

2026 Soybean Breeders' Workshop

Plant Physiology and Breeding Innovation

Feb. 16 – 18, 2026

Hilton St. Louis Frontenac, 1335 S. Lindbergh Blvd,
St. Louis, MO 63131

Monday, February 16

Session 1: Breeding Innovations and Industry Highlights

Time	Speaker	Institution	Title
1:00	Ben Hall and Aaron Lorenz	GDM Seeds and UMN	Welcome and opening remarks
1:10	Pedro Gonzalez	Confluence Genetics	Accelerating the future of specialized soybean seed quality traits
1:35	Santiago Fleming	GDM Seeds	TBD
2:00	Francois Belzile	Université Laval	Translational genomics in soybean breeding: 10 years of public-private partnership in Canada
2:25	Jon Massman	Corteva	Breeding high-performing products at Corteva Agriscience
2:50	Jianming Yu	Iowa State	Complex trait dissection, prediction, and artificial intelligence
3:15	Coffee Break		

Session 2: Keynote Presentations

Time	Speaker	Institution	Title
3:45	Charlie Messina	University of Florida	Building an AI enabled prediction framework for crop improvement
4:20	Lisa Ainsworth	University of Illinois	Improving soybean canopies for greater photosynthesis in today's and tomorrow's atmosphere
4:55	Ben Hall and Aaron Lorenz	GDM Seeds and UMN	Housekeeping announcements

5:00	Adjourn		
5:15	Career Panel	Multiple institutions	Early career networking session for students and postdocs

Tuesday, February 17

Session 3: High-throughput Phenotyping

Time	Speaker	Institution	Title
8:00	Anne Brown and Danny Singh	Bayer Crop Science and Iowa State	Opening remarks
8:05	Alencar Xavier (Remote)	Corteva	An introduction to scalable multivariate and megavariate models
8:25	Britt Ousterhout	Bayer Crop Science	From pixels to performance
8:45	Joscif Raigne	Iowa State	Drone and satellite-based phenotyping in soybean variety development
9:05	Feng Li	Univ. of Missouri	Lightweight edge AI model for drought-induced soybean wilting classification
9:25	Pappu Yadav	SDSU	3D phenotyping of soybean with AI, RGB-D sensor and PhenAI-Bot in greenhouse
9:45	Coffee Break		

Session 4: Nutritional Imbalance

Time	Speaker	Institution	Title
10:15	Leah McHale and Gunvant Patil	Ohio State and Texas Tech	Opening remarks
10:20	Ivan Baxter	Danforth	A comparative approach for selecting orthologous candidate genes underlying signal in genome-wide association studies across multiple species
10:40	Michelle Graham	USDA-ARS	Identification and characterization of novel iron stress tolerance genes from soybean: A resource for crop improvement

11:00	Mather Khan	Univ. of Missouri	Iron Homeostasis in Plants: Molecular insights and applications for nutritional enhancement
11:20	Carrie Dottey	NDSU	Breeding for enhanced N fixation under low water conditions to protect soybean yields
11:40	Gunvant Patil	Texas Tech Univ.	Improving nutrient uptake through plant microbe interactions
12:00	Lunch		

Session 5: Abiotic Stress

Time	Speaker	Institution	Title
1:30	Caio Cannella Vieira and Walid Sadok	Univ. of Arkansas and Univ. of Minnesota	Opening remarks
1:35	Henry Nguyen	Univ. of Missouri	Mapping and characterization of QTL controlling flood tolerance and root plasticity in soybean
1:55	Danny Singh	Iowa State	Advancing Research and Breeding: Diverse platforms for abiotic stress screening
2:15	Felix Fritschi	Univ. of Missouri	TBD
2:35	Arianna Spellman-Kruse	Iowa State	Genomic analysis of soybean roots for heat tolerance associated genes and lncRNAs
2:55	Alvaro Sanz-Saez	Auburn University	Understanding the effects of elevated CO ₂ on soybean performance and seed nutrient concentration
3:15	Caio Canella Vieira	Univ. of Arkansas	Breeding soybean for season-long flood tolerance
3:35	Coffee		

Session 6: Presentations selected from submitted abstracts

Time	Speaker	Institution	Title
4:05	Venkata Hemanth	Purdue University	Modeling temporal biomass and G×E in soybean using UAS-RGB phenotyping and random regression genomics
4:20	Mauro Martinez	University of Illinois	Crop growth models calibration and use in a soybean breeding pipeline: Preliminary results

4:35	Shizhe Liang	University of Georgia	AI-enabled genomic prediction and implementation to support soybean breeding
4:50	Adjourn		
5:00-6:30	Poster session		Ambassadeur Rooms 2, 4, 6

Wednesday, February 18

Session 7: Reports and Announcements

Time	Speaker	Institution	Title
8:00	Aaron Lorenz	Univ. of Minnesota	Announcements
8:05	Jamie O'Rourke	USDA-ARS	Soybean Genomics and Executive Committee Report
8:20	Rex Nelson	USDA-ARS	Soybase Update
8:35	Ben Fallen, Zhanyou Xu	USDA-ARS	Soybean Germplasm Committee Report & More Services from Soybean GenBank: High-throughput pooled strategy for screening soybean germplasm for mining rare agronomic alleles
8:50	Brent Brower-Toland	Bayer Crop Science	Announcement of poster award winners
8:55	From the floor		Recognitions, retirements, announcements

Special Meetings

Monday, February 16

Time	Event	Location	Contact
8:00 AM – 12:00 PM	Phenotypic Plasticity and GxE Interaction: Dissection and prediction	Frontenac Room	Aaron Lorenz and Jiaming Yu
8:30 – 10:00 AM	Soybean Germplasm Committee Meeting	Pommard Room	Ben Fallen, USDA
9:00 – 10:30 AM	SoyBase Workshop Meeting	Le Café Room	Rex Nelson and Jacqueline Campbell, USDA
10:00 AM – 12:00 PM	Soybean Genomics Executive Committee Meeting	Pommard Room	Jamie O'Rourke, USDA
1:00 – 5:00 PM	Technicians' Workshop	Frontenac Room	Brian Little and Benjamin Bartlett

Tuesday, February 17

Time	Event	Location	Contact
8:00 AM – 12:00 PM	Technicians' Workshop	Frontenac Room	Brian Little and Benjamin Bartlett
6:30 – 7:30 PM	Uniform Regional Testing North	Frontenac Room	Adam Brock, USDA
6:30 – 7:30 PM	Uniform Regional Testing South	Le Café Room	Anne Gillen, USDA

Wednesday, February 18

Time	Event	Location	Contact
9:00 AM – 12:00 PM	Public Private Soybean Breeding Session	Ambassadeur Room	Michaela McGinn and Aaron Lorenz