

11th Annual Harvard Plant Biology Initiation Symposium

2016 Poster Session -- Tuesday, May 3rd

Interactive Effects of Photoperiod, Temperature, and Chilling on Phenology Across Latitudes

Authors: Daniel Flynn, Tim Savas, Elizabeth Wolkovich

Lead contact email: Daniel Flynn (flynn@fas.harvard.edu)

Under Long Term Soil Warming, Trees in a Northeastern Hardwood Forest Reallocated Carbon from Roots to Aboveground Woody Growth

Authors: William Werner, Michael Bernard, Francis Bowles, Jerry Melillo

Lead contact email: William Werner (wwerner@mbi.edu)

Dried Out, But Not Dead! Photosynthetic Resilience in Desert-Derived Green Microalgae During Multiple Desiccation/Rehydration Cycles

Authors: ZG Cardon, E Lopez Peredo, O Shapira, S Thomas, D Bruce

Lead contact email: Zoe Cardon (zcardon@mbi.edu)

Stomatal Control Banana Style: What's the "Wrong Way Response" Hiding?

Authors: Or Shapira, Yotam Zait, Amnon Schwartz, Edward Rastetter, Zoe Cardon

Lead contact email: Or Shapira (oshapira@mbi.edu)

Experimental Warming Delays Autumn Senescence in a Boreal Spruce Bog: Initial Results from the SPRUCE Experiment

Authors: Andrew Richardson, Morgan E. Furze, Donald M. Aubrecht, Thomas Milliman, W. Robert Nettles, Misha B. Krassovski, Paul J. Hanson

Lead contact email: Morgan Furze (mfurze@fas.harvard.edu)

Zygotic Dormancy Underlies Prolonged Seed Development in *Franklinia alatamaha*: A Most Unusual Case of Reproductive Phenology in Angiosperms

Authors: Kristel M. Schoonderwoerd, William E. Friedman

Lead contact email: Kristel M. Schoonderwoerd (schoonderwoerd@fas.harvard.edu)

Response of Foliar Traits and Phosphorus Fractions to Fertilization in a Tropical Forest: Understanding Plant Adaptations to Phosphorus Availability

Authors: Faming Wang, Qifeng Mo, Emma J. Sayer, Hans Lambers, Mary Heskell, Jianwu Tang

Lead contact email: Faming Wang (wangfm@scbg.ac.cn)

Seasonality and Evolution of Leaf Defenses Across the Wild Dogwoods (*Cornus*)

Authors: Michael LaScaleia, Chase Mason

Lead contact email: Michael LaScaleia (Michael.LaScaleia@tufts.edu)

Exploring the Transcriptomes of Texas *Phlox*

Authors: Federico Roda, Robin Hopkins

Lead contact email: Federico Roda (federicoroda@fas.harvard.edu)

Nonstructural Carbon Reserves in Temperate Tree Species

Authors: Morgan Furze, Meghan Blumstein, Andrew Richardson, Moriah Carbone, Trevor Keenan

Lead contact email: Morgan Furze (mfurze@fas.harvard.edu)

Season Spotter: Citizen Science and PhenoCams

Authors: Margaret Kosmala, Rebecca Cheng, Sandra Henderson, Andrew Richardson

Lead contact email: Margaret Kosmala (kosmala@fas.harvard.edu)

The *Aquilegia* JAGGED Ortholog Controls Primordium Initiation and Adaxial Cell Proliferation

Authors: Min Ya, Elena Kramer

Lead contact email: Min Ya (yamin@g.harvard.edu)

Phloem Anatomy in Two Members of the Basal Angiosperm Lineage *Austrobaileyales*

Authors: Juan M. Losada, Noel M. Holbrook

Lead contact email: Juan M. Losada (juanlosada@fas.harvard.edu)

Reconstruction and Structural Analysis of Ancestral RuBisCO Proteins

Authors: Victor Hanson-Smith, Nicholas Boekelheide, Zachary R. Adam, Betul Kacar

Lead contact email: Betul Kacar (kacar@g.harvard.edu)

How Do Trees Maintain Photosynthate Transport from Leaves to Roots as They Grow Taller?: A Study of The Ontogenetic Scaling of Phloem Sieve Tube Hydraulic Resistance with Tree Height in *Quercus rubra*

Authors: Laura Clerx, Noel M. Holbrook, Jessica Savage

Lead contact email: Laura Clerx (lcclerx@college.harvard.edu)

Multiscale Model of Light Harvesting and Non-Photochemical Quenching by Photosystem II in Plants

Authors: Doran I.G. Bennett, Kapil Amarnath, Graham Fleming

Lead contact email: Doran I.G. Bennett (bennett.doran@gmail.com)

Optimizing Whole-Mount Confocal Microscopy for Ovules and Seeds

Authors: Rebecca Povilus, William Friedman

Lead contact email: Rebecca Povilus (rpovilus@fas.harvard.edu)

Predicting the Thermodynamics of Biochemical Redox Reactions Through Quantum Chemistry and Machine Learning

Authors: Adrian Jinich, Sung-Jin Kim, Benjamin Sanchez-Lengeling, Elad Noor, Arren Bar-Even, Alan Aspuru-Guzik

Lead contact email: Adrian Jinich (ajinich@fas.harvard.edu)

Modeling Exciton Dynamics in Biliproteins with HPC: Towards Nanoscale Control of Coherence

Authors: Samuel M. Blau, Thomas Markovich, Doran I.G. Bennett, Alan Aspuru-Guzik

Lead contact email: Samuel M. Blau (sblau@fas.harvard.edu)

Closure and Wilting Precedes Xylem Cavitation in Grapevine Leaves

Authors: Uri Hochberg, Alexandre Ponomarenko, Fulton Rockwell, Noel M Holbrook

Lead contact email: Uri Hochberg (uriho9842@yahoo.com)