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Blood Research Institute

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BRIghtLights

BRIghtLights is a quarterly newsletter published by the Versiti Blood Research Institute Foundation.
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BRIghtLights
Shining a light on research and discovery

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Innovations in Research

Understanding why heart pumps and catheters sometimes cause blood clots

As a hematologist with Versiti Blood Research Institute and Medical Sciences Institute, and a practicing physician at Froedtert and the Medical College of Wisconsin, Lisa Baumann Kreuziger, MD, MS, studies device-related thrombosis, particularly what causes patients with catheters and heart pumps to develop blood clots. "My focus is venous thrombosis. I see patients with blood clots, do research to understand how to best treat patients with blood clots, and set up systems of care for the hospital so other doctors can prevent and treat clots," she said.

She is also a founding member of VENUS, the Venous thromboEmbolism Network U.S., a collaborative research network organized under the Hemostasis & Thrombosis Research Society. VENUS's goal is to implement multi-institutional, investigator-initiated clinical trials and research projects that focus on thrombotic disorders. In addition to managing the executive committee, Dr. Baumann Kreuziger also leads the device-related thrombosis committee. "We are working on a multicenter study of patients with catheter-related thrombosis, which occurs in 5-10% of patients who have catheters to treat their cancer," she said.

Dr. Baumann Kreuziger feels that Versiti Blood Research Institute, as a collaborative institution, is the best place for her to perform her research. "Being a clinician scientist gives you a perspective about what questions are important to patients and their health. Basic science researchers focus on the molecular mechanisms of disease and understanding biology," she said. "The ability to do clinical research and collaborate on basic research was the reason I came here."

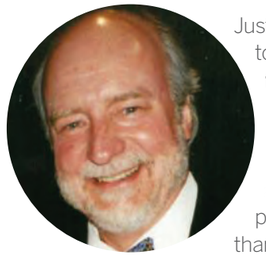
In addition to her research and work as a physician, Dr. Baumann Kreuziger is hard at work encouraging physicians interested in studying benign hematology. "Versiti is very involved with the American Society of Hematology and the Hemostasis and Thrombosis Research Society to get trainees interested in hemostasis and thrombosis," she said. Versiti's critical mass of expertise and collaborative culture of knowledge-sharing increases the possibility for new, life-saving discoveries that will change lives across the country and around the world.

Lisa Baumann Kreuziger, MD, MS, studies device-related thrombosis, particularly what causes patients with catheters and heart pumps to develop blood clots.

Community Beacon of Hope

Spotlighting organizations and individuals in our community who go above and beyond in their support of Versiti Blood Research Institute.

Justin Abbott



Justin Abbott's passion for Versiti's mission began in 2011 when his father, Roger Abbott, pictured right, was diagnosed with a rare blood disease: myelodysplastic syndrome (MDS). Roger's disease was discovered and diagnosed through the efforts of Versiti, and he received weekly blood transfusions throughout five years. Roger's doctors said that these blood transfusions extended his life by five years. "Those extra years created memories and experiences that our family can't quantify," Justin said.

Justin's commitment to support Versiti led him to establish the **Roger Abbott Foundation for Blood Disease Research**, the proceeds of which support research at Versiti Blood Research Institute. "We want to keep Roger's impact on others and his legacy alive," Justin said. "We can't think of a more perfect way to do that and honor my father than through this foundation."

Thank you, Justin, for your ongoing passion for and support of Versiti Blood Research Institute!

How healthy blood vessels make our hearts tick a beat

In her lab at Versiti Blood Research Institute, Investigator Magdalena Chrzanowska, PhD, FAHA, is attempting to answer one not-so-basic question: "We're trying to understand exactly how human bodies work," she said. As a basic researcher, her laboratory focuses on using disease models to help answer questions related to the human body. "We want to understand exactly how things work, and we do that using cells," she said.

Dr. Chrzanowska studies the function and malfunction of blood vessels and the endothelial cells that line them. When blood vessels and endothelium function properly, they aid in the basic processes that ensure human health, like regulating blood pressure, forming and oxygenating tissues, and healing wounds. But when endothelium is not healthy and isn't able to sense the flow of blood as it usually does, or is exposed to damaging factors, patients are at risk for diseases like hypertension and cardiovascular disease. "The health of blood vessels impacts all aspects of human life," Dr. Chrzanowska said.

Understanding the processes that cause cells to function is important to human health, but investigators still don't know how they all work together. Dr. Chrzanowska believes that endothelial cells and their molecules are the key to understanding cardiovascular disease, the leading cause of death for men and women of most racial and ethnic groups in the U.S. "If we understand what goes wrong at the molecular level, we can prevent it," she said. "Once we diagnose a defect or damage to endothelium, we can try to repair it by promoting the activity of the factors that enhance endothelial function."

Planned Giving: Leaving a Legacy

The Versiti Legacy Society celebrates our most dedicated and generous donors who invest in supporting our research and improving patient health and outcomes. By making a planned gift to the Versiti Legacy Society, you will help Versiti Blood Research Institute continue to invest in innovation and discovery through research.

Versiti Legacy Society accepts gifts from a will or trust, beneficiary designations, life insurance, appreciated securities and real estate, personal property, and even the gift of your home. To learn more, visit versiti.org/legacysociety.

Implementing better treatments for patients with bleeding disorders

Versiti Comprehensive Center for Bleeding Disorders (CCBD) Medical Director Lynn Malec, MD, MSc, wants to change the way patients with blood disorders receive treatment. Many already turn to the CCBD for their checkups, regular factor infusions and supportive care. But Dr. Malec wants to make it easier than ever for these patients to receive the comprehensive care they need without having to make extra trips to the hospital for tests and treatments.

Her current research focuses on patients with blood disorders who experience bleeding in their index joints, or elbows, knees and ankles. Without proper treatment, these patients can develop arthritis and loss of range of motion. "We can have teenage patients who, if they don't have good bleeding control, can experience loss of function," Dr. Malec said. "In some cases, these young people need to consider joint replacement or joint surgery." The trouble is, hardware wears out and young patients who opt for joint surgery or replacement will likely need it again later in life.

Dr. Malec is hoping to combat this by implementing point-of-care ultrasounds for patients with bleeding and clotting disorders. These ultrasounds will give hematologists a better look at patients' joints over time and help avoid expensive tests and treatments like MRIs, radiation and joint replacements. Thanks to these ultrasounds and other novel treatments Dr. Malec and her colleagues are studying, they are already making an impact on patients' lives. "In the hemophilia and rare bleeding disorder population, I can follow patients for their entire lives," she said. "As people have had access to therapies, we have a hemophilia population that is aging in a way that a generation or two ago didn't."

You Can Make a Difference

To make a gift or learn more, contact: **Versiti Blood Research Institute Foundation Office** at **414-937-6799**

Upcoming Events – Imagine Gala

Friday, Sept. 11, 2020• The Wisconsin Club

To request an invitation, please contact Qiana Bolden at qbolden@versiti.org.