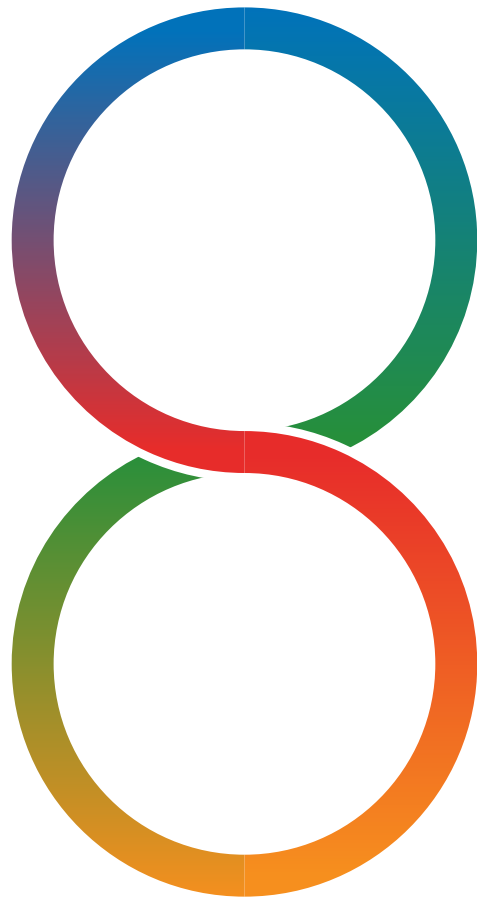


DEPARTMENT OF ENERGY  
JOINT GENOME INSTITUTE (DOE JGI)



# Genomics of Energy & Environment User Meeting Agenda



March 26–28, 2013 / Walnut Creek Marriott / Walnut Creek, CA

All functions will be held at the Walnut Creek Marriott, unless otherwise noted.

## TUESDAY, March 26

5:00 – 6:00 PM	Welcome, Opening Keynote Presentation. Session Chair, Eddy Rubin <b>Part Mining for Synthetic Biology</b> Chris Voigt, Massachusetts Institute of Technology
6:00 – 9:00 PM	Opening Reception and Poster Session

## WEDNESDAY, March 27

<b>8:30 AM – 12:00 PM</b>	<b>SESSION I – Metagenomics. Session Chair, Susannah Tringe</b>
8:30 AM – 9:00 AM	<b>Assembly-driven Metagenomics of a Hypersaline Microbial Ecosystem</b> Eric Allen, University of California, San Diego
9:00 AM – 9:30 AM	<b>Succession of Microbial Phylogeny and Function during Plant Litter Decomposition</b> Eoin Brodie, LBNL Earth Sciences Division
9:30 AM – 10:00 AM	<b>Strange Tails in Viral Discovery</b> Joe DeRisi, University of California, San Francisco
10:00 AM – 10:15 AM	<b>Deep Community Sequencing Using Short Illumina and Multi-Kb Molecule Reads Provides Insight into Aquifer Sediment Microbial Diversity and Metabolic Potential</b> Laura A. Hug, University of California, Berkeley
10:15 AM – 10:45 AM	Break
10:45 AM – 11:15 AM	<b>The Genomic Encyclopedia for Archaea and Bacteria-root Nodule Bacteria (GEBA-RNB) Community Sequencing Project: A Comprehensive Resource of Microsymbiont Genomes</b> Wayne Reeve, Murdoch University
11:15 AM – 11:45 AM	<b>The Isthmus of Panama – A Natural Laboratory for the Genomics of Climate Resilience</b> Eldredge Bermingham, Smithsonian Tropical Research Institute
11:45 AM – 12:00 PM	<b>Roles of Genotype-by-Environment Interactions in Shaping the Root-Associated Microbiome of <i>Populus</i></b> Christopher W. Schadt, Oak Ridge National Laboratory
12:00 PM – 1:15 PM	Lunch
<b>1:15 PM – 5:00 PM</b>	<b>SESSION II – Plants. Session Chair, Dan Rokhsar</b>
1:15 PM – 1:45 PM	<b>New Approaches and Technologies to Sequence <i>de novo</i> Plant Reference Genomes</b> Jeremy Schmutz, HudsonAlpha Institute for Biotechnology
1:45 PM – 2:15 PM	<b>Genetic Regulation of Grass Biomass Accumulation and Biological Conversion Quality</b> Sam Hazen, University of Massachusetts
2:15 PM – 2:45 PM	<b>Regulation of Flowering in <i>Brachypodium distachyon</i></b> Rick Amasino, University of Wisconsin
2:45 PM – 3:00 PM	<b>Genome Diversity in <i>Brachypodium distachyon</i>: Deep Sequencing of Highly Diverse Natural Accessions</b> Sean P. Gordon, U.S. Department of Agriculture
3:00 PM – 3:30 PM	Break
3:30 PM – 4:00 PM	<b>Systems Genetics and Genomics of Woody Biomass Production in Eucalyptus, a Global Fibre Crop</b> Zander Myburg, University of Pretoria
4:00 PM – 4:30 PM	<b>Uncovering Transcriptional Circuits in <i>Arabidopsis</i> by Functional Genomics</b> Jose Pruneda-Paz, University of California, San Diego
4:30 PM – 5:00 PM	<b>New Technologies Overview and User Feedback</b> Len Pennacchio, DOE Joint Genome Institute
5:00 PM – 6:00 PM	Travel to JGI – Bus Service from Marriott
6:00 PM – 9:00 PM	<b>JGI Reception, Poster Session, and Tours</b>
7:00 PM – 9:00 PM	Travel from JGI – Bus Service to Marriott (Last pickup at JGI at 9:00 PM)

