The Jackson Laboratory

*Leading the search
for tomorrow's cures*

Virtual - Introduction to Microbial Community Analysis

October 27th – 29th
The Jackson Laboratory for Genomic Medicine,
Farmington CT

At the end of this workshop, participants will be able to:

- Explain what the microbiome is and why it is an important research topic
- Identify pitfalls in experimental design
- Contrast the information that can be provided by several microbiome analysis methods
- Execute basic genomic analysis scripts
- Describe new opportunities and future directions of microbiome research

Tuesday, October 27th

Pre-Recorded   **Introduction to Unix**
                          Dave Mellert, Ph.D.
                          Manager, IT Applications

Pre-Recorded   **Introduction to R**
                          Sandeep Namburi
                          Cloud Systems Analyst

1:00 pm   **Unix and R Q&A Session**
                          Dave Mellert, Ph.D. and Sandeep Namburi

Wednesday, October 28th

Pre-Recorded   **Course Introduction**
                          Julia Oh, Ph.D.
                          Associate Professor

Pre-recorded	**Microbial Genomics Overview** **Mark Adams, Ph.D.** Professor & Director, Microbial Genomic Services
Pre-recorded	**Methods & Study Design** **Julia Oh, Ph.D.** Associate Professor
Pre-Recorded	**Introduction to 16S Ribosomal RNA Sequence Analysis** **Mark Adams, Ph.D.** Professor & Director, Microbial Genomic Services
1:00 pm	**Live Instructor & Participant Introduction** Discussion Session w/Speakers
2:00 pm	**Workshop: 16S rRNA Analysis Using QIIME2** Preeti Bais, Jacquelynn Benjamino, Lauren Long & Sai Lek

Thursday, October 29th

Pre-Recorded	**Microbial Isolates & Comparative Genomics** **Mark Adams, Ph.D.** Professor & Director, Microbial Genomic Services
Pre-Recorded	**Whole Genome Shotgun Metagenomics** **Julia Oh, Ph.D.** Associate Professor
Pre-Recorded	**Introduction to Statistical Analyses** **Julia Oh, Ph.D.** Associate Professor
Pre-Recorded	**Advanced Topics** **Julia Oh, Ph.D.** Associate Professor
1:00pm	**Discussion Session & Introduction to Workshop Instructors**
2:00pm	**Workshop: Shotgun Metagenomics** Preeti Bais, Wei Zhou & Akintunde Emiola