

Morningside Graduate School of Biomedical Sciences

## Morningside Graduate School of Biomedical Sciences Masters in Clinical Investigation Program

Announces the MSCI Thesis Defense of

## LAUREN ORR, DO

## The Impact of Race on Prenatal Detection of Small for Gestational Age Infants

Thursday, December 23, 2021 at 10 a.m. Via Zoom Meeting

**Objective**: To examine differences in the antenatal detection rate of small for gestational age (SGA) infants amongst race-ethnicity groups and determine if perinatal outcomes differ in antenatally detected versus undetected SGA infants according to race-ethnicity.

<u>Methods</u>: A retrospective cohort study was conducted at a single tertiary care center that evaluated all deliveries of SGA infants >23 weeks gestation between January 2016-January 2020. Race and ethnicity were self-reported and categorized as non-Hispanic White, non-Hispanic Black, Hispanic, or Asian. Multifetal gestations, fetuses with major anomalies or genetic syndromes, and those with prior SGA pregnancy were excluded. Medical charts of those eligible were reviewed. The primary outcome was analyzed using multiple variable logistic regression, the secondary outcome was analyzed using multiple variable logistic regression.

**<u>Results</u>**: A total of 526 childbearing persons satisfied study inclusion criteria. The predominant race-ethnicity group was non-Hispanic White who comprised 50% of the study population. Antenatal detection of SGA occurred in 38% of the study population. Detection rates did not differ significantly according to race-ethnicity after adjusting for confounders. Analysis did not identify any significant differences in perinatal outcomes when comparing antenatally detected versus undetected SGA according to race-ethnicity.

<u>Conclusions</u>: Antenatal detection may not be the primary solution to improving racial and ethnic disparities amongst SGA infants. Additional investigation to identify, address and improve the disparities of perinatal medicine is necessary to provide more equitable care. Additionally, further work to investigate the barriers to antenatal detection of SGA is warranted as an avenue for improving perinatal outcomes.

Mentor Anthony Nunes, PhD **Dissertation Exam Committee** Tiffany A. Moore Simas, MD, MPH, MEd (Chair) Heidi Leftwich, PhD