

# **2019 National Fusarium Head Blight Forum**\*

Hyatt Regency Milwaukee Milwaukee, Wisconsin USA December 8-10, 2019

# **Pre Forum Events**

Sunday, December 8th

8:00 am-5:00 pm	REGISTRATION
	<i>Location:</i> Regency Ballroom Prefunction – outside of Regency C/D near
	Coat Check
9:00 am-12:45 pm	Authors set up posters
	Location: Regency Ballroom A/B

# **FORUM Begins**

1:00-1:10 pm	WELCOME
	Location: Regency Ballroom C/D
	Ruth Dill-Macky, University of Minnesota
	Co-Chair, U.S. Wheat & Barley Scab Initiative
1:10-2:45 pm	GENERAL SESSION I - CHAIRPERSON: David Kendra
	Location: Regency Ballroom C/D
1:10-1:45	Canadian Regulations for DON and FHB Levels
1.10 1.45	Santosh Kumar, Agriculture and Agri-Food Canada, Brandon,
	MB, CANADA
1 45 0 10	
1:45-2:10	Updated Insights on Efficacy and Timing of Fungicides from
	Multi-State Efforts
	Andrew Friskop, North Dakota State University, Fargo ND, USA

<sup>\*</sup>General Sessions and Flash and Dash Sessions will be held in Regency C/D. All Poster Sessions will be held in Regency Ballroom A/B. Forum Office is located in Solomon-Juneau.

1:45-2:45 pm	GENERAL SESSION I (cont.)
	Location: Regency Ballroom C/D
2:15-2:45	<ul> <li>Introduction and Overview of the ARS Genotyping Labs and their work on Scab.</li> <li>USDA-ARS Genotyping Lab Leaders: Guihua Bai, Manhattan, KS; Gina Brown-Guedira, Raleigh, NC; Jason Fiedler, Fargo, ND; and Deven See, Pullman, WA, USA</li> </ul>
2:45-3:10 pm	FLASH & DASH SESSION 1a: Mini Oral Presentations associated
	with Even Numbered Posters (2, 14, 18, 24, and 26)
	Location: Regency Ballroom C/D
3:10-3:35 pm	REFRESHMENT BREAK
	Location: Regency Ballroom Prefunction
3:40-4:30 pm	<b>GENERAL SESSION I - CHAIRPERSON:</b> H. Corby Kistler <i>Location: Regency Ballroom C/D</i>
3:40-4:05	Highly Aggressive and Toxigenic Transgressive Progeny from a Cross of Model Fusarium graminearum Strains PH-1 and GZ3639 are Associated with a Recombination Hotspot on Chromosome 2 Lisa Vaillancourt, University of Kentucky, Lexington, KY, USA
4:05-4:30	Targeting Pathogenicity Mechanisms to Promote FHB-Resistance in Wheat
	Jyoti Shah, University of North Texas, Denton, TX, USA
4:30-4:55 pm	FLASH & DASH SESSION 1b: Mini Oral Presentations associated with Even Numbered Posters (40, 44, 54, 60 and 62) Location: Regency Ballroom C/D
5:00-6:30 pm	<b>POSTER SESSION 1: Even Numbered Posters</b> (Authors with
	posters in this poster session should be at their posters from 5:15- 6:00 pm) <i>Location: Regency Ballroom A/B</i>
5:30-6:30 pm	RECEPTION <i>Location:</i> Inside Regency Ballroom A and Regency Ballroom Prefunction
6:30-8:00 pm	DINNER Location: Regency Ballroom C/D

<ul> <li>Ug99 Stem Rust Breeding in Wheat and Barley Update Location: Executive C/D</li> </ul>	8:00-9:00 pm	Evening Breakout Meeting	
<b>Facilitator:</b> Jose Costa, USDA-ARS, Beltsville, MD		Location: Executive C/D	

#### Monday, December 9<sup>th</sup>

6:30-8:10 am	BREAKFAST – Full Breakfast Buffet ( <i>breakfast voucher required</i> ) <i>Location:</i> Atrium
8:00 am-4:00 pm	REGISTRATION Location: Forum Office – Soloman-Juneau

#### **BREAKOUT MEETINGS** 8:10 am–12:00 pm and 1:00–1:55 pm

All Participants are welcome to attend any breakout except the USWBSI T3 Breeders Database Training which is limited to USWBSI Breeders/PIs only.

**NOTE:** There are two meeting rooms designated for networking activities / 'impromptu' meetings throughout the duration of the Forum: Pere Marquette and Executive D. Sign-up is not required to use those rooms; availability is on a 'first come basis.' A couple of small tables and chairs will also be setup in the back of Regency A/B (Poster Room) for attendees to use as well. However, no meetings are to be held inside Regency A/B during the scheduled Poster Sessions.

