Epigenetic age measures are often used as accurate indicators of biological age. Nonetheless, individuals age at varied rates and times between person-to-person, causing a difference between this biological age and the chronological age of an individual. This difference, known as epigenetic age acceleration, has been illustrated to predict a vast range of health outcomes [1].

In the context of pregnancies, older chronological maternal age is correlated with increased rates of adverse birth outcomes, including decreased birth weight, length, head circumference, and body fat [2]. Furthermore, there are studies that indicate prenatal maternal telomere length, a marker of cellular age, to be associated with an increased likelihood of adverse birth outcomes [3, 4]. There is, however, minimal study in a large, socioeconomically diverse population that tests the relationship between prenatal maternal epigenetic age acceleration and birth outcomes.

The purpose of this paper is to conduct an analysis of maternal epigenetic age acceleration measured during pregnancies and birth outcomes in collaboration with the Cebu Longitudinal Health and Nutrition Survey (CLHNS), a cohort following a large, diverse sample of women and their offspring in Cebu, Philippines for over 35 years [5]. In particular, the analysis was conducted on the pregnancies of index female young adults and their children between 2009 and 2011. **\*add sentences later about results?\***

1. Ryan, C.P., *"Epigenetic clocks": Theory and applications in human biology.* Am J Hum Biol, 2021. **33**(3): p. e23488.

2. Fuchs, F., et al., *Effect of maternal age on the risk of preterm birth: A large cohort study.* PLoS One, 2018. **13**(1): p. e0191002.

3. Akkad, A., et al., *Telomere length in small-for-gestational-age babies.* BJOG, 2006. **113**(3): p. 318-23.

4. Hanna, C.W., et al., *Telomere length and reproductive aging.* Hum Reprod, 2009. **24**(5): p. 1206-11.

5. Adair, L.S., et al., *Cohort profile: the Cebu longitudinal health and nutrition survey.* Int J Epidemiol, 2011. **40**(3): p. 619-25.