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INTRODUCTION TO MICROBIAL COMMUNITY ANALYSIS Wednesday, November 15 – Friday, November 17, 2017

The Jackson Laboratory for Genomic Medicine Farmington, Connecticut

Course Organizers: Julia Oh, Ph.D., The Jackson Laboratory and Kelly LaRue, Ph.D., The Jackson Laboratory

For more information please contact

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Wednesday, November 15

12:00 pm Optional Seminar

Microbial Community Imaging

1:00 Optional Workshop

Introduction to Unix, R and SRA data

Preeti Bais, Ph.D., Computational Scientist and

Susan McClatchy, Program Manager Bioinformatics Education

6:00 pm Dinner on your own

Thursday, November 16

9:00	Course introduction Julia Oh, Ph.D., Assistant Professor
9:15 am	Introduction to microbiota and the microbiome Mark Adams, Ph.D., Director of Microbial Genomic Services
9:45	Methods and study design Julia Oh, Ph.D., Assistant Professor
10:30	Break

10:45 Intro to 16S analysis

Mark Adams

12:00 pm Lunch provided – set up for comp sessions if necessary

1:00 Workshop

16S analysis exercise and making basic microbiome plots in **R** Jethro Johnson, Ph.D., Postdoctoral Associate - Weinstock Lab

Helpers: Preeti, Julia

5:00 Participant poster session

6:00 Dinner on your own

Friday, November 17

9:00 am Shotgun metagenomic analysis

Julia Oh, Ph.D., Assistant Professor

10:00 Workshop

Shotgun metagenomic analysis

Jethro Johnson, Ph.D., Postdoctoral Associate - Weinstock Lab

Helpers: Preeti and Julia

12:00 pm Lunch provided

1:00 Microbiota isolates introduction & analysis

Mark Adams, Ph.D., Director of Microbial Genomic Services

Helper: Jethro

2:30 Break

3:00 Advanced techniques and innovations in the microbiome field

Julia Oh, Ph.D., Assistant Professor

4:00 Workshop

De novo metagenomics

Julia Oh

4:45 **General Q&A**

6:00 Dinner on your own