

Schedule of Events

Talks will be held in the Grand Ballroom 5-8.

Posters will be displayed in the Ballroom Foyer (adjacent to Grand Ballroom) and on the 3rd floor in the St. Johns and Clearwater rooms.

Thursday, March 17

2:00 PM – 6:00 PM **OPTIONAL PRE-CONFERENCE WORKSHOPS**

2:00 PM – 3:30 PM **MaizeGDB problem solving workshop** (Daytona Room)

3:30 PM – 4:30 PM **Gramene tutorial** (Daytona Room)

4:30 PM – 6:00 PM **Zea mays genome assemblies** (Daytona Room)

Pre-registration recommended for the above sessions.

3:00 PM – 8:30 PM **REGISTRATION** (2nd Floor Sky Bridge near Grand Ballroom)

3:00 PM – 6:00 PM **POSTER HANGING** (Ballroom Foyer and 3rd floor in St. Johns and Clearwater Rooms)

6:00 PM – 7:00 PM **DINNER** (Grand Ballroom 1-4)

7:00 PM – 9:00 PM **SESSION 1 – PLENARY TALKS**

Chair: David Braun

7:00 PM **WELCOME AND ANNOUNCEMENTS** (Grand Ballroom 5-8)
David Braun

7:15 PM **Karen Koch, University of Florida** [Plen 1]
Sugar in your ears: Regulating transport, metabolism, and consequences

8:05 PM **Jonathan Lynch, Pennsylvania State University** [Plen 2]
Phenes and genes for improved water and nutrient capture in maize

9:00 PM – 10:00 PM **REGISTRATION** (2nd Floor Sky Bridge near Grand Ballroom)

9:00 PM – 1:00 AM **INFORMAL POSTER VIEWING & HOSPITALITY**
(Grand Ballroom 1-4)

Friday, March 18

7:00 AM – 8:00 AM	BREAKFAST (Grand Ballroom 1-4)	
7:00 AM – 8:15 AM	REGISTRATION (2 nd Floor Sky Bridge near Grand Ballroom)	
8:00 AM – 10:15 AM	SESSION 2 - COMPUTATIONAL & LARGE-SCALE BIOLOGY Chair: Alain Charcosset	Talks 1-6.
8:00 AM	ANNOUNCEMENTS David Braun	(Grand Ballroom 5-8)
8:15 AM	Amanda Waters, University of Minnesota <i>Natural variation and cis-regulatory variation for response to abiotic stress in maize</i>	[T1]
8:35 AM	Julia Bailey-Serres, University of California, Riverside <i>Ancient sensing and response networks regulate flooding tolerance – So what's up with maize?</i>	[T2]
8:55 AM	Ana Paula Alonso, The Ohio State University <i>Deciphering kernel metabolism: how metabolomics and fluxomic can guide us</i>	[T3]
9:15 AM	Bo Wang, Cold Spring Harbor Laboratory <i>Unveiling the complexity of maize transcriptome by single-molecule long-read sequencing</i>	[T4]
9:35 AM	Linda Hanley-Bowdoin, North Carolina State University <i>DNA replication timing programs during development of maize root tips</i>	[T5]
9:55 AM	Johann Joets, Institute for Agricultural Research (INRA) <i>Genome-wide sequence analysis of the maize FV2 inbred line provides new insights into molecular and chromosomal features of presence/absence variants and their implication in European maize genetic originality</i>	[T6]
10:15 AM	BREAK	
10:45 AM – 12:25 PM	SESSION 3 – NEW TOOLS & APPROACHES FOR MAIZE Chair: Karen McGinnis	Talks 7-11.
10:45 AM	Johanna Smyth, Oregon State University <i>Proteomic profiling suggests control of translation and protein stability is crucial for pollen tube germination in maize (Zea mays)</i>	[T7]
11:05 AM	Maike Stam, University of Amsterdam <i>Identification and characterization of distant enhancers in Zea mays</i>	[T8]
11:25 AM	Sergei Svitashhev, DuPont Pioneer <i>Maize genome editing using CRISPR/Cas9 technology</i>	[T9]
11:45 AM	Elizabeth Lee, University of Guelph <i>Genomes to Fields' Maize GxE Project: Expression of productivity and phenological traits across a diverse set of environments</i>	[T10]
12:05 PM	Addie Thompson, Purdue University <i>Beyond GWAS: Characterizing drought response of elite temperate and tropical maize using a systems-biology approach</i>	[T11]

