Welcome to our fifth edition of BRIGHTLIGHTS!

Our quarterly newsletter brings you information about how your support is helping us reach our goal to end blood disease as we know it. This edition highlights current research regarding T-cell regulation in the fight against cancer and introduces you to our Director of Development Melinda Lanham.

Getting Your T-Cells Positioned to Fight Cancer

Cancer treatments have traditionally involved chemotherapy and radiation. Today, immune-therapy sits on the cutting-edge in the battle against cancer. This is an alternative to chemotherapy, using your own white cells to fight cancer off.

Dr. Matt Riese is an immuno-oncology researcher who specializes in this space, and looks for new ways to fight cancer using the immune system instead of chemotherapy.

“The greatest time to be working in immuno-oncology in the history of the field,” he explains. “And it likely is just in its infancy.”

Dr. Riese’s work involves working with CAR-T cells. “We are contributing to ongoing work to directly engineer T cells to bind to and kill cancer cells,” he says. “CAR-T cells have been a major breakthrough in the field of immuno-oncology, but they don’t yet work outside of B cell leukemias and lymphomas.”

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This discovery means a major breakthrough in understanding B cell biology. It could help us in the fight to cure certain blood cancers.”

“We have identified a second B cell signal pathway that controls the early development of B cells,” Dr. Wang said. “The pathway could further help us unlock the mysteries of B cell deficiencies and malignancy – which could help us in the fight to cure certain blood cancers.”

Identification of a major pathway underlying the regulation of normal B cell development provides new clues to the pathogenesis of immunodeficiency, autoimmune and malignancy disorders, and holds great promise in providing new targets for more effective therapies.

Dr. Wang has been investigating B cell signal pathways for the past 20 years. This discovery means a major breakthrough in understanding B cell biology.

Blood Center Research Foundation Funds | How you can help make success possible

Discovering and Innovating Fund
Your gift here seeds innovation, technology, and foundational research that leads to discovering answers to what causes diseases of the blood.

Improving Care and Sharing Fund
Your gift here supports clinically-based research and medical trials, and allows us to share what we learn for improving patient care and outcomes with other health care organizations.

Leading and Training Fund
Your gift here assists fellows, professional development, visiting scholars, and our program aimed at educating and training the next generation of researchers and clinical experts.

Society of Hematology Awards BRI Researcher Nan Zhu $150,000 Grant to Study Genetics

Congratulations to Blood Research Institute Associate Investigator Nan Zhu, PhD, for receiving a Scholar Award from the American Society of Hematology (ASH) in the junior faculty category. Dr. Zhu will receive $150,000 over the next two-to-three years for her research on genetic changes that cause human blood cancers, particularly acute forms of leukemia.

“The Scholar Award is one of ASH’s most prestigious awards and it is presented to hematologists in the U.S. and Canada who conduct foundational, translational or clinical research.”

"To be recognized in the hematology community is a great source of pride," Dr. Zhu said of her award. "The BloodCenter has a history of leadership in this area, and the award is further validation of my work. To know that I am contributing to advancements is a tremendous honor." Dr. Zhu received recognition of her award last month at the 59th Annual ASH meeting in Atlanta.

Your Support of BloodCenter is Linked to BloodCenter Employees Who Chose to Walk the Walk with Record Amount of Sharing Program Donations

BloodCenter of Wisconsin employees put their money where their research is. In 2017 and pledged a record $135,995 to support the BloodCenter Research Foundation, BloodCenter Organ and Tissue, and the United Way in 2018. Your financial gifts, coupled with our employees’, helps more than 170 researchers keep their labs and research on the cutting edge of global science, providing our support to treat and cure all diseases of the blood.

Our research is focused on immune therapies, solid cell anemia, hemophilia and other bleeding disorders, as well as glycobiology – studying the sugar properties of blood.

BloodCenter Organ and Tissue is a federally-funded organ procurement organization that supports the transplant community in eastern Wisconsin by recovering organs for transplant. It also educates the public and professionals about the need for organ and tissue donors.

Versiti President and CEO Chris Miskel voiced his appreciation for the employees who chose to give back to the institution they make work. “I am humbled by your generosity and your contributions to ensuring a future for research and critical community programs.”

Employees gave through our Employee Sharing Program and through generous gifts pledged at our 70th Anniversary Imagine Gala. Your donations also are welcome. You can make them at: contribute.bcw.edu/donatenow

BRI Development Director Sees Giving as a Building Block of Life
Melinda Lanham joined the Blood Research Institute as our Director of Development in April of 2016. Her relationship-focused approach for the BloodCenter Research Foundation has included extensive one-on-one outreach efforts in addition to a 70th Anniversary Imagine Gala event that welcomed 275 friends of the BRI to the Boerner Botanical Gardens.

“Versiti’s passion in life involves giving back to others both personally and professionally. She engages with donors to help them express their values through giving, and she enjoys spreading the word about our world-class blood research.”

“When it comes to raising gifts to support blood research, it takes a village. The philanthropy team is very passionate about our mission. We are a dynamic group of individuals with unique talents and skills,” she said. “Our ultimate goal is to support the work of our researchers to allow them to impact the lives of others.”

Melinda is a leader on the philanthropy team for outreach, and assists with fundraising and stewardship events. Additionally, she develops fundraising appeals, and helps with community awareness events.

