



U.S. Wheat and Barley Scab Initiative GDER and PBG Joint Mid-year Meeting

Thursday, April 23, 2026

12:00 - 5:00 PM US Central Time (Virtual)

Zoom Meeting Link: You should have received it when you registered. If you don't have the email confirmation with Zoom link, contact nfo@scabusa.org and the email can be resent.

- **12:00 - 12:15 PM: Welcome**

- **12:15 - 1:10 PM: Session 1. Deoxynivalenol – Toxicity Mechanism & Control**

Dr. Gerit Bethke (University of Minnesota, St. Paul, MN)

UGT13248 is required for type 2 resistance to multiple Fusarium graminearum chemotypes

Dr. Sean O'Mara (University of Minnesota, St. Paul, MN)

Heterologous expression of the barley UDP-glucosyltransferase UGT13248 provides resistance to FHB spread and DON accumulation in wheat

Dr. John McLaughlin (Rutgers, The State University of New Jersey, New Brunswick, NJ)

Measuring the impact of DON on the chloroplast

- **1:10 - 1:50 PM: Session 2. Fungal Genomics & Biocontrol**

Dr. Chris Toomajian (Kansas State University, Manhattan, KS)

Genome-wide association studies in Fusarium graminearum populations

Dr. Nicholas Rhoades (USDA-ARS, Peoria, IL)

Enhancing Trichoderma-based biocontrol strategy to control FHB and mycotoxin contamination

- **1:50 - 2:10 PM: Break**

- **2:10 - 3:05 PM: Session 3. Susceptibility Genes - Genetic Targets for Enhancing Resistance to FHB in Wheat**

Dr. Md Ashraf Islam (University of North Texas, Denton, TX)

Disruption of the defense repressors NPR3 and NPR4 enhances resistance to Fusarium graminearum in wheat and Arabidopsis

Simran Goyal (University of Maryland, College Park, MD)
High-Resolution mapping of a conserved Fusarium Head Blight susceptibility factor Sf-Fhb-7AS in Wheat

Isha Mittal (University of North Texas, Denton, TX)
Integrated Host-Pathogen Transcriptomics Elucidates the Role of Wheat Lpx3 in Fusarium Head Blight Resistance

- **3:05 - 4:00 PM: Session 4. Enabling Technologies**

Dr. Yahya Rauf (Texas A&M AgriLife Research, Canyon, TX)
Coordinated efforts for pyramiding FHB resistance in winter wheat germplasm through double haploids

Dr. Shengming Yang (USDA-ARS, Fargo, ND)
Optimization of transformation efficiency and amenability spectrum in barley

Dr. Rong Di (Rutgers, The State University of New Jersey, New Brunswick, NJ)
Barley genetic engineering facility for FHB research community and engineering FHB resistance in barley

- **4:00 - 4:30 PM: Developing Collaborations**

- **4:30 - 5:00 PM: Future Directions**

- **5:00 PM: Adjourn**