## Dr. Kolb Receives 5-year \$10.5M NIH COBRE Phase II Grant

Written by Vicky L. Funanage, PhD Executive Director, Nemours Biomedical Research



Please join me in congratulating Andy Kolb, MD, Director of the Nemours Center for Cancer and Blood Disorders, for securing a 5-year **\$10.5M** NIH Center of Biomedical Research Excellence (COBRE) Phase II grant entitled *The Delaware Comprehensive Sickle Cell Research Center*, which focuses on translational, clinical, and psychosocial research in sickle cell disease. The COBRE Phase I grant under the original leadership of **Marie** 

Stuart, MD, with Dr. Kolb as Director of the Clinical and Data Management Core, Heesun Newlin as Program Administrator, and Robin Miller, MD, and Steven Reader, PhD, as Nemours Project Leads, was instrumental in building infrastructure for sickle cell disease research at Nemours and produced an active research program with impressive, newly acquired research funding and the combination of two health networks. Nemours and Christiana Care, to advance sickle cell treatment and research. Under Dr. Kolb's continued leadership, the COBRE Phase II will develop a multidisciplinary Center that will strengthen early career investigator mentoring while further advancing biomedical research infrastructure for sickle cell disease research. The Center will bring investigators, mentors, and advisors together from Nemours Children's Health, Christiana Care, University of Delaware, and Delaware State University, while integrating supportive resources and infrastructure provided by the Delaware IDeA network. The specific aims of the grant are: 1) Develop and oversee expert mentoring of early career investigators in research methods, research program development, and academic independence across an array of disciplines involved in the study of sickle cell disease; 2) Establish a diverse and inclusive grants program to promote the development of the next generation of sickle cell researchers in Delaware; and 3) Maintain administrative oversight that ensures strategic planning and development, compliance with all local and federal reporting requirements, and effective stewardship of resources to lead to the sustainable success of the Delaware Sickle Cell Research Center. The center structure will include an Administrative Core under the expert management of Dr. Kolb and Heesun Newlin with support from the Executive Committee—Anne

Kazak, PhD, Eric Kmiec, PhD (Christiana Care), and Drs. Miller and Kolb-and Internal Advisory Committee-Robert Akins, PhD, Vicky Funanage, PhD, Claudine Jurkovitz, MD (Christiana Care), Thomas Shaffer, PhD, Cherese Winstead, PhD (Delaware State University), and Cathy Wu, PhD (University of Delaware); a Clinical Research and Data Informatics Core, co-led by Robin Miller, MD, and Erin Crowgey, PhD; and four target investigator projects: Project 1 - Increasing Documentation and Disclosure of Sickle Cell Trait Carrier Status: An Implementation Science Approach, led by Corinna Schultz, MD, with primary mentor, Melissa Alderfer, PhD; Project 2 - Empowering Adolescents and Young Adults with Sickle Cell Disease, led by Aimee Hildenbrand, PhD, with primary mentor, Lori Crosby, PsyD (Cincinnati Children's); Project 3 - Chronic Pain and Self-efficacy—A Peer-Mediated Group Intervention for Adults with Sickle Cell Disease, led by Stephanie Guarino, MD, with primary mentor, Sophie Lanzkron, MD (Johns Hopkins); and Project 4 – The Eye as a Window into Sickle Cell Disease Morbidity. led by Jing Jin. MD, with primary mentor, Melinda Duncan, PhD (University of Delaware).

As part of the COBRE Phase II grant, Dr. Kolb has also proposed a multidisciplinary and systematic approach to study the influence of stigma and racism within communities and the health care system on the efficacy of both routine health maintenance and targeted interventions in patients with sickle cell disease. The four target projects are beautifully interwoven to evaluate biomarkers for severe sickle cell disease comorbidities (Project 4), engage patients and community to take stock of barriers to routine care (Projects 1, 2, and 3), and explore tools to improve self-efficacy among health care providers (Project 1) and patients (Projects 1, 2, and 3), while simultaneously confronting how racism impacts the health of children and young adults (Projects 1, 2, and 3). The NIH Review Panel stated, "This is an excellent application with clinically significant and novel research goals, strong core directors and mentors, and an impressive core of junior investigators with novel and clinically important projects. The direction of the planned research is meaningful in addressing stigma and involving stakeholders in the research development, implementation, and evaluation of outcomes." Impressively, this grant marks the second major NIH infrastructure award to Dr. Kolb in that he is also PI of the Nemours NCI Community Oncology Research Program (NCORP), one of only two pediatric NCORPs in the country. As a superb physician, researcher, educator, and thought leader, Dr. Kolb enhances Nemours' reputation in multiple ways while advancing our stature as a preeminent leader in children's health and health care.