

Schedule of Events

**Talks will be held in the St. Charles Ballroom.
Posters will be displayed in the Mega Center.**

Thursday, March 14

10:00 AM – 6:00 PM	OPTIONAL PRE-CONFERENCE WORKSHOPS	
10:00 AM – 3:00 PM	iPlant Collaborative Workshop (Utrillo Room)	
4:00 PM – 5:00 PM	MaizeGDB "How to" Tutorials Session #1 (Utrillo Room)	
5:00 PM – 6:00 PM	MaizeGDB "How to" Tutorials Session #2 (Utrillo Room)	
	The two MaizeGDB tutorials are identical.	
	<i>Pre-registration recommended for the above sessions.</i>	
3:00 PM – 6:00 PM	REGISTRATION (Near Main Lobby)	
3:00 PM – 6:00 PM	POSTER HANGING (Mega Center)	
6:00 PM – 7:00 PM	DINNER (Mega Center)	
7:00 PM – 9:00 PM	SESSION 1 – PLENARY TALKS	
	Chair: Phil Becraft	Pages 23 & 24
7:00 PM	WELCOME AND ANNOUNCEMENTS Phil Becraft	(St. Charles Ballroom)
7:15 PM	Mike Scanlon, Cornell University <i>Genetics of the maize shoot apical meristem</i>	[Plen 1]
8:05 PM	Julia Bailey-Serres, University of California, Riverside <i>Waterproofing plants: Sensing, signaling and response mechanisms</i>	[Plen 2]
9:00 PM – 12:00 AM	REGISTRATION (Mega Center)	
9:00 PM – 1:00 AM	INFORMAL POSTER VIEWING & HOSPITALITY (Mega Center)	

Friday, March 15

7:00 AM – 8:00 AM	BREAKFAST (Mega Center)	
7:00 AM – 8:15 AM	REGISTRATION (Mega Center)	
8:00 AM – 10:15 AM	SESSION 2 - GENOME STRUCTURE, FUNCTION & EVOLUTION I	
	Chair: Jinsheng Lai	Talks 1-6. Pages 29-32
8:00 AM	ANNOUNCEMENTS Phil Becraft	(St. Charles Ballroom)
8:15 AM	Fei Lu, Cornell University <i>Characterizing structural variation in 19,101 maize inbred lines</i>	[T1]
8:35 AM	Wenbin Mei, University of Florida <i>The alternative splicing landscape of maize</i>	[T2]
8:55 AM	Candice Hirsch, Michigan State University <i>Insights into the Maize (Zea mays L.) Pan Genome and Transcriptome</i>	[T3]
9:15 AM	Marcela Dotto, Cold Spring Harbor Laboratory <i>Analysis of leafbladeless1-dependent small RNAs: new insights into the tasiARFs pathway</i>	[T4]
9:35 AM	Hao Wang, University of Georgia <i>Twenty to Ten: Centromere Loss and Retention during the Descent of Maize from a Tetraploid Ancestor</i>	[T5]
9:55 AM	Lin Wang, Donald Danforth Plant Science Center <i>Exploring the mechanism of C₄ photosynthetic differentiation through a unified comparative analysis of maize and rice leaf transcriptomes</i>	[T6]
10:15 AM	BREAK	
10:45 AM – 12:25 PM	SESSION 3 – QUANTITATIVE GENETICS	
	Chair: Milena Ouzunova	Talks 7-11. Pages 33-35
10:45 AM	Eva Bauer, Technische Universität München <i>Variation of recombination landscape in European Flint and Dent maize</i>	[T7]
11:05 AM	David Wills, University of Wisconsin <i>From Many, One: Genetic Control of Prolificacy during Maize Domestication</i>	[T8]
11:25 AM	David Hessel, Iowa State University <i>Identification of genetic factors conferring resistance to Western corn rootworm beetles, "The Billion Dollar Pest of Maize"</i>	[T9]
11:45 AM	Bode Olukolu, North Carolina State University <i>A Connected Set of Genes Associated with Programmed Cell Death Implicated in Controlling the Hypersensitive Response in Maize</i>	[T10]
12:05 PM	Jianbing Yan, Huazhong Agricultural University <i>Genome-wide association study dissects the genetic architecture of quantitative traits in maize</i>	[T11]

Friday, March 15 (continued)

- 12:30 PM – 1:30 PM **LUNCH** (Mega Center)
- 1:30 PM – 5:00 PM **POSTER SESSION 1** (Mega Center)
- 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.

