

# 2025 SOYBEAN BREEDERS' WORKSHOP

## PATHOLOGY AND BREEDING INNOVATION

Feb 17 - 19, 2025

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

MONDAY, FEB 17

### SESSION 1: RESOURCES AND BREEDING INNOVATIONS

- 1:00 PM ● **Aaron Lorenz** - UMN  
**Keith Rincker** - BASF  
Welcome & Opening Remarks
- 1:05PM ● **Rex Nelson** - SOYBASE, USDA  
SoyBase Update: New look, new  
functionality
- 1:35PM ● **Jianxin Ma** - PURDUE  
SoyRenSeq: An approach for disease resistance  
gene discovery and application
- 2:05PM ● **Geeta Menon** - BASF  
BASF soybean seeds & traits
- 2:35PM ● **Cory Hirsch** - UMN  
Leveraging large-scale data and machine learning to  
understand plant responses to abiotic and biotic  
stresses
- 3:05PM ● **Mark Miller** - UNITED SOYBEAN BOARD  
Current state and focus of USB  
research funding

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3:10 PM ● **Coffee Break : Banquet Lobby**

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### SESSION 2: KEYNOTE PRESENTATIONS

- 3:40 PM ● **Jan Leach** - COLORADO STATE  
Exploiting intergenic spaces to build stress  
resistance in plants
- 4:20 PM ● **Carl Bradley** - UNIVERSITY OF KENTUCKY  
Current and future soybean disease  
challenges in the U.S.
- 5:00 PM ● **Aaron Lorenz** - UMN  
**Keith Rincker** - BASF  
Housekeeping announcements
- 5:10:PM -  
6:30 PM ● **Graduate Student and Postdoc  
Professional Development Event**  
Ambassadeur 2-4-6

## SESSION 2 : NEMATODES

- 8:00 AM ● **Session Chairs**  
**Andrew Scaboo** - U of MO  
**Carrie Miranda** - NDSU  
Introduction
- 8:05 AM ● **Andrew Scaboo** - U of MO  
New insights for developing soybean cultivars with broad SCN resistance
- 8:30 AM ● **Horacio Lopez-Nicora** - OHIO STATE  
Soybean Cyst Nematode: Current challenges and future innovations
- 8:55 AM ● **Melissa Mitchum** - U of GA  
Towards a better understanding of soybean resistance to Southern Root-Knot Nematode
- 9:20 AM ● **Caio Canella Vieira** - U of AR  
Broadening soybean resistance to Southern Root-Knot Nematode

9:45 AM ● **Coffee Break : Banquet Lobby**

## SESSION 3: STEM AND ROOT DISEASES

- 10:15 AM ● **Session Chairs:**  
**Megan McCaghey** - UMN  
**Eliana Monteverde** - U of IL  
Introduction
- 10:20 AM ● **Alison Robertson** - IOWA STATE  
Loss of *Rps* gene efficacy for mitigating Phytophthora stem and root rot in conventional soybean varieties
- 10:40 AM ● **Keith Merrill** - BAYER CROP SCIENCE  
Engineering disease tolerance through the use of genome editing
- 11:00 AM ● **Febina Mathew** - NDSU  
Fusarium and Diaporthe: Latest insights
- 11:20 AM ● **Andrew Bent** - U OF WI  
Soybean Cyst Nematode resistance mechanisms
- 11:40 AM ● **Steve Clough** - USDA-ARS, U OF IL  
Red Crown Rot- An emerging threat

12:00 PM ● **Lunch**  
-1:30 PM

## SESSION 4 : FOLIAR AND SEEDLING DISEASES

- 1:30 PM ● **Session Chairs:**  
**Feng Lin** - U OF MO  
**Horacio Lopez-Nicora** - OHIO STATE  
Introduction
- 1:30 PM ● **Daren Mueller** - IOWA STATE  
Foliar disease identification: How good are you?
- 1:55 PM ● **Wade Webster** - NDSU  
Soybean seedling disease management in a changing climate
- 2:20 PM ● **Zeng Li** - U OF GA  
Progress in breeding for frogeye leafspot resistance
- 2:45 PM ● **Dechun Wang** - MICHIGAN STATE  
Genetics and breeding for white mold resistance
- 3:10 PM ● **Mandy Bish** - U OF MO  
Insights from the field: An extension perspective on soybean diseases in the Central U.S.

