

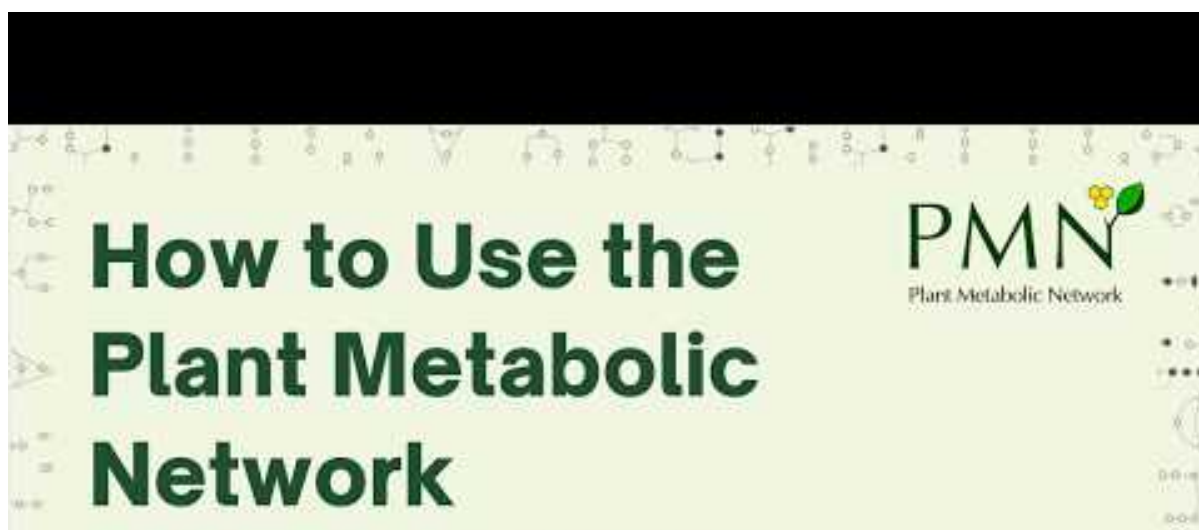


The Plant Metabolic Network (PMN) is your go-to resource for curated metabolic pathway data, genome annotations, and analysis tools that support plant research and enhance understanding of plant metabolism. This newsletter will keep you informed about the latest developments, events, and resources from PMN, including database updates, feature enhancements, tutorials, workshops, and research highlights.

Watch Now: How to Use the Plant Metabolic Network Enzyme Activity Submission Form

The first video in our PMN Tutorial Video Series is officially live! In our first video, we walk through how to use the enzyme activity curation form of the Plant Metabolic Network. This form allows you to submit new enzyme activities into PMN.

You can view the tutorial video on our [YouTube channel here](#) or watch it below!



Enzyme Activity Curation Form

Are you interested in building a genome-scale metabolic pathway database for your species of interest?

[Click here to get started!](#)

PMN at Upcoming Conferences

Where We Will Be: **Northeast Regional Disordered Proteins Workshop**

When: September 17-18, 2026

Who Will Be There: Sue Rhee

PMN at Recent Events

Where We Were: **[The American Society of Plant Biologists \(ASPB\) Conference](#)**

When: July 18-22, 2026

Who Was There: Sue Rhee and Gabrielle Wyatt

Dr. Gabrielle Wyatt attended and Dr. Sue Rhee gave a talk on “*Arabidopsis thaliana* RHAMNOSE 1 condensate formation drives UDP-rhamnose synthesis.”





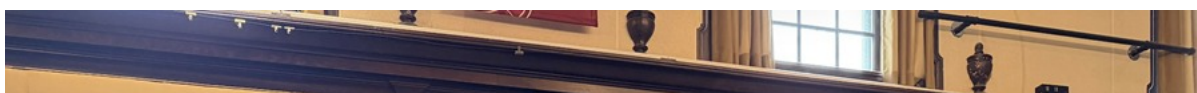
Dr. Rhee during her talk at the ASPB Conference.

PMN at PSNA

PMN members had a wonderful time attending and helping organize the 65th Annual Meeting of the Phytochemical Society of North America (PSNA 2026) in Madison, Wisconsin. The meeting provided an excellent opportunity to connect with the plant science community, share PMN resources, and learn about exciting advances in phytochemistry, plant metabolism, chemical ecology, and related fields.

Several PMN members also made important contributions to the scientific program. Dr. Philipp Zerbe presented a talk titled "Diversity, Biosynthesis, and Function of Diterpenoids in Monocot Crops," while Dr. Gabrielle Wyatt and Dr. Charles Hawkins served as group leaders for the workshop titled "Integration of A.I. into Phytochemical Research."

Thank you to the organizers, presenters, and attendees who helped make this year's meeting a success. We enjoyed connecting with colleagues and look forward to seeing everyone again next year!

