

The GAPPS Repository

Overview of Benefits

- Creates a much-needed resource for researchers exploring the causes of preterm labor and stillbirth
- Supports research in genetics, proteomics, biology, epidemiology, translational development, pathophysiology, ethics/social justice, and healthcare delivery
- Provides a new resource to inspire technological innovations for improving pregnancy outcomes (e.g., new diagnostics, therapeutics, and prevention)

Background and Purpose of Collection System

The GAPPS Repository is a coordinated system for collecting, processing, banking and sharing data and specimens from diverse populations of pregnant women. This information will drive discovery science research and lead to the development and delivery of innovative solutions in the field of maternal, newborn and child health.

These high quality data and prenatal specimens will be collected throughout pregnancy and postpartum period. These specimens will be linked to the phenotypic data, enabling the study of multiple factors at different points throughout pregnancy—necessary for predicting adverse outcomes and their relation to gestational age. The GAPPS Repository also provides a resource for studies aimed at understanding the fetal origins of adult disease, both acute and chronic.

Shared Research Resource

Data and specimens will be stored at the Seattle Children's Research Institute and be available to researchers upon review and approval by the GAPPS Utilization Committee. Most other specimen collections are not standardized or are collected to answer a specific research question, and have limited value for unrelated or comparative studies. GAPPS' standardized collection of prenatal specimens and phenotypic data will enable broader research usage. All sites will follow GAPPS' standard operating procedures during collection and processing.

Network of Collection Sites

GAPPS is currently collaborating with five Washington hospitals, or collection sites, to launch a network that will serve as a long-term preterm birth and stillbirth research resource, providing standardized prospective collection to study a large, diverse population. These pilot sites will utilize GAPPS' standard operating procedures. Once collection processes are refined, GAPPS will help train and build in-country research capacity.

These hospitals serve 16,000 births, which is 20% of all Washington births. Collection sites were recruited because of their high preterm birth rates and racially, ethnically, and socioeconomically diverse populations.

Deaconess Medical Center, Spokane • Kadlec Medical Center, Richland • Swedish Medical Center, Seattle • University of Washington Medical Center, Seattle • Yakima Valley Memorial Hospital, Yakima

