

# 5-State Alliance for Child Development Research (5-STAR) at Oklahoma State University



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## Study Goals and Objectives

Planning for the HEALthy Brain and Child Development (HBCD) Study by contributing to the design and protocol considerations for a future large-scale multi-site research study to:

- Prospectively examine human brain, cognitive, behavioral, social and emotional development of children prenatally through ages 9-10
- Determine the impact of maternal pre and postnatal substance use on short- and long-term development of children

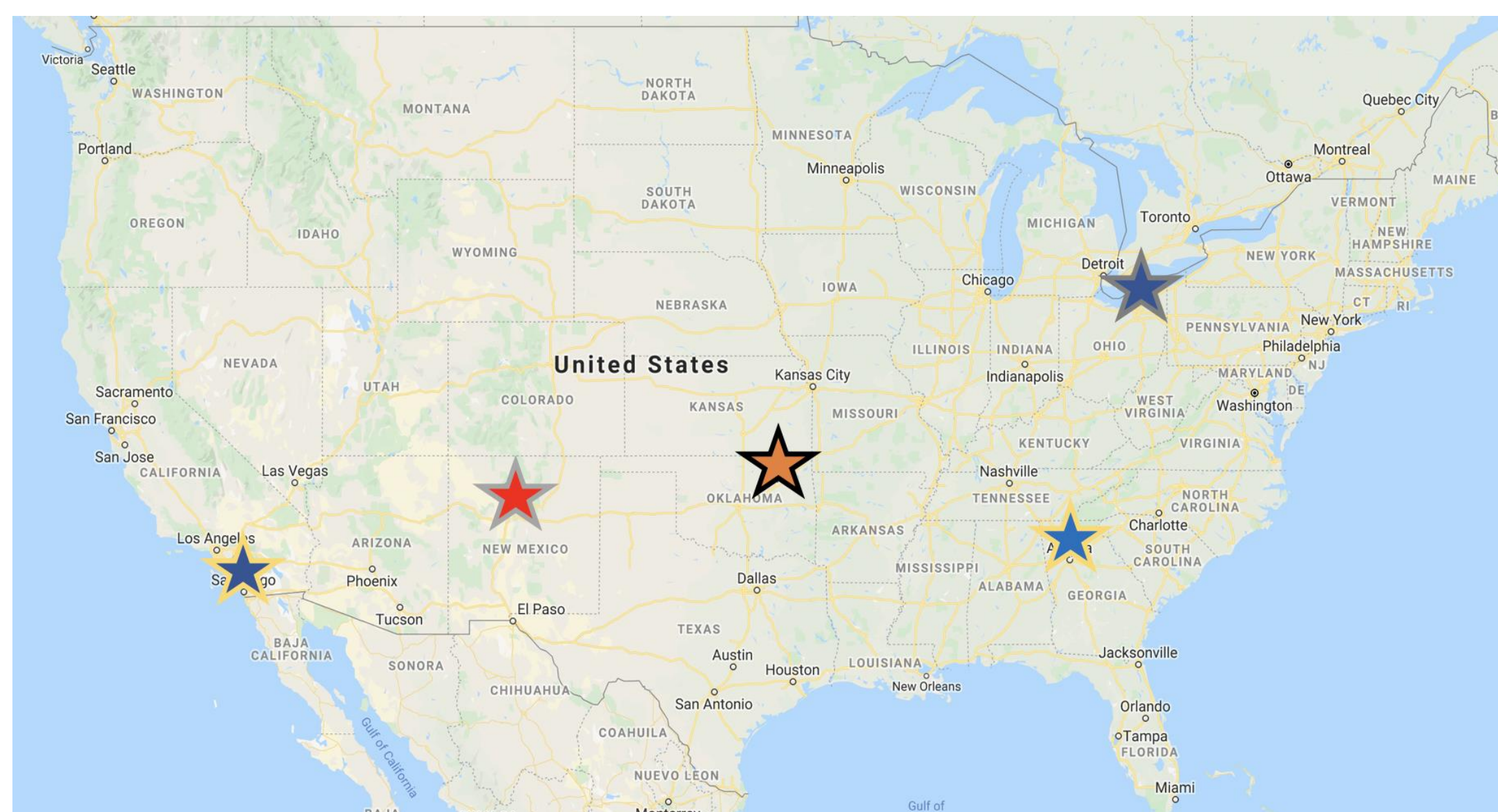
## Methods

This Planning Study links investigators from five collaborating institutions (see Figure 1) who have complementary expertise and experience in areas essential to designing the future study. Planning activities will be accomplished through a coordinated set of Working Groups assigned to work collaboratively to:

- Design a sampling and recruitment strategy
- Identify strategies to address challenges to ethical recruitment and retention of vulnerable populations
- Develop and test a common protocol for neuroimaging, infant and child assessments, exposure assessment, and integration of novel technologies.

In addition, the Oklahoma site is unique because:

- National Center for Wellness and Recovery
- Access to Native American populations
- Center on Integrative Research on Childhood Adversity
- Collaboration with Laureate Institute for Brain Research ABCD site



**Figure 1. 5-STAR Sites**

- UC San Diego
- University of New Mexico
- Oklahoma State University
- Case Western Reserve
- Emory University

## Outcomes, Scientific and Public Health Implications

Required elements for a successful longitudinal study in a future Phase II which will inform:

- The range and magnitude of outcomes that may be associated with prenatal opioid and other substance use;
- Contribute to a better understanding of the range of normal brain development through childhood.

Public health implications of the results of this study are far-reaching and will inform best practices across a broad range of domains.