

# ASU SCHOOL OF LIFE SCIENCES

Special Seminar



## Ben Callahan

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**Date:** Monday, Mar. 14

**Time:** 4-5 p.m.

**Place:** LSE 244

## The microbiome of pregnancy and preterm birth in high-resolution

The human microbiome play an important role in health, and previous work suggests that it may be especially important for mother and fetus during pregnancy. Using a case-control cohort of 40 women, we characterized weekly variation in the vaginal, gut, and oral microbiota during and after pregnancy. We found that an altered vaginal microbial community was associated with preterm birth, suggesting that pregnancy outcomes might be predicted by features of the microbiota early in gestation. As part of this study, we developed a new method that eschews OTUs and instead infers sample composition from amplicon sequencing data at high-resolution. This method, DADA2, provides a more accurate and more detailed picture of environmental microbial communities than was previously possible, including the human microbiome of pregnancy.

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