8:10-10:00 am	<b>VDHR-MGMT JOINT SESSIONS</b> – Joint sessions between breeders and pathologists by Market Class/Region. Groups will meet as indicated below:
8:10-8:30	<ul> <li>VDHR-MGMT JOINT SESSION – All Breeders and Pathologists meet together. Location: Regency C/D Facilitators: Stephen Baenziger and Andrew Friskop</li> </ul>
8:35-9:25	<ul> <li>Hard Winter Wheat Location: Executive A</li> <li>Facilitators: Stephen Baenziger and Erick DeWolf</li> </ul>
8:35-9:25	<ul> <li>Barley         Location: Executive B         Facilitators: Alyssa Collins and Kevin Smith     </li> </ul>
8:35-9:25	<ul> <li>Soft Winter Wheat</li> <li>Location: Executive C</li> <li>Facilitators: Christina Cowger and Clay Sneller</li> </ul>

8:10-9:30 am	VDHR-MGMT JOINT SESSIONS (cont.)
8:35-9:25	<ul> <li>Spring Wheat/Durum</li> <li>Location: Crystal</li> <li>Facilitators: Jim Anderson and Andrew Friskop</li> </ul>
9:30-10:00	<ul> <li>VDHR-MGMT JOINT SESSION – All Breeders and Pathologists reconvene to discuss results from small group discussions and reach consensus. Location: Regency C/D Facilitators: Stephen Baenziger and Andrew Friskop</li> </ul>
8:45-10:00 am	NUTS AND BOLTS – This breakout is targeted for Graduate Students, Post Docs and Technicians, but anyone interested is welcome to attend. <i>Location: Lakeshore A</i> Facilitator: Amber Hoffstetter
9:15-10:00 am	GDER AND PBG JOINT BREAKOUT Location: Lakeshore B Facilitators: Steve Scofield and Todd Ward
10:00-10:25 am	REFRESHMENT BREAK Location: Regency Ballroom Prefunction
10:30-11:55 pm	RESEARCH AREA BREAKOUTS
	<ul> <li>FHB Management (MGMT)</li> <li>Location: Milwaukee A/B</li> <li>Facilitator: Paul Esker</li> </ul>
	<ul> <li>Food Safety &amp; Toxicology (FST)</li> <li>Location: Executive B</li> <li>Facilitator: Dave Kendra</li> </ul>
	<ul> <li>Gene Discovery &amp; Engineering Resistance (GDER)</li> <li>Location: Lakeshore B</li> <li>Facilitator: Steve Scofield</li> </ul>
	<ul> <li>Pathogen Biology &amp; Genetics (PBG)</li> <li>Location: Lakeshore C</li> <li>Facilitator: Todd Ward</li> </ul>
10:30-11:30 am	USWBSI T3 BREEDERS DATABASE WORKSHOP –Breeders are required to attend, space is limited to PIs only <i>Location:</i> Lakeshore A Facilitator: David Waring

11:35 am-12:00 pm	GENOTYPING LAB NETWORKING SESSIONS – USDA Lab Leaders meet with USWBSI Researchers in their region.
	<ul> <li>Northern and Southern Soft Winter Wheat Joint Session with USDA Eastern Regional Small Grains Genotyping Lab <i>Location: Lakeshore A</i> Facilitator: Gina Brown-Guedira</li> </ul>
	<ul> <li>Hard Winter Wheat Joint Session with USDA Central Small Grain Genotyping Lab Location: Executive A Facilitator: Guihua Bai</li> </ul>
	Sarley, Durum, and Spring Wheat Joint Session with USDA
	North Central and Western Small Grains Genotyping Labs
	<i>Location: Regency C/D</i> Facilitators: Jason Fiedler and Deven See
12.00 12.55	
12:00-12:55 pm	
	Location: Atrium
1:00-1:55 pm	COORDINATED PROJECT BREAKOUTS
	Barley Coordinated Project (BAR-CP)
	Location: Lakeshore B
	Facilitator: Brian Steffenson
	Durum Coordinated Project (DUR-CP)
	Location: Executive B
	Facilitators: Steven Xu
	<ul> <li>Hard Winter Wheat Coordinated Project (HWW-CP) <i>Location:</i> Executive A Facilitator: Sunish Sehgal     </li> </ul>
	<ul> <li>Variety Development and Host Resistance – Spring Wheat Region Coordinated Project (VDHR-SPR CP) Location: Lakeshore C Facilitator: Mory Rugg</li> </ul>

