

# High-Resolution Microbiome Informatics Meeting (2015)

MARINE BIOLOGICAL LABORATORY, WOODS HOLE

This meeting is funded by a Marine Biological Laboratory - University of Chicago Collaboration Award

**Thursday (March, 19<sup>th</sup>)** at the MBL Club (100 Water Street, Woods Hole, MA 02543)

9:00 - 9:10	<i>Welcome</i>
9:10 - 9:50	<b>Sarah P. Preheim</b> (JOHNS HOPKINS UNIVERSITY) “Distribution-based clustering: using ecology to refine the operational taxonomic unit”
9:50 - 10:30	<b>Mikhail Tikhonov</b> (HARVARD UNIVERSITY) “Interpreting 16S metagenomic data without clustering to achieve sub-OTU resolution”
10:30 - 11:10	<b>Amnon Amir</b> (UNIVERSITY OF COLORADO) “Deblurring 16S sequencing data”
11:10 - 11:50	<b>A. Murat Eren</b> (MARINE BIOLOGICAL LABORATORY) “Using information theory to find ecologically meaningful units in marker gene amplicons”
LUNCH BREAK	
1:00 - 1:20	<b>Jed A. Fuhrman</b> (UNIVERSITY OF SOUTHERN CALIFORNIA) “Benefits of higher phylogenetic resolution in marine microbial ecology”
1:20 - 1:40	<b>Jack A. Gilbert</b> (UNIVERSITY OF CHICAGO) “Invisible influence: examining microbial activity”
1:40 - 2:00	<b>Pawel Gajer</b> (UNIVERSITY OF MARYLAND) “Ribotyping with Restricted Boltzmann Machines”
2:00 - 2:20	<b>Inés Martínez</b> (UNIVERSITY OF ALBERTA) “What determines microbiome responsiveness towards a non-digestible oligosaccharide?”
2:20 - 2:40	<b>Floyd E. Dewhirst</b> (FORSYTH INSTITUTE) “The human oral microbiome database: Importance of speciation in NGS era”
TEA/COFFEE BREAK	
3:00 - 3:45	Discussion: <b>Making new approaches more accessible</b>
TEA/COFFEE BREAK	
4:00 - 4:45	Discussion: <b>Outline of an opinion article</b>
DINNER	
7:00 - 9:00	<i>MBL Club will be open for group discussions</i>

**Friday (March, 20<sup>th</sup>)** at the MBL Club (100 Water Street, Woods Hole, MA 02543)

9:00 - 9:30	<b>Jeremiah J. Faith</b> (THE MOUNT SINAI HOSPITAL) “Experimental advances for improving microbiome strain-tracking resolution and the computational opportunities they present”
9:30 - 10:00	<b>Jessica L. Mark Welch</b> (MARINE BIOLOGICAL LABORATORY) “Connecting high-resolution informatics to spatial organization through imaging”
10:00 - 10:30	<b>Christopher Quince</b> (UNIVERSITY OF WARWICK) “Reconstruction of genomes from metagenomes using coverage and composition”
TEA/COFFEE BREAK	
10:45 - 12:00	Final words and future plans
LUNCH	