

*Plant Genomics @ MSU  
Research Symposium  
2019*

*Thursday July 25<sup>th</sup> & Friday July 26<sup>th</sup>  
A149 Plant & Soil Sciences Building*



*Sponsors*



*MSU College of Natural Science  
MSU College of Agriculture & Natural Resources  
Department of Plant Biology  
Department of Biochemistry & Molecular Biology  
Department of Horticulture  
Department of Plant, Soil & Microbial Sciences  
MSU-DOE Plant Research Laboratory*

## Thursday July 25<sup>th</sup>

- 1:30 pm Welcome, Cornelius Barry
- 1:35 pm **Session One: Responses to Environmental Stimuli**  
Session Chair: Acer Van Wallendael
- 1:35 pm **Michael Kalinowski**, Aquinas College (VanBuren)  
“The desiccation tolerance of *Craterostigma plantagineum*”
- 1:50 pm **Audrey Searing**, Western Michigan University,  
(Montgomery) “Phytochrome A (PHYA) regulated Sigma  
factor 6 (SIG6) controls genes contributing to the far-  
red block of greening response in *Arabidopsis thaliana*.”
- 2:05 pm **Chasity Polk**, Fort Valley State University (Bonito)  
“Algae & fungi stress resilience”
- 2:20 pm **John Wrath**, California State University, Dominguez-Hills  
(Lowry) “Freezing tolerance and emergence time varies  
with ecotype and latitude of origin in *P. virgatum*”
- 2:35 pm **Kenia Segura Aba**, University of Texas, Austin (Shachar-  
Hill) “Recovery from nitrogen deprivation in  
*Chlamydomonas reinhardtii*”
- 2:50 pm **Karina Rodriguez**, University of Puerto Rico, Mayaguez  
(Montgomery) “Regulation of pigmentation and tuning  
of photosynthetic potential during complementary  
chromatic acclimation in *Fremyella diplosiphon*”
- 3:05 – 3:30 pm Coffee Break

- 3:30 pm      **Session Two: Development & Regulation**  
Session Chair: Hervé Begue
- 3:30 pm      **Marshall Ledford**, Vassar College (Niederhuth)  
“Trends in DNA methylation context of gene duplicates”
- 3:45 pm      **Drina Cooper**, Saint Augustine’s University (Hsu)  
“Understanding the roles of genes that are translationally upregulated by ABA treatment”
- 4:00 pm      **Christine Schafer**, SUNY Oneonta (Thompson)  
“Modeling canopy architecture in maize”
- 4:15 pm      **Eric Gonzales**, Grand Valley State University, (Ducat)  
“Disentangling the role of PntAB, a pyridine nucleotide transhydrogenase, in the regulation of photosynthetic function of flavodiiron proteins in *Synechococcus elongatus* PCC 7942”
- 4:30 pm      **Melina Brunelli**, Binghamton University, (Grotewold)  
“Understanding the influence of alternative TSS selection on translation initiation and protein diversity”

## Friday July 26<sup>th</sup>

- 8:45 am      Coffee and Bagels
- 9:00 am      **Session Three: Biotic Interactions**  
Session Chair: Marivi Colle
- 9:00 am      **Thomas Zambiasi**, Michigan State University (Weber)  
“Do pearl bodies in grape plants (*Vitis* spp.) attract and feed beneficial mites?”
- 9:15 am      **Tuesday Danielle Weaver**, California State University, Fullerton (Day) “Defining the mechanisms behind

*Pseudomonas syringae*–induced mitochondrial dysfunction in *Nicotiana benthamiana* cells”

- 9:30 am **Vicki Meraz** California State University, Monterey Bay (Miles), Genetic factors regulating the infection process and virulence of *C. acutatum* on blueberry fruits and other important small fruit crops”
- 9:45 am **Carolyn Graham**, Michigan State University (Weber)  
“Trade-offs between chemical defense and mutualistic mite biotic defense across the genus *Vitis*”
- 10:00 am **Lexi Heger**, Ohio State University (Miles),  
“Characterizing resistance to multiple SDHI fungicides in *Botrytis cinerea* using phenotypic and genotypic approaches”
- 10:15 am **Carson Pearl**, University of Missouri, Columbia (Edger)  
“How plant-fungal interactions impacted the colonization of land”
- 10:30 am **Coffee Break**
- 10:45 am **Session Four: Metabolism**  
Session Chair: Hannah Parks
- 10:45 am **MacKenzie Jacobs**, West Liberty University (Last)  
“Sweet defense: Identifying acylsugar diversity in *Nicotiana*”
- 11:00 am **Vang Yang**, California State University, Fresno (Hamberger)  
“Converting synthetic substrates with novel terpene synthases”

- 11:15 am **Thomas Young**, Michigan State University (Schnell)  
"Functional analysis of mitochondrial carrier proteins in *Arabidopsis*"
- 11:30 am **Cameron De La Mora**, Illinois State University, (Benning)  
"Characterizing RBL10: A rhomboid protease in *Arabidopsis thaliana*"
- 11:45 am **Clare Radtke**, Lake Superior State University (Kerfeld)  
"Characterization of a new family of water-soluble carotenoid binding proteins"
- 12:00 pm **Hannah Ramcharan**, University of Maryland, Baltimore County (Last)  
"Identifying medicinal defense metabolite genes in *Mimulus guttatus*"
- 12:15 pm **Cornelius Barry**, Closing Remarks