

Study aims to measure impact of genes vs. environment during fetal development

A recent study led by A*STAR's Singapore Institute for Clinical Sciences (SICS) found that genetics as well as the environment in the womb play important roles in the development of the baby. The effort by the international team of scientists and clinicians is the world's first attempt to discover how genetic and environmental factors affect the human epigenome. The results have fundamental implications for how epigenetic studies will be conducted in the future and for our understanding of how the mother's nutrition and lifestyle may have long-lasting effects on the health of her children.

In this study, samples of umbilical cord tissue were taken from 237 individuals in the GUSTO Birth Cohort Study and their epigenetic profiles were examined. While genetic differences alone accounted for 25% of epigenetic variation, up to 75% could be attributed to interaction between genetic differences and prenatal environments. This means that both prenatal and genetic factors closely related.

Read the full, original story: [Study: Genetics as well as environment in womb play important roles in development of baby](#)