

13:40 – 15:40 | Walter E Washington Convention Center – 151A

A53A: Atmospheric Aerosol Processes Across Scales III
Primary Convener: Swarup China, Pacific Northwest National Laboratory

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Jinglie Zhou, JGI

B53H-2155: Diversity, evolution, and classification of virophages uncovered through global metaviromics

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Arunima Bhattacharjee, Pacific Northwest National Laboratory

B53H-2156 Visualizing microbial community dynamics and metabolic activity within soil microbiomes

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

David W Hoyt, Pacific Northwest National Laboratory

B53H-2158 Metabolic and Physiological Responses of Halanaerobium Growth and Persistence in Hydraulically-Fractured Shale Ecosystems

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Nicholas Bouskill, Lawrence Berkeley National Laboratory

B53K-2207 Spatial and temporal dynamics of nitrogen in a mountainous watershed

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Mr Prabhat, University of California, Berkeley

ED53E-0758: ClimateNet: bringing the power of Deep Learning to the climate community via open datasets and architectures

16:00 – 18:00 | Walter E Washington Convention Center – 151A

A54A: Atmospheric Aerosol Processes Across Scales IV
Primary Convener: Swarup China, Pacific Northwest National Laboratory

16:48 – 16:53 | Walter E Washington Convention Center – 202A

Yuxin Wu, Lawrence Berkeley National Laboratory

U54A-07 How I became a geoscientist and a quest for why



December 10 – 14, 2018, at the 2018 Fall Meeting of the American Geophysical Union (AGU) in Washington, D.C., stop by Booth 847 in the Exhibit Hall and chat with representatives from the DOE Joint Genome Institute (JGI), the Environmental Molecular Sciences Laboratory (EMSL) and the DOE Systems Biology Knowledgebase (KBase) about collaborative opportunities.

Below is a section of AGU talks relevant to the Facilities Integrating Collaborations for User Science (FICUS) program that provides free access to EMSL, JGI, and KBase omics and data analysis resources through a single proposal: <http://bit.ly/BER-FICUS>.

For more information, contact:

Nancy Hess, Nancy.Hess@pnnl.gov (EMSL), Susannah Tringe, SGTringe@lbl.gov (JGI)

Monday, 10 December 2018

08:00 – 12:20 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Kelly C Wrighton, Colorado State University

B11C-2157 It takes a village: Metatranscriptomics resolves a trophic network that sustains methanogenesis in oxic soils

08:00 – 08:16 | Walter E Washington Convention Center – 209A-C

Mr. Prabhat, University of California, Berkeley

IN11A-01: Towards Exascale Deep Learning for Climate Science

10:51 – 11:13 | Walter E Washington Convention Center – Salon B

Michael F Wehner, Lawrence Berkeley National Laboratory

GC12B-03 Causality and extreme event attribution. Or, was my house flooded because of climate change?

11:35 – 11:40 | Walter E Washington Convention Center – 209A-C

Mr Prabhat, University of California, Berkeley

IN12A-07 Lessons learnt from applying Deep Learning to Scientific problems at NERSC

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Arun Persaud, Lawrence Berkeley National Laboratory

NS13B-0591 Utilizing neutron scattering techniques to measure carbon-in-soil distribution

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Kenneth Hurst Williams, Lawrence Berkeley National Laboratory

H13J-1870 The East River, Colorado Community Watershed: Hydrobiogeochemical Studies Spanning Scales and Disciplines

Tuesday, 11 December 2018

08:00 – 12:20 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Alexander Polussa, Lawrence Berkeley National Laboratory

H21K-1808 A New Vibrational Analysis with Near-Infrared SpeCenteroscopy using Supervised Machine Learning

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Jianwei Li, Tennessee State University

B23G-2588 Differential effects of warming and nitrogen fertilization on soil respiration and microbial dynamics in switchgrass croplands

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Lauren Liu, Lawrence Berkeley National Laboratory

B23H-2616: Core values: large-scale analysis of environmental constraints on microbial community assembly, activity, and dispersal in groundwater and sediment from a contaminated subsurface aquifer.

13:40 – 18:00 | Convention Center – Hall A-C (Poster Hall)

Mauricio Ayllon Unzueta, Lawrence Berkeley National Laboratory

B23I-2642 Repeatable, non-destructive, spatially resolved measurements of carbon-in-soil

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Amelia Nelson, Ohio State University

H23K-2081 Heterogeneity in River-Groundwater Mixing, Microbiology, and Geochemistry in an Alpine Riverbed during Baseflow

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Savannah R Bryant, Ohio State University

H23K-2101 Modeling Seasonal Surface Water-Groundwater Mixing Controls on Organic Carbon Processing in Hyporheic Zones

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Erica Monroe Ewton, Oregon State University

OS23D-1657 The Effects of X-ray CT Scanning on Microbial Communities in Sediment Cores

16:10 – 16:25 | Walter E Washington Convention Center – 202A

Katharine Hayhoe, Texas Tech University

U24A-01 Climate Science in the Fourth US National Climate Assessment

Wednesday, 12 December 2018

08:00 – 12:20 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Megan Dillon, Lawrence Berkeley National Laboratory

