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A Pig Model of the Human Gastro-intestinal Tract

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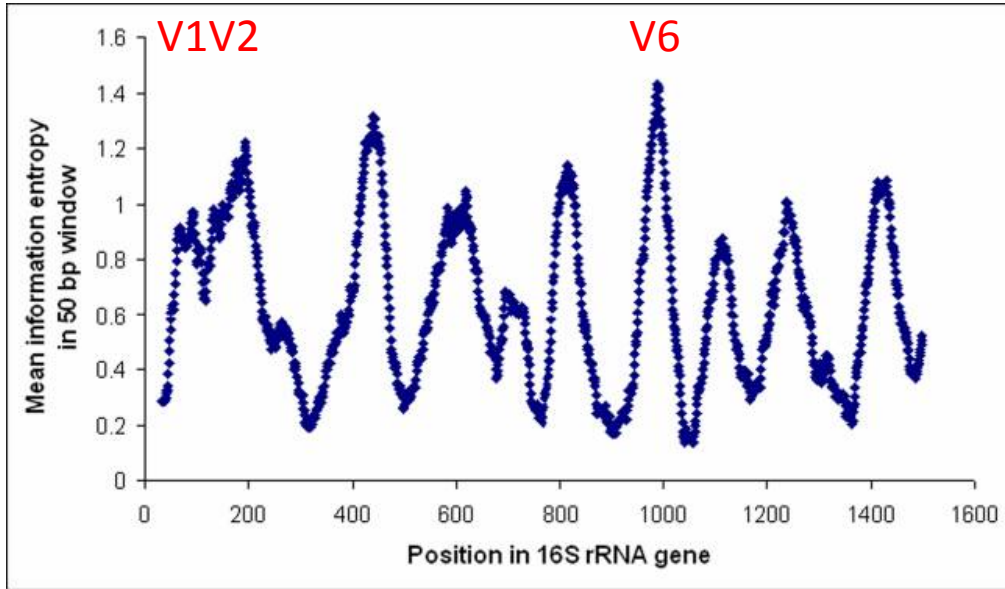
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COLLABORATIVE RESEARCH OPPORTUNITIES WITH TUFTS CUMMINGS SCHOOL OF VETERINARY MEDICINE (TCSVM)

Moderator: **Dr. Sawkat Anwer, PhD, DMVH,** Tufts Cummings School of
Veterinary Medicine (TCSVM)

Presenter: **Dr. Giovanni Widmer, PhD,** TCSVM

16S amplicon sequencing

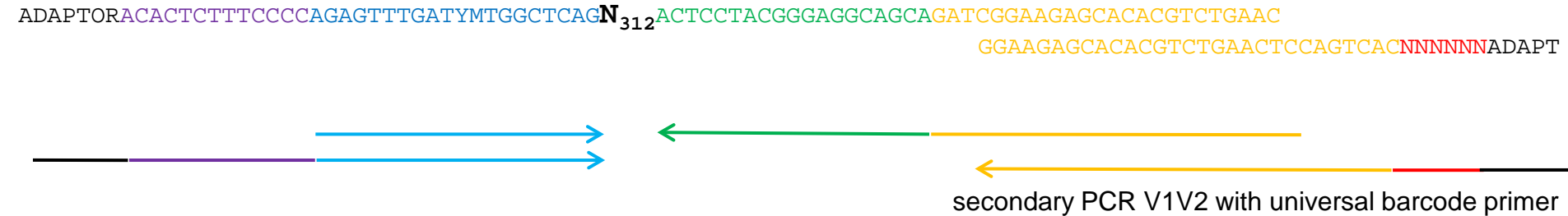
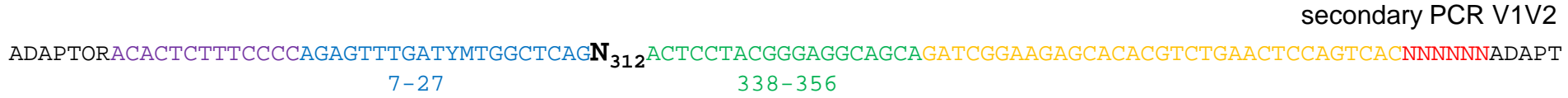
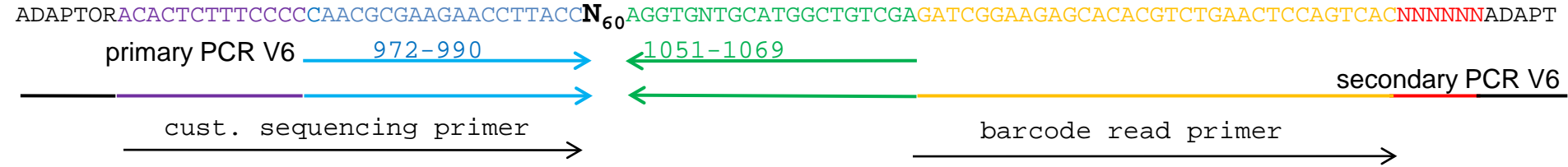