# THURSDAY, March 28

<b>8:30 AM – 12:00 PM</b>	<b>SESSION III – Microbial Genomics. Session Chair, Len Pennacchio</b>
8:30 AM – 9:00 AM	<b>The Challenges and Opportunities for Extending Plant Genomics to Climate</b> David Weston, Oak Ridge National Laboratory
9:00 AM – 9:30 AM	<b>A Glimpse into the Coding Potential of Microbial Dark Matter</b> Tanja Woyke, DOE Joint Genome Institute
9:30 AM – 10:00 AM	<b>Single-cell Genomics of Environmental Bacteria</b> Paul Blainey, Broad Institute
10:00 AM – 10:15 AM	<b>Modulation of Root Microbiome Community Assembly by the Plant Immune Response</b> Sarah L. Lebeis, University of North Carolina
10:15 AM – 10:45 AM	Break
10:45 AM – 11:15 AM	<b>Biodiversity Monitoring Using NGS Approaches on Unusual Substrates</b> Tom Gilbert, University of Copenhagen
11:15 AM – 11:45 AM	<b>Network as Discovery Instrument: A Quick-Start Guide</b> Greg Bell, DOE ESnet, LBNL Scientific Networking Division
11:45 AM – 12:00 PM	<b>Delineating Molecular Interaction Mechanisms in an <i>in vitro</i> Microbial-Plant Community</b> Peter E. Larsen, Argonne National Laboratory
12:00 PM – 1:30 PM	Lunch
<b>1:30 PM – 5:00 PM</b>	<b>SESSION IV – Synthetic Biology. Session Chair, Jim Bristow</b>
1:30 PM – 2:00 PM	<b>Genetics and Genomics Fuel the Development of the Energy Crop, <i>Jatropha curcas</i></b> Bob Schmidt, SG Biofuels; University of California, San Diego
2:00 PM – 2:30 PM	<b>Automated Strain Engineering at Amyris</b> Jack Newman, Amyris, Inc.
2:30 PM – 2:45 PM	<b>Metabolic Engineering of <i>Clostridium thermocellum</i> for Biofuel Production from Cellulosic Substrates</b> Adam Guss, Oak Ridge National Laboratory
2:45 PM – 3:15 PM	Break
3:15 PM – 3:45 PM	<b>Synthetic Metagenomics: Converting Digital Information Back to Biology</b> Sam Deutsch, DOE Joint Genome Institute
3:45 PM – 4:00 PM	<b>Improving Biofuel Feedstocks by Modifying Xylan Biosynthesis</b> Jane Lau, Joint BioEnergy Institute
4:00 PM – 5:00 PM	Closing Keynote Presentation. <b>TARA OCEANS: A Global Analysis of Oceanic Plankton Ecosystems</b> Eric Karsenti, EMBL Heidelberg
5:00 PM	End of JGI User Meeting



# Workshops and Satellite Meetings

## MONDAY, March 25

9:00 AM – 5:00 PM	<b>Metaproteomics of the Soil</b>	Walnut Creek Marriott	Contra Costa Salon II
12:00 PM – 4:00 PM	<b>KBase Outreach Workshop</b>	Walnut Creek Marriott	Contra Costa Salon I

## TUESDAY, March 26

9:00 AM – 4:00 PM	<b>Genomic Technologies Workshop (formerly "RNA Technologies...")</b>	Walnut Creek Marriott	CA Ballroom E
9:00 AM – 4:00 PM	<b>Prokaryotic Super Program User Advisory Committee Meeting</b>	Walnut Creek Marriott	CA Ballroom F
1:00 PM – 5:00 PM	<b>BRC Project Management Meeting</b>	Walnut Creek Marriott	Sacramento Room

## WEDNESDAY, March 27

12:00 PM – 1:30 PM	<b>Rhizosphere Project Meeting</b>	Walnut Creek Marriott	San Jose Room
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## THURSDAY, March 28

12:00 PM – 1:30 PM	<b>Microbial Isolate Project Reviews</b>	Walnut Creek Marriott	San Jose Room
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## FRIDAY, March 29

8:00 AM – 10:00 AM	<b>JGI Microbial Genomics Program Management Meeting</b>	Walnut Creek Marriott	JGI 345 Conf Room
10:00 AM – 12:00 PM	<b>JGI Metagenomics Program Management Meeting</b>	Walnut Creek Marriott	JGI 345 Conf Room

## Call for Large-Scale Genomics Proposals

LOI deadline: April 8, 2013

Proposals invited: April 15

Proposals due: May 27

Projects begin: October 2013



For more information about the Community Sequencing Program, scan the code above or visit: <http://1.usa.gov/JGI-CSP14>

The DOE JGI's Community Sequencing Program (CSP) is now accepting letters of intent (LOIs) for large-scale sequence-based genomic science projects that address questions in alternative fuels, global carbon cycling, and biogeochemistry.

Areas of emphasis:

- Plant Flagship Genomes: <http://1.usa.gov/JGI-Plants>  
Comparators that provide insight into feedstock evolution and phenotype.  
Examples include:
  - Gene Atlas & ENCODE-like projects
  - Large-scale resequencing
  - De novo sequencing of flagship comparators
  - Plant microbiomes
- Functional diversity of microbes
- Microbial emission and capture of greenhouse gases in terrestrial systems
- DNA synthesis
- **NEW!** Exploratory collaborations between the DOE JGI and Pacific Northwest National Laboratory's Environmental Molecular Sciences Laboratory