime Achievement Awards

In December 2018, Blood Research Institute Senior Investigator Richard Aster, MD, was recognized as a Health Care Hero and was awarded a Lifetime Achievement Award by BizTimes Media in Milwaukee. The annual award honors the accomplishments of people and organizations who make a positive impact on healthcare.

Dr. Aster has been continuously recognized as a scientific leader in hematology and transfusion medicine during his 50+ year career. "He is a giant in the field of transfusion medicine and hematology," said Gilbert White, executive vice president of research at Versiti, and director of the Blood Research Institute. "From fundamental discoveries in his research lab, to being an early advocate for tissue typing transplantation and unrelated bone marrow donation, as well as his leadership in founding organizations such as Blood Centers of America, the Great Lakes Hemophilia

Foundation, the Blood Research Institute, the BloodCenter Research Foundation and GTI diagnostics, he has an enormous impact in his field."

Dr. Aster holds one of the longest-running, fully funded National Institutes of Health research grants, which he received in 1969 and is still active today. In past years, his research focused on pathogenesis, diagnosis and treatment of immune conditions that affect blood cells, especially those involving platelets. Currently, he focuses on drug-induced immune thrombocytopenia.



Blood Research Institute Associate Investigator Nan Zhu, PhD, Wins Ziegler Award

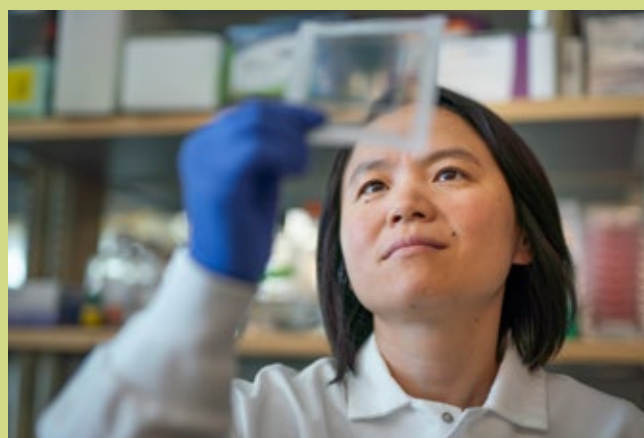
Versiti Blood Center of Wisconsin's Research Foundation awarded the R. Douglas Ziegler Innovation Award to Nan Zhu, PhD, for advancing research to identify therapeutic targets and develop targeted therapy for patients diagnosed with acute myeloid leukemia (AML).

Dr. Zhu, an associate investigator at the Blood Research Institute, is studying epigenetic regulation in normal and malignant hematopoiesis, with emphasis on the role of such regulation in hematopoietic stem cells (HSC), as well as leukemia stem cells (LSC). Through this \$50,000 award, she hopes to identify novel regulatory elements within human AML genomes that govern leukemia development, with the ultimate goal of development of new therapies for AML based on her findings.

The R. Douglas Ziegler Innovation Award was founded in memory of the late R. Douglas Ziegler, whose decades of dedication to Versiti, including his service on its board of directors, helped the organization achieve new medical advancements and carry forth its life-saving

mission. As a fitting tribute, his family established the fund to foster and accelerate cutting-edge research at the Blood Research Institute.

"Innovation is at the core of everything we do. This tribute not only drives us forward, but also honors somebody who was so important to this organization," says Gilbert White, MD, Chief Scientific Officer at the Blood Research Institute.



Karin Hoffmeister, MD, Awarded \$5M NIH Glycosciences Grant

The Blood Research Institute is among four academic and research centers that will receive approximately \$20 million over the next five years from the National Heart, Lung and Blood Institute, part of the National Institutes of Health (NIH), to launch a new national Career and Development Consortium for Excellence in Glycosciences. As a part of the consortium, the Blood Research Institute will receive approximately \$5 million for its own Program for Career Development in Glycosciences, bringing together Versiti, Medical College of Wisconsin, Virginia Commonwealth University and Roswell Park Cancer Institute.

Glycans (simple and complex carbohydrates) are one of the four basic building blocks for all life forms on earth. Mounting evidence suggests that glycans play an important role in human development, health and disease, and should be taken into account when new therapeutics are designed and tested.

"Translational medicine fosters cross-functional collaborations between researchers and clinicians to facilitate precision-driven treatments for individualized therapy," said Blood Research Institute Senior Investigator Karin Hoffmeister, MD. "Scientists and clinicians successfully applied this approach to DNA and proteins; however, the science of glycans (carbohydrates) has received little attention. Hence, glycoscience and translational aspects of glycosciences lag far behind other disciplines."

Versiti's program will recruit and train more than 12 early-career glycoscientists over the next five years, with a focus dedicated to recruiting clinician scientists. Trainees will have access to leading-edge glycan research technologies at each of the participating institutions, and opportunities to rotate in collaborating laboratories, network with visiting scholars and participate in local, national and international symposia.

With its newly established Translational GlycOmics Program at the Blood Research Institute, Versiti brings new and established expertise in glycobiology to the new consortium, supporting and educating glycoscientists so that they can better understand the functional diversity and specificity of glycans.



Community Beacon of Hope

John Stollenwerk, Stollenwerk Family Foundation

Versiti's Blood Research Institute received a \$1 million gift from the

Stollenwerk Family Foundation, based in Mequon, WI. This gift supports the creation of a Stem Cell and Cellular Therapy Institute, which is targeted for completion over the next three years, and for which the BRI is seeking a total of \$10.4 million in philanthropic support.

"An investment in the Blood Research Institute is one of the best investments I can make in this community," said John Stollenwerk, Sr. "The extraordinary work of the researchers who make up the Stem Cell and Cellular Therapy Institute will ensure we are at the forefront of cellular therapy—which is the future of health and medicine. With the crucial

support of the philanthropic community, we will transform healthcare globally."

This gift enabled the Blood Research Institute to employ new researcher John Pulikkan, PhD, as part of the Stem Cell and Cellular Therapy Institute. The BRI plans to recruit six additional researchers as a result of future philanthropic gifts, all of whom will become part of the Stem Cell and Cellular Therapy Institute.

Stollenwerk has served on the board of the Blood Research Institute Foundation for more than 20 years. A longtime community philanthropist, he created the Stollenwerk Family Foundation in 2009 to support medical research, education and the arts.