

## Body Composition Research & Pregnancy

- Pregnancy weight gain is linked to pregnancy outcomes for maternal & child health.
- Previous research does not take into account the pattern of weight gain or specific components of weight gain.
- We are examining how fat mass, muscle and tissue change throughout pregnancy in order to better understand how changes influence maternal and infant health.
- Weight gain includes both fat and lean tissue, such as bone, muscle, and mineral content.
- Our work may help to establish clinical practice guidelines and personalized guidance for gestational weight gain and nutrition.

## Magnetic Resonance Imaging (MRI)

- MRI, magnetic resonance imaging, is the only accurate method that can be used during pregnancy to get detailed information on body composition, including adipose tissue, skeletal muscle, and organ mass.
- To get an accurate assessment of body composition changes over time, we need to take several MRI assessments throughout the course of pregnancy.
- Though no published studies to date have used MRI to estimate changes in maternal body composition during pregnancy. Ongoing research at other institutions serves as the foundation for our current research.
- The American College of Obstetricians and Gynecologists recommends the use of MRI for imaging during pregnancy as compared to x-ray.
- There are no known risks to the use of MRI at low field strengths.