sequencing

V6: Illumina HiSeq2000
100-nt single-end sequencing

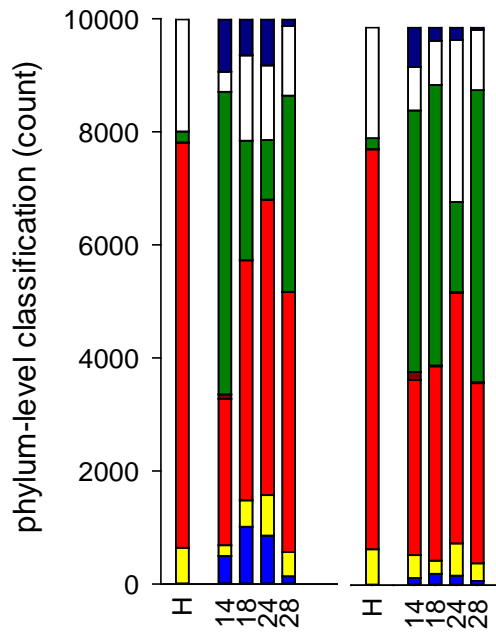
V1V2: Illumina HiSeq2500
150-nt single-end sequencing

16S rRNA PCR strategy

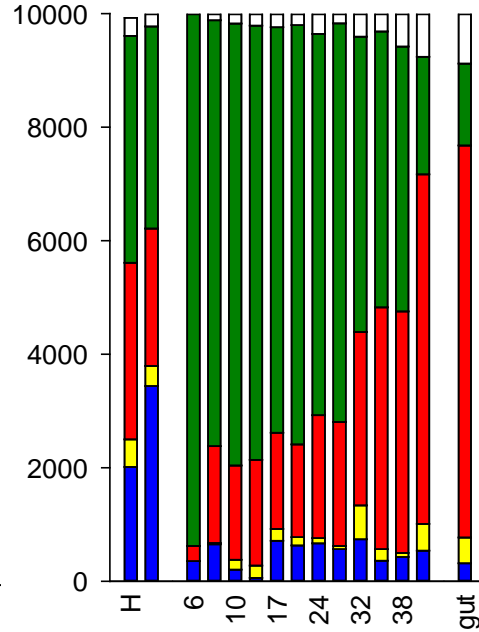


fecal transplants: human -> pig taxonomy

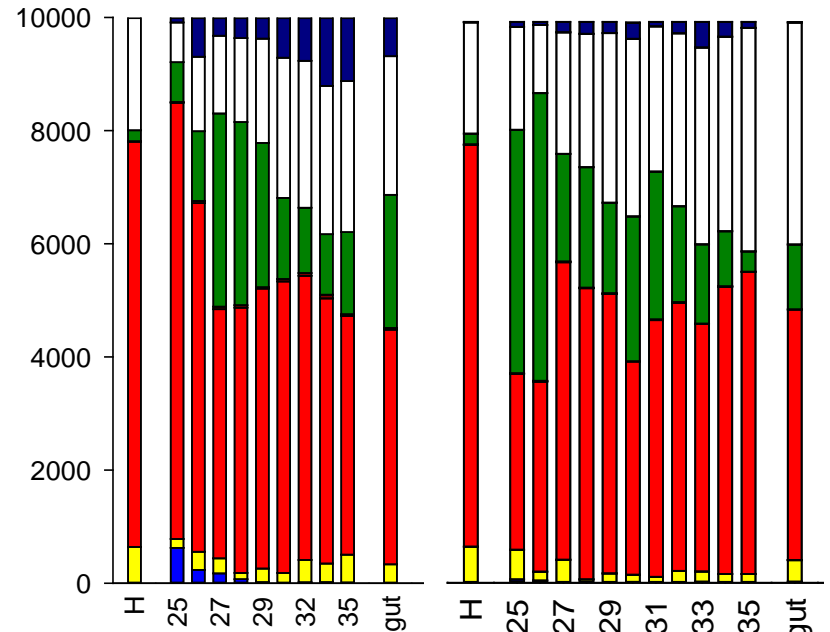
experiment 1
adult-Similac



