Foundation for SMFM 2019 Garite Mini-Sabbatical Grant

"Contribution of Antenatal Maternal Stress to Biologic Markers in Placental Tissue Linked to Preterm Labor: An Evaluation of Health Disparities Utilizing Everyday Discrimination Scale"

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The major aim of this project was to demonstrate a physiologic link between psychological stress as illustrated via Edinburgh Postnatal Depression Scale (EPDS) exposure in pregnancy and modulation of the biologic inflammatory mechanisms that may contribute to preterm labor by examining the placental tissues for pro-inflammatory cytokines in patients with elevated antenatal EPDS compared to women with normal scores reported throughout pregnancy.



Through the Foundation for SMFM's Garite Mini-Sabbatical Grant, I was able to establish a relationship with Dr. Brittany Chamber's and the California Preterm Birth Initiative for this ongoing project. This grant has allowed me to understand both the necessity and the challenges of having translational research projects that bridge the gap between clinical research as well as basic science, while simultaneously including

community involvement to allow for pertinent initiatives that can immediately engage, inform, and affect the community.



As a group we were able to complete our secondary aim to evaluate whether the EPDS scoring system is sufficient for evaluating depression and related mood disorders secondary to economic and/or racial biases, which allowed us to utilize a factor analysis to create an Obstetric Discrimination Scale, that may be used alongside the EPDS.

Our studies demonstrated an important tool for identification of mothers who may need additional support during pregnancy secondary to discriminatory practices. Additionally, development of an Obstetric Discrimination Scale would allow for an objective tool to directly measure pregnancy outcomes, maternal morbidity and mortality in relation to perceived bias and racism.



Our research has been submitted as an abstract for the 2021 SMFM Annual Meeting, and Dr. Chambers and I are currently working on the manuscript for AJOG submission.

I look forward to continuing working within this area of pregnancy, with the goal of developing this tool as well as other projects that have great

impact on maternal health and that may influence and guide policy changes within our community.