

# SDSU researchers develop an assessment tool to identify birth defects

January 16 2012

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(Medical Xpress) -- Researchers with the National Children's Study at South Dakota State University, in collaboration with Dr. H. Eugene Hoyme, chief academic officer at Sanford Health and president and senior scientist for Sanford Research/University of South Dakota, are working to develop a standardized assessment tool that would be used to identify birth defects in infants. An evaluation model of this type would have a significant impact on the study of human genetics and birth defects.

One of the main goals of the NCS is to better understand the interaction of family history and the environment during pregnancy. Much of the data collected by the NCS will require long-term follow-up before results are available. However, data about birth defects, particularly those affecting the morphology, or anatomy of the unborn baby, provide an opportunity for more immediate results.

Current methods of assessing [birth defects](#) require expertise in human morphology, the study of an organism's form and structure, as well as embryology, the study of an organism's formation and early development. As a result of this project, the NCS hopes this standardized tool will be available for more general use by both clinicians and research staff.

"Providing leadership in pediatric health and research is a key priority for Sanford Health, and I look forward to collaborating with the SDSU research team on this important national study," said Hoyme, who has

led extensive research initiatives in fetal alcohol spectrum disorders and pediatric genetic and malformation syndromes.

Other entities working on the project are the Universities of Utah, California Irvine, California San Diego and the Mississippi Medical Center.

#### About the National Children's Study

The NCS, the largest long-term study of children's health ever conducted in the U.S., will include 100,000 children from before birth to age 21. The Study will look at how children's health is affected by a number of factors, including their family health history; the air and water where they live, learn and play; as well as the food they eat. The Study will provide information that may help improve the health and development of children for generations to come.

South Dakota State University is managing the NCS in Brookings County, South Dakota, and Yellow Medicine, Pipestone and Lincoln Counties, in Minnesota.

The Study is led by the Eunice Kennedy Shriver National Institute of Child Health and Human Development within the National Institutes of Health in collaboration with a consortium of federal government partners including the National Institute of Environmental Health Sciences of the NIH, the Centers for Disease Control and Prevention and the Environmental Protection Agency.

**More information:** [sdsu.NationalChildrensStudy.gov](https://sdsu.NationalChildrensStudy.gov)

Provided by South Dakota State University

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