**College Student Microbiome Results Section Outline**

1. One of the major results of this study was that individuals show a great deal of temporal variation in their microbiome, and this variation is a personalized feature.
2. The palm and skin communities showed the most variation in microbiome community structure among all individuals in the study.
3. There is no time decay relationship between bacterial communities.
4. Does the between sample diversity for week 1 of the college student microbiome project differ from the other weeks of the study?

1. **procrustes analysis** 1.forehead , tongue, palm, and gut- week 1 versus weeks 2 - 11

2. **anosim** forehead, tongue, palm, and gut - week 1 versus weeks 2 - 11

**II.** When looking at antibiotic disturbance, it was observed that within individuals , the largest shifts in microbial community membership corresponded with the period of time that antibiotics were taken.

Due to the inherent variation within the microbiome of an individual, other disturbances such as menstruation, and sickness did not have a significant shift in microbial community membership across individuals.

a**. Antibiotics**

1.**forehead -** within individual unifrac boxplots by personal ID; both weighted and unweighted

2. **tongue -** within individual unifrac boxplots by personal ID; both weighted and unweighted 3.**palm -** within individual unifrac boxplots by personal ID; both weighted and unweighted

4.**gut -** within individual unifrac boxplots by personal ID; both weighted and unweighted

b. **Menstruation**

1. **forehead -**within individual unifrac boxplots by personal ID; both weighted and unweighted-with mislabeling analysis

2. **tongue -** within individual unifrac boxplots by personal ID; both weighted and unweighted-mislabeling analysis

3. **palm -** within individual unifrac boxplots by personal ID; both weighted and unweighted -mislabeling analysis

4.**gut-** within individual unifrac boxplots by personal ID; both weighted and unweighted - mislabeling analysis

c. **Sickness**

1. **forehead -**within individual unifrac boxplots by personal ID; both weighted and unweighted - mislabeling analysis

2. **tongue -** within individual unifrac boxplots by personal ID; both weighted and unweighted - mislabeling analysis

3. **palm -** within individual unifrac boxplots by personal ID; both weighted and unweighted -mislabeling analysis

4.**gut-** within individual unifrac boxplots by personal ID; both weighted and unweighted -mislabeling analysis

**III. Subject participation**

1. **This will deal with how many individuals started the study and how many individuals participated through 10 weeks of the study.**
2. **Participation by University**
3. Northern Arizona University (hint: NAU had the best participation)
4. Colorado University at Boulder
5. North Carolina State University