Friday, March 18 (continued)

- 12:30 PM – 1:30 PM **LUNCH** (Grand Ballroom 1-4)
- 1:30 PM – 5:00 PM **POSTER SESSION 1** (Ballroom Foyer and 3rd floor in St. Johns and Clearwater Rooms)
- 1:30 PM – 3:00 PM *Presenters should be at odd numbered posters.*
- 3:00 PM – 4:30 PM *Presenters should be at even numbered posters.*

Beverages will be available from 3:30 PM to 5:00 PM.

4:40 PM – 6:00 PM SESSION 4 – GENOME STRUCTURE & CYTOGENETICS Chair: Ruairidh Sawers Talks 12-15.

- 4:40 PM **Zhikai Liang, University of Nebraska-Lincoln** [T12]
B73 maize population structure analysis by RNA-seq data
- 5:00 PM **Michelle Stitzer, University of California, Davis** [T13]
Ecological determinants of transposable element distributions in the B73 maize genome
- 5:20 PM **Gernot Presting, University of Hawaii** [T14]
Resolving the centromere paradox – microevolution of centromeric DNA repeats
- 5:40 PM **Arnaud Ronceret, Universidad Nacional Autónoma de México** [T15]
Analysis of maize meiotic mutants to fix heterosis

- 6:00 PM – 7:00 PM **DINNER** (Grand Ballroom 1-4)

7:00 PM – 9:00 PM SESSION 5 – MCCLINTOCK PRIZE PRESENTATION Chair: Sherry Flint-Garcia McClintock Talk.

- 7:00 PM **Nathan Springer, MGEC Chair**
Early- and Mid-Career Awards
- Ron Phillips, University of Minnesota**
McClintock Prize Presentation
- 7:40 PM **Jeffrey D. Palmer, Indiana University at Bloomington** [M1]
Horizontal gene transfer – the dark matter of plant genomes and plant evolution

- 9:00 PM – 1:00 AM **INFORMAL POSTER VIEWING & HOSPITALITY**
(Grand Ballroom 1-4)

Saturday, March 19

7:00 AM – 8:00 AM **BREAKFAST** (Grand Ballroom 5-8)

8:00 AM – 10:20 AM **SESSION 6 – QUANTITATIVE GENETICS & BREEDING**
Chair: Jianbing Yan Talks 16-22.

8:00 AM **Jorge Alberto Romero Navarro, Cornell University** [T16]
Identifying the diamond in the rough: Studying allelic variation for complex traits in maize landraces

8:20 AM **Tingting Guo, Iowa State University** [T17]
Optimal design of genomic prediction in maize hybrid breeding

8:40 AM **Jason Wallace, The University of Georgia** [T18]
The effect of host genetics on the maize leaf microbiome across 270 diverse inbred lines

9:00 AM **Xiaohong Yang, China Agricultural University** [T19]
Genome-wide association study reveals genetic basis and role of ZmVPP1 in drought tolerance in maize seedlings

9:20 AM **Sebastien Praud, Biogemma** [T20]
BALANCE, a powerful population to decipher complex traits in maize

9:40 AM **Lei Liu, Huazhong Agricultural University** [T21]
KRN4 controls quantitative variation in maize kernel row number

10:00 AM **Shuhua Zhan, University of Guelph** [T22]
The genetic basis and adaptive significance of transcript abundance differences between two maize inbreds

10:20 AM – 10:45 AM **BREAK**

10:45 AM – 12:25 PM **SESSION 7 – CELL & DEVELOPMENTAL GENETICS**
Chair: Amanda Wright Talks 23-27.