3:35 PM ● **Coffee Break : Banquet Lobby**

## SESSION 5: NEW AND EMERGING DISEASE ISSUES

- 4:00 PM ● **Panel discussion**  
New and emerging diseases: What should breeders be worried about?
- 5:00 PM ● **Adjourn**
- 5:00 PM-6:30 PM ● **Poster session and social hour**  
Ambassadeur 1-3-5

## SESSION 6 : REPORTS AND ANNOUNCEMENTS

- 8:00 AM ● **Brent Brower-Toland** - BAYER CROP SCIENCE  
Announcement of poster winners
- 8:10 AM ● **Jamie O'Rourke** - USDA-ARS  
Soybean Genomics Executive Committee Report
- 8:25 AM ● **Elroy Cober** - AAFC  
Soybean Genetics Committee Report and Soybase.org update
- 8:40 AM ● **Ben Fallen** - USDA-ARS  
Soybean Germplasm Committee Report
- 8:55 AM ● **From the floor**  
Recognitions, retirements, and announcements

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## SESSION 7: ORAL PRESENTATIONS SELECTED FROM POSTER ABSTRACTS

- 9:00 AM ● **Scott Moore** - UNIVERSITY OF GUELPH  
Identification of novel marker-trait associations and genes for resistance to Soybean Cyst Nematode using a genomic diversity panel involving elite Canadian and Chinese germplasm
- 9:15 AM ● **Atit Parajuli** - IOWA STATE UNIVERSITY  
SNP panel to facilitate marker-assisted selection of genomic regions carrying genes for drought and flood tolerance and disease resistance in Soybean
- 1 15 AM  
9 30 AM ● **Lucas Roberts** - UNIVERSITY OF MINNESOTA  
Insights into breeding soybeans for winter oilseed relay-cropping systems
- 1 00 AM  
9:45 AM ● **Mariola Usovsky** - UNIVERSITY OF MISSOURI  
Resistance to Soybean Cyst Nematode is independent of Rhg1 in soybean landrace PI 407729
- **Lauren Docherty** - UNIVERSITY OF MINNESOTA  
Virulence genetics of Soybean Cyst Nematode
- **Aamir Khan** - UNIVERSITY OF MISSOURI  
A complete pangenomic landscape unlocks the genomic diversity of wild and cultivated soybean genomes
- ~10:30 AM ● **Adjourn**

# SPECIAL MEETINGS

## MONDAY FEB 17

8:00 AM  
-12:00 PM

● **Data visualization workshop**

Frontenac Room  
Contact : Aaron Lorenz- UMN

8:30 AM  
-10:00  
AM

● **Soybean Germplasm Committee Meeting**

Pommard Room  
Contact : Ben Fallen- USDA-ARS

9:00 AM  
-10:30 AM

● **SoyBase Workshop Meeting**

Le Cafe Room  
Contact : Rex Nelson and Jacqueline Campbell- SOYBASE, USDA

10:00 AM -  
12:00 PM

● **Soybean Genomics Executive Committee Meeting**

Pommard Room  
Contact : Jamie O'Rourke- USDA-ARS

1:00 PM  
-5:00 PM

● **Technicians' Workshop**

Frontenac Room  
Contact : Brian Little and Benjamin Bartlett

7:00 PM  
-8:00 PM

● **Soybean Genetics Committee**

Pommard Room  
Contact : Elroy Cober-AAFC

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## TUESDAY, FEB 18

8:00 AM  
-12:00 PM

● **Technicians' Workshop**

Frontenac Room  
Contact : Brian Little and Benjamin Bartlett

6:30 PM -  
7:30 PM

● **Uniform Regional Testing North and SCN Regional Testing**

Frontenac Room  
Contact : Adam Brock / Troy Cary

6:30 PM  
-7:30 PM

● **Uniform Regional Testing South**

Le Cafe Room  
Contact : Anne Gillen

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## WEDNESDAY, FEB 19

10:30 AM  
-12:00 PM

● **Soybean Breeders' Workshop Planning Committee**

Pommard Room  
Contact : Keith Rincker-BASF

# SPECIAL THANKS!





Keith Rincker Chair & Treasurer | BASF



Ben Hall Vice Chair | GDM Seeds



Cleiton Wartha Secretary | Corteva



Aaron Lorenz Public Liaison | University of Minnesota



Rex Nelson SoyBase Liaison | USDA



Jacqueline Campbell SoyBase Liaison | USDA



Nicole Choquette Hotel Liaison | Benson Hill



Ian McNish Social Media Liaison | Syngenta



Brent Brower-Toland Member | Bayer

2025 SBW Attendee Survey



[https://bit.ly/SBW\\_Survey](https://bit.ly/SBW_Survey)

SoyBase User Survey



[https://bit.ly/SoyBase\\_Survey](https://bit.ly/SoyBase_Survey)