experiment 2
infant-Similac



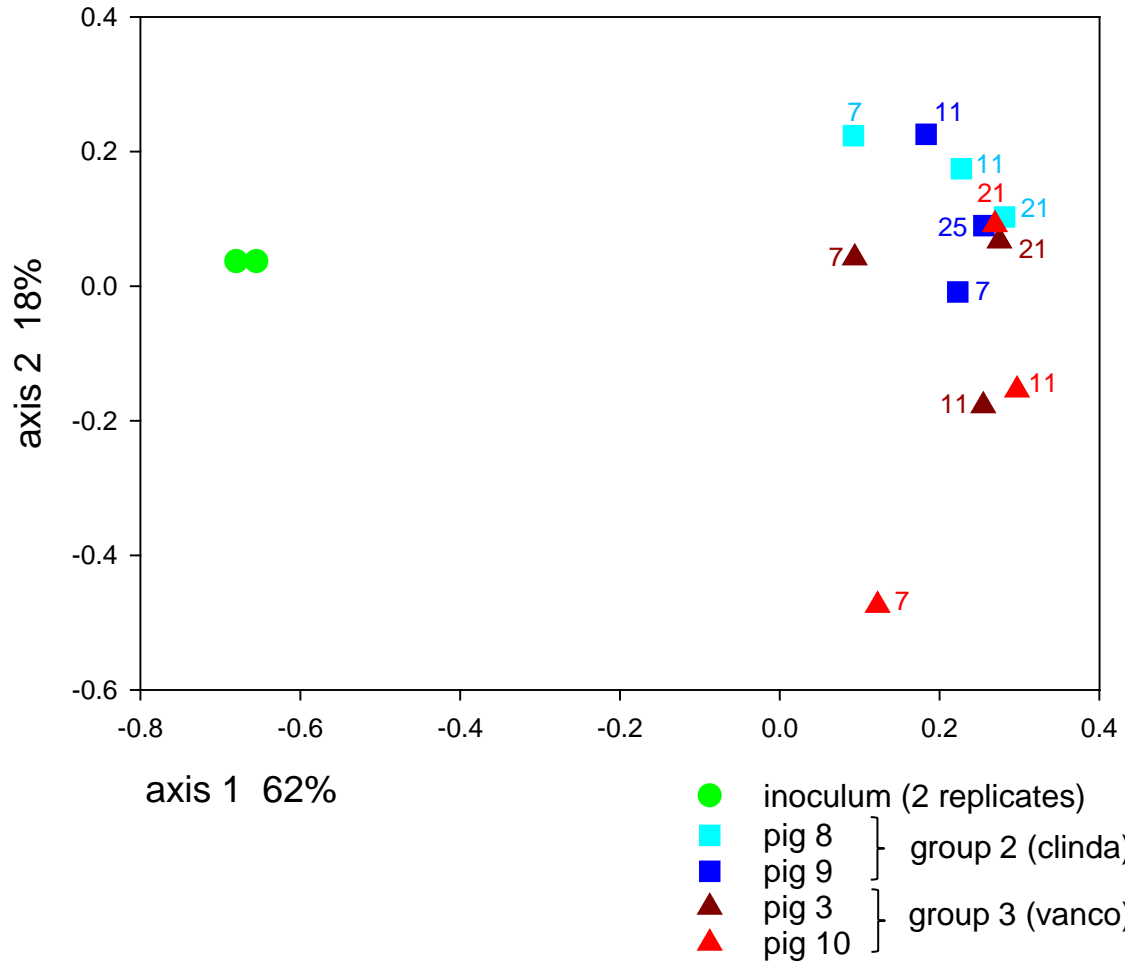
experiment 3
adult-solid



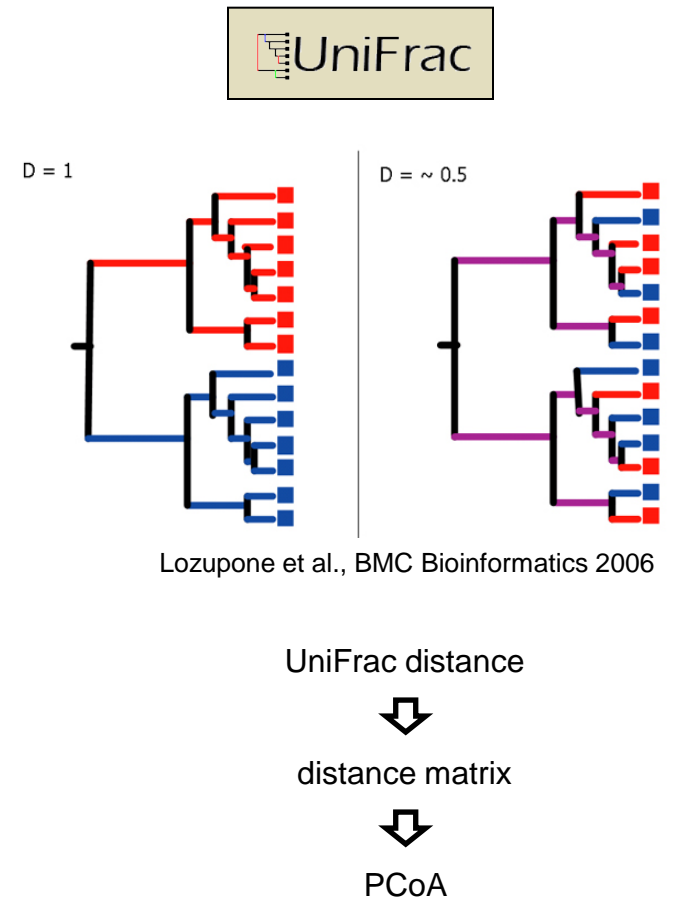
age (days)

- Actinobacteria
- Bacteroidetes
- Firmicutes
- Tenericutes
- Proteobacteria
- unclassified
- Verrucomicrobia

fecal transplant: PCoA based on Unifrac distance