10:45 AM **Karina van der Linde, Stanford University** [T23]
Biomolecular interpretation of the Trojan horse myth: Use of Ustilago maydis to analyze the function of maize (Zea mays) MAC1

11:05 AM **Pablo Martinez, University of California Riverside** [T24]
TANGLED-1 function in maize

11:25 AM **Kin Lau, Purdue University** [T25]
Induced and natural variation in genes encoding the microtubule severing ATPase, katanin p60 (KTNI), alter meristem shape, plant morphology and spikelet density

11:45 AM **Marisa Rosa, University of California at Berkeley** [T26]
The maize Mid-Completing Activity protein NARROW ODD DWARF is required for normal plant growth and leaf patterning

12:05 PM **Josh Strable, Iowa State University** [T27]
Maize YABBY genes drooping leaf1 and drooping leaf2 affect agronomic traits by regulating leaf and floral architectures

Saturday, March 19 (continued)

12:30 PM – 1:30 PM	LUNCH (Grand Ballroom 1-4)
1:30 PM – 5:00 PM	POSTER SESSION 2 (Ballroom Foyer and 3 rd floor in St. Johns and Clearwater Rooms)
1:30 PM – 3:00 PM	<i>Presenters should be at even numbered posters.</i>
3:00 PM – 4:30 PM	<i>Presenters should be at odd numbered posters.</i>
<i>Beverages will be available from 3:30 PM to 5:00 PM.</i>	
5:00 PM – 6:00 PM	COMMUNITY SESSION - Maize Genetics Executive Committee MGEC Chair: Nathan Springer (Grand Ballroom 5-8)
6:00 PM – 7:00 PM	DINNER (Grand Ballroom 1-4)
7:00 PM – 8:55 PM	SESSION 8 – PLENARY TALKS Chair: Erich Grotewold
7:00 PM	ANNOUNCEMENTS (Grand Ballroom 5-8) David Braun
7:15 PM	Mark Stitt, Max Planck Institute for Molecular Plant Physiology, Golm, Germany [Plen 3] <i>Balancing the carbon budget: Are plants better than bankers and politicians?</i>
8:05 PM	Chris-Carolin Schön, Technische Universität München, Freising, Germany [Plen 4] <i>Splendor and misery of quantitative genetics in the era of high-throughput technologies</i>
9:00 PM – 2:00 AM	INFORMAL POSTER VIEWING/DANCE (Grand Ballroom 1-4)

Sunday, March 20

7:00 AM – 8:20 AM **BREAKFAST** (Grand Ballroom 1-4)

Posters should be taken down by 9 am!

8:20 AM – 9:50 AM SESSION 9 – BIOCHEMICAL & MOLECULAR GENETICS I
Chair: Petra Wolters Talks 28-31.

- 8:20 AM **ANNOUNCEMENTS** (Grand Ballroom 5-8)
David Braun
- 8:30 AM **Mihai Miclaus, National Institute of Research and Development
for Biological Sciences, Romania** [T28]
*Maize cytolines provide key nuclear genes that are under the control of
retrograde signaling pathways in plants*
- 8:50 AM **Janaki Mudunkothge, University of Florida** [T29]
*The maize dosage-effect defective kernel1 (*ded1*) locus encodes a MYB
transcription factor controlling endosperm development and grain-fill*
- 9:10 AM **Charles Hunter, USDA-ARS** [T30]
*Maize white seedling 3 results from disruption of homogentisate
solaneyl transferase*
- 9:30 AM **Richard Vierstra, Washington University in St. Louis** [T31]
*Autophagic recycling plays a central role in maize nutrient
remobilization*
- 9:50 AM **BREAK**

10:20 AM – 11:30 AM SESSION 10 – BIOCHEMICAL & MOLECULAR GENETICS II
Chair: Wes Bruce Talks 32-34.

- 10:20 AM **Norman Best, Purdue University** [T32]
*Forward genetics identifies the nuclear pore complex component,
aladin1, as necessary for tassel architecture and asymmetric cell
division in maize*
- 10:40 AM **Hilde Nelissen, VIB Ghent University** [T33]
*Altered expression of the maize cytochrome P450 CYP78A1/KLUH
increases biomass and seed yield by an extended duration of cell
division*
- 11:00 AM **Jorge Nieto-Sotelo, Universidad Nacional Autónoma de
México** [T34]
*Importance of mesocotyl and plumule growth on heat and drought
avoidance in modern maize hybrids: physiology and GWAS*
- 11:30 AM **ADJOURNMENT**