NIH Awards Bloodworks $12M Grant to Advance Transfusion Safety
Focus on Immunobiology of Transfusion

SEATTLE – The National Heart, Lung and Blood Institute of the National Institutes of Health (NIH) has awarded a grant of $12 million to James C. Zimring, MD, PhD of Bloodworks Research Institute to advance research investigations into the biology of immune system responses to transfusion, and approaches that will improve transfusion safety and efficacy.

The grant supports a five-year, nationwide collaboration between Bloodworks, Yale University, University of Virginia and Emory University in a concentrated effort to unravel different mechanisms of immune system response to transfusion – which can be a major obstacle to therapy. While immune responses can affect anyone receiving transfusion, their greatest impact is on frequently-transfused patients with certain cancers, and bone marrow diseases like sickle cell anemia. In severe cases, immune reactions can be so widespread that it becomes impossible to find compatible blood to transfuse to a patient, depriving them of life-saving therapy. Immune responses can also impact pregnant women whose immune systems attack the fetus and, in extreme cases, cause the death of unborn babies.

In exploring different immune system mechanisms, the collaborative studies will focus on the most promising new and innovative therapies to mitigate or prevent immune responses that adversely impact transfusions.

Dr. Krystalyn Hudson, PhD who collaborates with Dr. Zimring at Bloodworks Research was also part of the award. The NIH grant will build on the foundation of preliminary data collected using sophisticated technology available through generous support from the MJ Murdock Charitable Trust and the Ellen Browning Scripps Foundation.
Dr. Zimring is a scientist recognized worldwide in the field of biochemical and immunological changes in blood cells. He joined the Research Institute in 2012 as director of transfusion medicine research. In 2016, he was appointed Chief Scientific Officer (CSO) and director of the research institute – which comprises multiple teams led by independent academic researchers, along with core facilities and labs. He has been a leader in strengthening relationships and collaboration between researchers, and with other leading medical research organizations.

Dr. Zimring holds multiple grants from the National Institutes of Health (NIH), is a mentor to young scientists and a prolific researcher -- with more than 100 articles published in scientific journals. He is also a Professor in the Department of Laboratory Medicine and in the Division of Hematology, Department of Medicine, at the UW School of Medicine.

Founded more than 70 years ago, Bloodworks Research Institute (formerly Puget Sound Blood Center Research Institute) is dedicated to comprehensive and cross-disciplinary research into blood – performing leading-edge research in blood biology, safe transfusions, extended blood storage and the treatment of bleeding and blood disorders.

**About BloodworksNW**

Bloodworks (formerly Puget Sound Blood Center) is backed by 70 years of Northwest history and 230,000 donors. It is local, nonprofit, independent, volunteer-supported and community-based. A recognized leader in transfusion medicine, Bloodworks serves patients in more than 90 hospitals in Washington, Oregon and Alaska — partnering closely with local hospitals to deliver the highest level of patient care. Comprehensive services include blood components, complex cross-matching, specialized lab services for organ transplants, care for patients with bleeding and blood disorders, and collection of cord blood stem cells for cancer treatment. Bloodworks Research Institute performs leading-edge research in blood biology, transfusion medicine, blood storage and treatment of bleeding disorders. Patients with traumatic injuries, undergoing surgeries or organ transplantation, or receiving treatment for cancer and blood disorders all depend on our services, expertise, laboratories and research. For more information, visit bloodworksnw.org