

Microbial Metagenomics

Course Description

IG and Micro Workshop 2009 GENET591

<http://www.genetics.iastate.edu/ws09.html>

PAPERS

Wednesday, January 28: Kirsten Hofmockel (khof@iastate.edu) will lead discussion of the research of Dr. Jill Banfield, University of California Berkeley: Geochemistry group at Lawrence Berkeley National Laboratory.

The Dynamic Genetic Repertoire of Microbial Communities

<http://www.genetics.iastate.edu/banfield.pdf>

Wednesday, February 04: Allen Miller (wamiller@iastate.edu) will lead discussion of the research of Dr. Ian Lipkin, MD, Columbia University, Professor of Epidemiology in the Mailman School of Public Health.

Pathogen Discovery <http://www.genetics.iastate.edu/lipkin1.pdf>

Isolation and Characterization of Borna Disease Agent CDNA Clones.

<http://www.genetics.iastate.edu/Lipkin1988.pdf>

A New Arenavirus in a Cluster of Fatal Transplant Associated Diseases.

<http://www.genetics.iastate.edu/Lipkin3.pdf>

A Metagenomic Survey of Microbes in Honey Bee Colony Collapse Disorder

<http://www.genetics.iastate.edu/lipkin4.pdf>

Global Distribution of Novel Rhinovirus Genotype.

<http://www.genetics.iastate.edu/lipkin5.pdf>

Lack of Association between Measles Virus Vaccine and Autism w Enteropathy: A Case Study

<http://www.genetics.iastate.edu/lipkin6.pdf>

Wednesday, February 18: Larry Halverson (larryh@iastate.edu) will lead discussion of the research of Dr. Ed DeLong, Department of Biological Engineering and Department of Civil and Environmental Engineering, MIT.

Microbial Engines That Drive Earth's Biogeochemical Cycles

<http://www.genetics.iastate.edu/delong1.pdf>

Microbial Community Gene Expression in Ocean Surface Waters

<http://www.genetics.iastate.edu/delong2.pdf>

Proteorhodopsin photosystem gene expression enables photophosphorylation in a

heterologous host. <http://www.genetics.iastate.edu/delong3.pdf>

Proteorhodopsin lateral gene transfer between host marine planktonic Bacteria and Archaea.

<http://www.genetics.iastate.edu/delong4.pdf>

Community Genomics among Stratified Microbial Assemblages in the Ocean's Interior

<http://www.genetics.iastate.edu/delong6.pdf>

Genomic perspectives in microbial oceanography

<http://www.genetics.iastate.edu/delong5.pdf>

Wednesday, February 25: Larry Halverson (larryh@iastate.edu) will lead discussion of the research of Philip Hugenholtz, Head, Microbial Ecology Program, DOE Joint Genome Institute.

Metagenomics. <http://www.genetics.iastate.edu/phila.pdf>

A Bioinformatician's Guide to Metagenomics: <http://www.genetics.iastate.edu/philb.pdf>.

Wednesday, March 4: Allen Miller (wamiller@iastate.edu) will lead discussion of the research of Dr. Curtis Suttle, Professor, Department of Earth and Ocean Sciences, University of British Columbia.