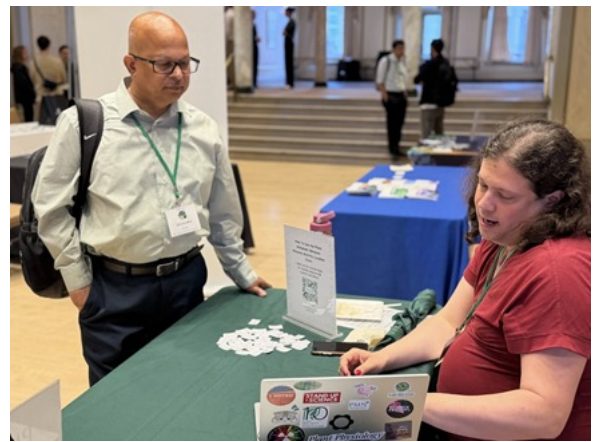




Members of PMN at the PSNA 2026 Conference.



Dr. Philipp Zerbe presenting at PSNA.



Dr. Charles Hawkins at the PMN booth at PSNA.

Publication Spotlight

A



Single-cell RNA-seq from maize pollen precursor cells / stages:



Meiocyte

B



Bulk RNA-seq from sorghum leaves and roots under different drought conditions:



C



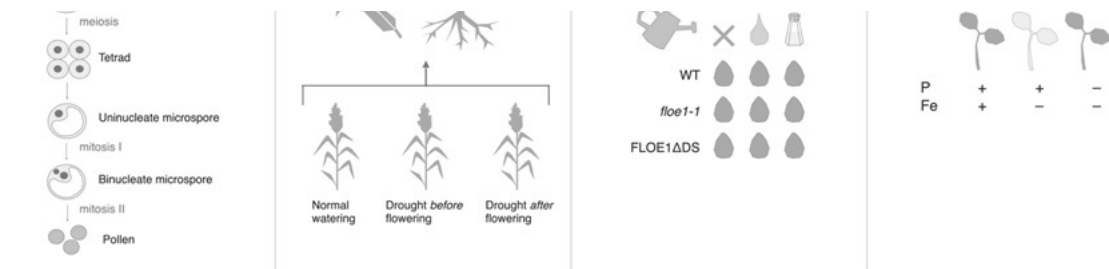
Bulk RNA-seq from *Arabidopsis* seeds with different genotypes and imbibition conditions:



D



Bulk RNA-seq from whole *Arabidopsis* seedlings grown in different media conditions:



A Reference-Free Algorithm Discovers Regulation in the Plant Transcriptome

Elisabeth Meyer, Evan V. Saldivar, Marek Kokot, Bo Xue, Sebastian Deorowicz, Seung Y. Rhee, Julia Salzman

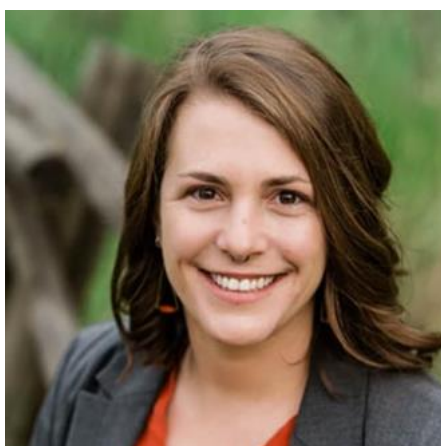
Published: April 2026

Abstract: Most plant genomes and their (post-)transcriptional regulation remain unknown. We used SPLASH—a new, reference genome-free sequence variation detection algorithm—to analyze transcriptional and post-transcriptional regulation from RNA-seq data. We discovered allelic variation in expression during maize pollen development and imbibition-dependent cryptic splicing in Arabidopsis seeds. SPLASH enables discovery of novel regulatory mechanisms, including differential regulation of genes from parental haplotypes of hybrids, without the use of alignment to a reference genome.

[Read The Publication Here](#)

People News

PMN is celebrating the following member achievements:



Dr. Gabrielle Wyatt

PMN Member Gabrielle Wyatt Earns PhD!

PMN Member Dr. Gabrielle Wyatt earned her Ph.D. in Plant Biology from UC Davis, officially graduating on June 11, 2026!

Her dissertation, "Expansion and evolution of diterpenoid metabolism in switchgrass (*Panicum virgatum*)," advances our understanding of plant specialized metabolism and contributes valuable insights into an important bioenergy crop.



Dr. Philipp Zerbe

Dr. Philipp Zerbe Named Associate Dean for Research and Graduate Studies

PMN Co-Principal Investigator Dr. Philipp Zerbe was named Associate Dean for Research and Graduate Studies at the UC Davis College of Biological Sciences!

[You can read more about it here!](#)



Dr. Matt Stata

Dr. Matt Stata to Launch the Stata Lab at the University of Massachusetts Amherst

PMN member Dr. Matt Stata will be joining the Department of Biology at the University of Massachusetts Amherst as an Assistant Professor and launching the Stata Lab. The Stata Lab will be a research group focusing on photosynthetic evolution, diversity, and resilience.



National Science Foundation (Grant #: [2312181](#), 1546838, 1026003, and 0640769) executed at [Michigan State University's Department of Biochemistry & Molecular Biology](#) and the [Plant Resilience Institute](#).

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