B31E-2502 Arctic Permafrost Microbiomes: A Meta-Analysis

10:20 – 10:35 | Walter E Washington Convention Center – 149AB

Susan Hubbard, Lawrence Berkeley National Laboratory

B32A-01: Multi-scale Investigations of the Impact of (Early) Snowmelt on Water and Nitrogen Cycles at the mountainous East River Watershed, CO

10:35 – 10:50 | Walter E Washington Convention Center – 149AB

Eoin Brodie, Lawrence Berkeley National Laboratory
B32A-02: Uncovering the metabolic processes driving microbial activity beneath the snowpack and mechanisms of microbial biomass turnover and nitrogen release following snowmelt

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Patrick Sorensen, Lawrence Berkeley National Laboratory

B33M-2856: Early Snowmelt Timing Controls the Magnitude of Soil Nutrient Flux and Microbial Community Turnover During the Winter-Spring Transition

14:25 – 14:40 | Walter E Washington Convention Center – 152A

Peter Martin Caldwell, Lawrence Livermore National Laboratory

A33D-04: High-Resolution Modeling using E3SM

16:00 – 16:12 | Walter E Washington Convention Center – 209A-C

Deb Agarwal, Lawrence Berkeley National Laboratory
IN34B-01 Enabling Scalable Integration of Diverse Data

16:00 – 16:15 | Walter E Washington Convention Center – 150A

Jennifer Pett-Ridge, Lawrence Livermore National Laboratory

B34B-01 Into the Deep: Interactions Between Plant Roots, Microbial Ecophysiology, and Soil Minerals shape the fate and persistence of deep soil carbon

16:30 – 16:45 | Walter E Washington Convention Center – 150A

Petr Capek, Pacific Northwest National Laboratory
B34B-03: A plant-microbe interaction framework explaining nutrient effects on primary production

Thursday, 13 December 2018

08:00 – 12:20 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Wyatt Hartman, JGI. Presented by Susannah Tringe, JGI.

B41E-2763: Multiple Microbial Guilds Mediate Soil Methane Cycling Along a Wetland Salinity Gradient Spanning the San Francisco Bay – Delta Region

08:15 – 08:30 | Walter E Washington Convention Center – Salon A

Yun Qian, Pacific Northwest National Laboratory
GC41C-02: Parametric sensitivity and uncertainty quantification in the version 1 of E3SM Atmosphere Model based on short Perturbed Parameters Ensemble simulations

12:30 – 13:30 | Marriott Marquis – Archives

James Stegen, Emily Bonnell Graham and Vanessa Alessandra Garayburu-Carusio, Pacific Northwest National Laboratory

TH43K: WHONDERS: A Community Resource for Studying Dynamic River Corridors

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Victoria Madison Fulfer, University of Rhode Island
B43H-2946 Biogeochemical Sulfur Cycling in Hypersaline Mono Lake Sediments

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Renxing Liang, Princeton University

B43H-2950 Differential diversity and function of microbial communities along a salinity gradient in ancient Siberian permafrost

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Maria Cristina Figueroa, University of California, Riverside

B43H-2953 Spatial and Temporal Dynamics of Microbial Sulfur Cycling During the Onset of Meromixis in Mono Lake, California

13:40 – 18:00 | Walter E Washington Convention Center – Hall A-C (Poster Hall)

Tianmei Wang, Stanford University

B43M-3000 Coupled Climatic and Soil Arsenic Stressors Threaten Future Rice Yields

Friday, 14 December 2018

08:00 – 10:00 | Walter E Washington Convention Center – 149AB

B51A: From -omics to the Earth System: Bridging Scales to Improve our Understanding of Earth System Function and Response I

Chairs: Katharyn Aurora Duffy, Northern Arizona University; Emily Bonnell Graham, Pacific Northwest National Laboratory

08:00 – 10:00 | Walter E Washington Convention Center – 150A

B51B: New Insights to Soil Structure and Function: Bridging Plant, Microbe, and Mineral Constituents Using Experimentation and Multiscale Modeling I

Chairs: Nancy J Hess and Petr Capek, Pacific Northwest National Laboratory

08:15 – 08:30 | Walter E Washington Convention Center – 150A

Jennifer Pett-Ridge, Lawrence Livermore National Laboratory

B51B-02 Quantitative Microbiomics: New Frontiers Q-Stable Isotope Probing Is Enabling for Soil Microbial Ecology

10:20 – 10:35 | Walter E Washington Convention Center – 150A

Caitlin Hicks Pries, Dartmouth College

B52A-01: Beyond Surface Flux: Gathering new insights from in situ warming experiments

10:20 – 12:20 | Walter E Washington Convention Center – 151A

A52C: Atmospheric Aerosol Processes Across Scales II
Primary Convener: Swarup China, Pacific Northwest National Laboratory

11:35 – 11:50 | Walter E Washington Convention Center – 206

Deb Agarwal, Lawrence Berkeley National Laboratory
IN52B-06 Environmental System Science Data Infrastructure for a Virtual Ecosystem (ESS-DIVE): Report on our First 18 Months

11:35 – 11:50 | Marriott Marquis – Marquis 3-4

Andrew D Jones, Lawrence Berkeley National Laboratory

PA52B-06: Assessing Climate Information in Use Context

13:40 – 13:55 | Walter E Washington Convention Center – 150A

Timothy D Scheibe, Pacific Northwest National Laboratory

B53B-01: Merging Process Understanding with Numerical Models across Scales to Predict River Corridor and Watershed Function
