Introduction:
Research has established a clear connection between abuse and neglect of children and a variety of health problems, including cancer, heart disease, stroke, diabetes, skeletal fractures, COPD, obesity, and premature death. Likewise, links exist between adverse childhood experiences and negative social/behavioral outcomes such as smoking, lower economic status, and academic difficulties. Interdisciplinary and integrative research on the mechanisms involved in the effects of childhood adversity on health and development is urgently needed to address childhood health disparities.

Definition:
In 1998, the landmark Adverse Childhood Experiences (ACEs) study was published by the Centers for Disease Control and Prevention. The study documented a significant link between childhood adversity and a wide array of physical and mental health conditions in thousands of patients. Subsequent research has shown that in addition to emotional and cognitive impairment, physical impacts result from the body’s attempt to adapt to harmful conditions of adversity.

Currently at OSU:
In 2016, Oklahoma State University received a Centers of Biomedical Research Excellence (CoBRE) grant from the National Institutes of Health to establish the Center for Integrative Research on Childhood Adversity (CIRCA) at OSU and OSU-CHS.
Existing OSU core research teams are in place to support CIRCA on both the Tulsa and Stillwater campuses. To further strengthen CIRCA, OSU has well-established research programs in data analytics, complex study design, translational research, community research, public health and developmental psychology.

**Potential:**

CIRCA is the nation’s first interdisciplinary center focused on understanding and mitigating the effects of childhood adversity on health. The long-term goal of CIRCA is the development of more effective and sustainable prevention and intervention strategies to interrupt the cycle of generational trauma and toxic stress. Achieving these goals promotes and enhances the mission of Oklahoma State University as a land-grant institution dedicated to using research knowledge to improve the lives of the citizens of the state and the nation. These efforts will also bring increased visibility to OSU as an influential national research leader. As CIRCA matures, faculty from a host of disciplines will contribute to the center’s research capacity.

**Conclusion:**

Interdisciplinary and integrative research on the mechanisms involved in the effects of childhood adversity on health and development is urgently needed to mitigate current and future health disparities as well as intergenerational transmission of poverty. CIRCA, the first research center of its kind in the US, will develop and study interventions for children and adolescents at risk for negative outcomes associated with adverse experiences.

For more information, contact the OSU Vice President for Research at vpr@okstate.edu or 405-744-6501.