MICROBIOME/METAGENOME ANALYSIS WORKSHOP

Please join the Computational Biology Core (CBC) as we host a Microbiome/Metagenome Analysis Workshop. The CBC at Brown University (supported by the COBRE Center for Computational Biology of Human Disease) is teaming up with the RI-INBRE at URI to provide some training on microbiome and metagenome analysis. Please register at the link below by November 4, 2017.

DATE: Tuesday, November 7, 2017
TIME: 9:00 a.m. to 1:00 p.m.
LOCATION: The Stephen Roberts '62 Campus Center
Kasper Multipurpose Room
75 Waterman Street
Providence, RI 02912

REGISTER: https://cbc_metagenomics_workshop.eventbrite.com

In this workshop, participants will be introduced to the basics of analyzing metagenomics and 16S experiments for microbial genomics. We will cover aspects of fundamental concepts, data quality control and analysis. In addition, we will provide some hands on practice analyzing some test data.

Part 1 Introduction to Metagenomics

*Christopher Hemme, PhD, Bioinformatics Core Coordinator at URI RI-INBRE*

Session 1 Fundamental concepts
This will include the overall goal of metagenomics, the types of metagenomics experiments, and considerations for experimental design.

Session 2 Workflows and tools for analysis
This will include workflows and tools for analysis as well as some common pitfalls and how to troubleshoot them.

Part 2 Hands-on Tutorials for Analysis of 16S Data
presented by Brown University Graduate Students.

Session 1 Analysis of 16S data using QIIME  *Kellyanne Duncan.*
This will be a short tutorial on the analysis of 16S data using QIIME with an overview of quality filtering and examples of some different aspects of analyses.

Session 2 Analysis of 16S data using DADA2  *Damien Cabral*
This will be a short tutorial on the analysis of 16S data using DADA2 that will include DADA2 background and core principles, DADA 2 workflow, and a brief introduction to analysis in Phyloseq.

At the end of each part, we will provide ample time for questions to ensure that participants get detailed advice tailored to their specific needs.