Laboratory focus

Dr. King is a pediatric hematologist and oncology specialist at St. Louis Children’s Hospital who makes her home in occupational therapy. The laboratory studies children with chronic illness, specifically those with sickle cell disease (SCD) or brain tumors. Children in both populations experience cognitive deficits that affect academic achievement. Topics of the lab include implementation of evidence-based care, early intervention, cognitive rehabilitation, transition from pediatric to adult health care, and quality of life for brain tumor survivors and individuals with SCD. In addition, Dr. King currently directs the Heartland Sickle Cell Disease Network, a partnership with SCD care providers and community organizations to improve overall care and quality of life for patients with SCD in a four-state region that includes Missouri, Iowa, Kansas and Nebraska.

Questions explored in laboratory

1. How can we improve implementation of evidence-based care for children with SCD?
2. How can we improve implementation of evidence-based survivorship care for survivors of cancer?
3. What are the educational needs of adolescents with SCD as they transition from pediatric to adult health care and to independent living, and how can we best meet those needs?
4. What role does the environment of children with SCD play in their development in relation to the disease itself?
   
What is the best method of early intervention and parenting education to improve cognitive and academic outcomes for young children with SCD?

Contributions to rehabilitation science

For the past 10 years, Dr. King has investigated factors that influence cognitive and educational outcomes of students with SCD and has contributed to assessments and interventions to improve educational outcomes of this vulnerable population. Dr. King has also been a site investigator on interventional trials to study the effect of chronic blood transfusions and hydroxyurea on reducing central nervous system injury and improving functional outcomes in patients with SCD. In future studies, Dr. King will continue to evaluate cognitive outcomes of children who undergo stem cell transplant.

Current and recent funding

Title: Heartland/Southwest Sickle Cell Disease Network
Principal Investigator: Allison King, MD, PhD
Funding Source: U1EMC27865 Health Resources & Services Administration (HRSA)
Project Period: 9/1/14-8/31/21
Total Award: $4,659,424

Title: The implementation of cognitive screening and educational support to improve outcomes of adolescents and young adults with sickle cell disease: from clinic to the community and back
Principal Investigator: Allison King, MD, PhD
Funding Source: U01HL133994 NIH - NHLBI
Project Period: 8/5/16-6/30/22
Total Award: $4,321,826

Title: Impacts of the ACA dependent care provision on young adults with cancer
Principal Investigator: Kim Johnson, MPH, PhD
Funding Source: WU IHP, Center for Health Economics & Policy Pilot Program
Project Period: 6/1/17-5/31/18

Representative publications


Allison King, MD, PhD
Child Health and Education Laboratory

Title
Associate Professor of Occupational Therapy, Medicine, Pediatrics, Surgery (Prevention and Control) and Education

Program in Occupational Therapy Faculty Mentors