Melinda is looking forward to the continued development of research in the areas of immunology and the fight against cancer in 2018. One of Melinda’s favorite quotes: “We make a living by what we get. We make a life by what we give.” – Winston S. Churchill

The Power Of One | How You Can Get Involved
When you buy, please smile!
Your AmazonSmile purchases support the BloodCenter of Wisconsin when you use the following link: http://smile.amazon.com/ch/39-0807235.

Your financial support can make one transfusion possible and/or can help keep a lab in operation for a year. Every donation is a powerful step toward eradicating blood disease as we know it.

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At Versiti, we define research as “that which gives hope, brings light to our promise, and enhances both current and future generations.”

http://smile.amazon.com/characteristics/bcw/
Donor Support Helps BRI Researcher Find New B Cell Pathway

The main function of a B cell is to produce a broad range of antibodies to protect you against infection. These cells are tightly regulated by a signaling network which emanates from various receptors. There is still a lot to be learned and understood when it comes to the molecular mechanism underlying the signal regulation of B cell development and function.

Senior Investigator, and the John B. and Judith A. Gardetto chair for Cancer Research, Demin Wang studies this signal regulation and has discovered a novel and major signal transduction pathway that controls early B cell development.

His work recently was chronicled in Nature Communications, a prominent journal published by the Nature Publishing Group.

“We have identified a second B cell signal pathway that controls the early development of B cells,” Dr. Wang said. “The pathway could further help us unlock the mysteries of B cell deficiencies and malignancy – which could help us in the fight to cure certain blood cancers.”

Identification of a major pathway underlying the regulation of normal B cell development provides new clues to the pathogenesis of immunodeficiency, autoimmune and malignancy disorders, and holds great promise for future treatments.

“By being recognized in the hematology community is a great source of pride,” Dr. Zhu said of her award. “The BloodCenter has a history of leadership in this area, and the award is further validation of my work. To know that I am contributing to advancements is a tremendous honor.”

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Melinda’s passion in life involves giving back to others both personally and professionally. She engages with donors to help them express their values through giving, and she enjoys spreading the word about our world-class blood research. “When it comes to raising gifts to support blood research, it takes a village. The philanthropy team is very passionate about our mission. We are a dynamic group of individuals with unique talents and skills,” she said. “Our ultimate goal is to support the work of our researchers to allow them to impact the lives of others.”

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The BloodCenter is a world-renowned research institute dedicated to improving the lives of people with bleeding disorders. Every day, we conduct cutting-edge research to improve patient care and save lives.

The dictionary also defines research as “that which gives hope, answers to what causes diseases of the blood, discovers new treatments, and enhances both current and future generations.”

At Versiti, we define research as “that which gives hope, brings a promise, and enhances both current and future generations.”

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Use your power today!

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One Discovery

“Your gifts are critical in creating new hope for people with bleeding disorders.”

Versiti, Inc. is a 501(c)(3) non-profit organization with federal tax ID 39-0807235. To the extent permitted by law, contributions to Versiti are deductible as charitable contributions for federal income tax purposes.
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Dr. Wang also noted that "B cell development signals are important to lead to the next discovery. It only takes one cell to lead to the next life-saving technique.

Researchers keep their labs and research on the cutting edge of global science, supported by your financial gifts. Your support can make one transfusion possible and lead to the next discovery. It only takes one cell to lead to the next life-saving technique.

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T cells identify and eliminate cells that look unusual due to being infected with a virus or becoming cancerous. Once a tumor has formed, it creates an environment that inhibits the T-cell’s ability to turn “on.” Dr. Riese works on helping T cells “turn on” inside of tumors.

“My work looks at how to make T cells less inhibited by factors that keep them in an ‘off state,’” Dr. Riese says. “T cells can be easily turned ‘off’ because the immune system has safety measures that try to prevent autoimmunity. Tumors take advantage of these safety measures to prevent the T cells from eliminating them.”

When asked to place his research on a development spectrum of 0-10, Dr. Riese says his work is about at a 7. “We expect to be targeting intracellular pathways that facilitate T cell inhibition within the next few years. While physicians can prescribe medications that block individual inhibitory proteins on T cells, our approach will simultaneously block multiple inhibitory proteins.”

Dr. Riese’s work also involves working with CAR-T cells. “We are contributing to ongoing work to directly engineer T cells to bind to and kill cancer cells,” he says. “CAR-T cells have been a major breakthrough in the field of immuno-oncology, but they don’t yet work outside of B cell leukemias and lymphomas.”

Dr. Riese joined the BRI about five years ago. He spends 25% of his time in clinic treating patients with prostate, bladder, or kidney cancer and 75% of his time conducting research.

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Get Even More Versiti.org!

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BRIghtLights Vol. 2, Issue 1, Winter 2018

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**Take A Tour Where We Seek Cures**

Our research work is done primarily in labs located at the Milwaukee Regional Medical Center located near Highway 41 and Watertown Plank Road in Wauwatosa. Feel free to contact us if you’d like to see your Philanthropy at work. Please know that we’d love to give you a tour where we seek the cure. To schedule a tour, contact Ben Merens at 414-937-3829 or bennet.merens@bcw.edu.

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