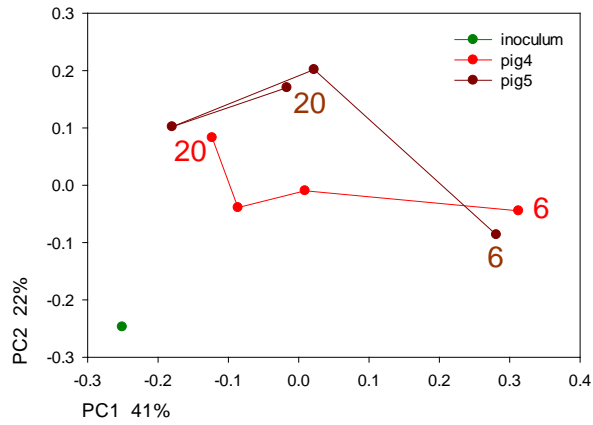


numbers indicate day post-inoculation

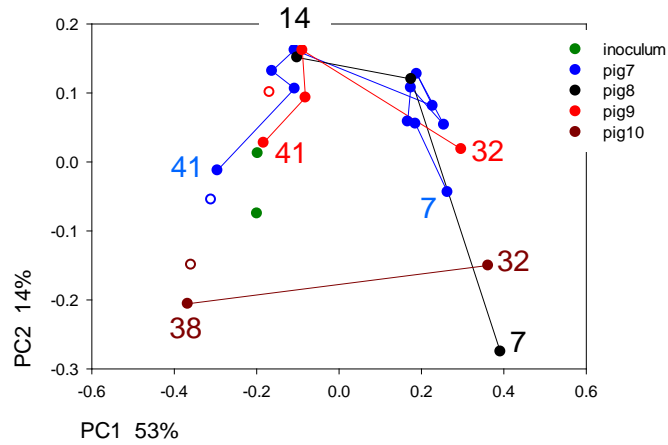


fecal transplant: effect of diet

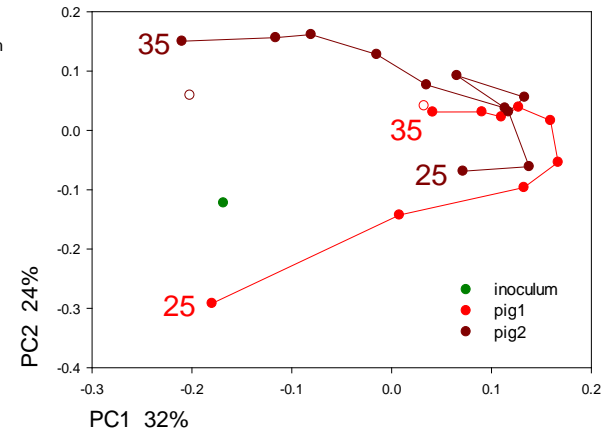
experiment 1 adult-Similac



experiment 2 infant-Similac



experiment 3 adult-solid



ACKNOWLEDGMENTS

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