

ENVIRONMENTAL SYSTEM SCIENCE (ESS) - List of Awards
DE-FOA-0002392

Title	Lead PI	Institution	Location
A general mechanistic framework for cross-scale understanding of hot spots and hot moments in carbon and water fluxes	Kannenberg, Steven	University of Utah	Salt Lake City, UT
Applying "R-osmos" to quantify hot-moments in a high mountain watershed: co-development of novel methodology to advance terrestrial-aquatic interface models	Thurber, Andrew	Oregon State University	Corvallis, OR
Droughts and deluges in semi-arid grassland ecosystems: Implications of co-occurring extremes for C cycling	Smith, Melinda	Colorado State University	Fort Collins, CO
Droughts and deluges in semi-arid grassland ecosystems: Implications of co-occurring extremes for C cycling	Hoover, David	<u>Collaborating Agency: USDA, Agricultural Research Service</u>	Fort Collins, CO
Effect of Hydrological Forcing on the Biogeochemical Transformation of Carbon and Greenhouse Gas Emissions in Riparian and Streambed Sediments	Taillefert, Martial	Georgia Institute of Technology	Atlanta, GA
Effect of Hydrological Forcing on the Biogeochemical Transformation of Carbon and Greenhouse Gas Emissions in Riparian and Streambed Sediments	Kaplan, Daniel	<u>Collaborating Lab: Savannah River National Lab (SRNL)</u>	Aiken, SC
Effect of Hydrological Forcing on the Biogeochemical Transformation of Carbon and Greenhouse Gas Emissions in Riparian and Streambed Sediments	Kemner, Ken	<u>Collaborating Lab: Argonne National Lab (ANL)</u>	Lemont, IL
From tides to seasons: How cyclic tidal drivers and plant physiology interact to affect carbon cycling at the terrestrial-estuarine boundary	Forbrich, Inke	Marine Biological Laboratory	Woods Hole, MA
From tides to seasons: How cyclic tidal drivers and plant physiology interact to affect carbon cycling at the terrestrial-estuarine boundary	O'Meara, Teri	<u>Collaborating Lab: Oak Ridge National Lab (ORNL)</u>	Oak Ridge, TN
High-frequency Data Integration for Landscape Model Calibration of Carbon Fluxes Across Diverse Tidal Marshes	Oikawa, Patty	California State University East Bay	Hayward, CA
High-frequency Data Integration for Landscape Model Calibration of Carbon Fluxes Across Diverse Tidal Marshes	Windham-Myers, Lisamarie	<u>Collaborating Agency: U.S. Geological Survey</u>	Sacramento, CA
Identifying Hot Spots and Hot Moments of Metabolic Activity in Salt Marsh Sediments through BONCAT-FISH Microscale Mapping	Marlow, Jeffrey	Boston University	Boston, MA
Interactive effects of press and pulse disturbances on biogeochemical cycling of a wet tropical forest in Puerto Rico	Cavaleri, Molly	Michigan Technological University	Houghton, MI
Interactive effects of press and pulse disturbances on biogeochemical cycling of a wet tropical forest in Puerto Rico	Yang, Xiaojuan	<u>Collaborating Lab: Oak Ridge National Lab (ORNL)</u>	Oak Ridge, TN
Interactive effects of press and pulse disturbances on biogeochemical cycling of a wet tropical forest in Puerto Rico	Reed, Sasha	<u>Collaborating Agency: U.S. Geological Survey</u>	Moab, UT
Linking root and soil microbial stress metabolism to watershed biogeochemistry under rapid, year-round environmental change	Bhatnagar, Jennifer	Boston University	Boston, MA
Methane dynamics described through vegetation-soil interactions in bald cypress and other bottomland hardwood forests	El Masri, Bassil	Murray State University	Murray, KY
Plant carbohydrate depletion, mycorrhizal networks, and vulnerability to drought: an experimental test in the field	Sala, Anna	University of Montana	Missoula, MT
Predicting hot spots and hot moments of biogenic gas accumulation and release in a subtropical ecosystem using airborne ground-penetrating radar (GPR)	Comas, Xavier	Florida Atlantic University	Boca Raton, FL
Predicting hot spots and hot moments of biogenic gas accumulation and release in a subtropical ecosystem using airborne ground-penetrating radar (GPR)	Terry, Neil	<u>Collaborating Agency: U.S. Geological Survey</u>	Troy, NY
Rewriting the Redox Paradigm: Dynamic hydrology shapes nutrient and element transformations in a Great Lakes coastal estuary	Kinsman-Costello, Lauren	Kent State University	Kent, OH
The potential for advanced snowmelt timing to decouple plant and mycorrhizal fungal phenology and biogeochemical cycling	Kivlin, Stephanie	The University of Tennessee	Knoxville, TN
The potential for advanced snowmelt timing to decouple plant and mycorrhizal fungal phenology and biogeochemical cycling	Sorensen, Patrick	<u>Collaborating Lab: Lawrence Berkeley National Lab (LBNL)</u>	Berkeley, CA
Trees as conduits for connecting belowground microbial processes to aboveground CH ₄ emissions at the Terrestrial-Aquatic Interface	Saleska, Scott	The University of Arizona	Tucson, AZ
Understanding spatial and temporal drivers of variation in tree hydraulic processes and their consequences for climate feedbacks	Dukes, Jeffrey	Purdue University	West Lafayette, IN
Understanding spatial and temporal drivers of variation in tree hydraulic processes and their consequences for climate feedbacks	Xu, Chonggang	<u>Collaborating Lab: Los Alamos National Lab (LANL)</u>	Los Alamos, NM
Using probability distribution function as a scaling approach to incorporate soil heterogeneity into biogeochemical models for greenhouse gas predictions	Sihi, Debjani	Emory University	Atlanta, GA
Using probability distribution function as a scaling approach to incorporate soil heterogeneity into biogeochemical models for greenhouse gas predictions	Zheng, Jianqiu	<u>Collaborating Lab: Pacific Northwest National Lab (PNNL)</u>	Richland, WA