1:00-1:55 pm	COORDINATED PROJECT BREAKOUTS (cont.)
	<ul> <li>Variety Development and Host Resistance – Northern Soft Winter Wheat Coordinated Project (VDHR-NWW CP) Location: Executive C Facilitator: Jana Murche</li> </ul>
	<ul> <li>Variety Development and Host Resistance – Southern Soft Red Winter Wheat Coordinated Project (VDHR-SWW CP) Location: Crystal Facilitator: Steve Harrison</li> </ul>
2:00-3:00 pm	<b>GENERAL SESSION II - CHAIRPERSON:</b> John McLaughlin <i>Location: Regency Ballroom C/D</i>
2:00-2:25	The Role of Plant Extracellular Vesicles in Immunity and Trans- Kingdom Silencing Brian Rutter, Indiana University, Bloomington, IN, USA
2:25-3:00	Multi-pronged Strategies to Improving Fusarium Head Blight Resistance in Durum Wheat Ehsan Sari, Crop Development Centre, Saskatoon, SK, CANADA
3:00-3:25 pm	<b>FLASH &amp; DASH SESSION 2a:</b> Mini Oral Presentations associated with Odd Numbered Posters (15, 31, 33, 35 and 39) <i>Location: Regency Ballroom C/D</i>
3:25-3:45 pm	REFRESHMENT BREAK Location: Regency Ballroom Prefunction
3:50-4:40 pm	GENERAL SESSION II (cont.) - CHAIRPERSON: Andrew Friskop Location: Regency Ballroom C/D
3:50-4:15	A Grower's Perspective on Scab from Northwest North Dakota Dustin Johnsrud, Private Producer, Epping, ND, USA
4:15-4:40	Steps for Approving and Validating Commercial Mycotoxin Test Kits Ajit Ghosh, USDA's Agricultural Marketing Service (AMS), Kansas City, MO, USA
4:40-5:05 pm	with Odd Numbered Posters (43, 47,
	51, 53 and 59) <i>Location: Regency Ballroom C/D</i>

5:10-6:40 pm	<ul> <li>Poster Session 2: Odd Numbered Posters (Authors with posters in this poster session should be at their posters from 5:30-6:15 pm)</li> <li>Location: Regency Ballroom A/B</li> </ul>
6:00-7:15 pm	RECEPTION
	Location: Inside Regency Ballroom A and Regency A/D Prefunction

# Tuesday, December 10<sup>th</sup>

6:30-8:10 am	BREAKFAST – Full Breakfast Buffet ( <i>breakfast voucher required</i> ) <i>Location:</i> Atrium
8:20-10:00 am	<b>GENERAL SESSION III - CHAIRPERSON:</b> Boyd Padgett <i>Location: Regency Ballroom C/D</i>
8:20-8:40	<i>Epigenetic Modifications: A Novel Source of FHB Resistance in</i> <i>Durum Wheat</i> Jitendra Kumar, University of Minnesota, Saint Paul, MN, USA
8:40-9:08	Can Agronomic Practices Reduce DON? Carrie Knott, University of Kentucky, Lexington, KY, USA
9:08-9:35	Effects of Head Morphology and Phenology on Fusarium Infection Processes and Implications for Disease Management in Barley Robert Brueggeman, Washington State University, Pullman, WA, USA
9:35-10:00	Application of Model Ensembles to the Prediction of Fusarium Head Blight Erick DeWolf, Manhattan, KS, USA
10:00-10:25 am	REFRESHMENT BREAK Location: Regency Ballroom Prefunction
10:30-11:55 am	<b>GENERAL SESSION III</b> ( <i>cont.</i> ) - <b>CHAIRPERSON:</b> Brian Steffenson <i>Location:</i> Regency Ballroom C/D
10:30-10:55	Color and Spectral Imagining for High-throughput Field FHB Detection and Lab DON Assessment Ce Yang, University of Minnesota, St. Paul, MN, USA

#### Tuesday, December 10<sup>th</sup> (cont.)

11:30-11:55 am	GENERAL SESSION III (cont.)
10:55-11:30	<b>RNA-based Innovative Plant Protection Strategies for Controlling</b> <b>Fungal Pathogens</b> Hailing Jin, University of California, Riverside, CA, USA
11:30-11:55	Challenges and Efforts to Maintain Winter Barley as a Viable Crop in the Eastern U.S. Carl Griffey, Virginia Polytechnic and State University, Blacksburg, VA, USA
11:55 am	TAKING CARE OF BUSINESS AND CLOSING REMARKS
	Location: Regency Ballroom C/D
	Doyle Lentz, Co-Chair, U.S. Wheat & Barley Scab Initiative and Private Producer, Rolla, ND, USA
12:00 pm	FORUM ADJOURNS

## **POST FORUM MEETINGS**

12:05-12:55pm	USWBSI Steering Committee (SC) Lunch (SC members only)
	Location: Gilpatrick
1:00-4:00 pm	USWBSI Steering Committee Meeting (Closed meeting - SC members
	only)
	Location: Lakeshore
4:00-6:00 pm	NWIC Evening Session Location: Lakeshore
-	Location: Lakeshore
	Chair: Eric Olson, Michigan State University

## Wednesday, December 11<sup>th</sup>

8:00 am-3:00 pm	National Wheat Improvement Full Committee (NWIC) Meeting
	Location: Lakeshore
	Chair: Eric Olson, Michigan State University