5:00 PM – 6:00 PM **SESSION 4 – GENOME STRUCTURE,
FUNCTION & EVOLUTION II**
Chair: Nathan Springer Talks 12-16. Pages 36 & 37

- 5:00 PM **Tao Zuo, Iowa State University** [T12]
*Phenotypic and transcriptional impacts of a specific copy number
variation (CNV) in maize*
- 5:20 PM **Mei Zhang, China Agricultural University** [T13]
*Genome-wide Single Base Resolution Allele Specific DNA and Histone
Methylation Profile in Maize Endosperm*
- 5:40 PM **Gernot Presting, University of Hawaii** [T14]
*Getting Hitched: retrotransposons, chromosome movement and
centromere drive*

- 6:00 PM – 7:00 PM **DINNER** (Mega Center)

7:00 PM – 9:00 PM **SESSION 5 – DROUGHT WORKSHOP**
Chair: Bob Bensen Workshop talks 1-3. Pages 27 & 28

- 7:00 PM **Roberto Tuberosa, University of Bologna** [W1]
*Enhancing drought tolerance in maize: Out with the old and in with
the new?*
- 7:30 PM **Mark Cooper, DuPont Pioneer** [W2]
Breeding for Drought Tolerance: Discovery to Product
- 8:00 PM **Daniel Dyer, Syngenta Seeds, Inc.** [W3]
Genetics at the Center of Corn Water Optimization Solutions
- 8:30 PM **Panel Discussion**

- 9:00 PM – 1:00 AM **INFORMAL POSTER VIEWING & HOSPITALITY**
(Mega Center)

Saturday, March 16

7:00 AM – 8:00 AM **BREAKFAST** (Mega Center)

8:00 AM – 10:15 AM **SESSION 6 – BIOCHEMICAL & MOLECULAR GENETICS**
Chair: Peter Balint-Kurti Talks 15-20. Pages 38-41

8:15 AM **Georg Jander, Boyce Thompson Institute** [T15]
A genetic and biochemical basis for natural variation in maize aphid resistance

8:35 AM **Karl Haro von Mogel, University of Wisconsin-Madison** [T16]
The mapping, genetic analysis, and phenotypic characterization of sugary enhancer1 (se1)

8:55 AM **Marna Yandea-Nelson, Iowa State University** [T17]
Defining the genetic and metabolic networks responsible for surface hydrocarbon production on maize silks

9:15 AM **Christy Gault, University of Florida** [T18]
Deep mRNA-sequencing of rough endosperm3 seedlings reveals altered splice site usage due to reduced function of splicing factor URP

9:35 AM **Eli Borrego, Texas A&M University** [T19]
Lipid-mediated signaling between maize and pathogens is required for disease development or defense

9:55 AM **Angi Xing, China Agricultural University** [T20]
Map-based cloning and characterization of a maize yellow seedling mutant and its modifier

10:15 AM – 10:45 AM **BREAK**

10:45 AM – 12:25 PM **SESSION 7 – CELL & DEVELOPMENTAL GENETICS**
Chair: Mark Settles Talks 21-25. Pages 42-44

10:45 AM **Thomas Slewinski, Cornell University** [T21]
Origin and Genetics of Kranz Anatomy and C4 Anatomical Specialization

11:05 AM **Amanda Durbak, University of Missouri** [T22]
Transport of boron and water by the tassel-less1 aquaporin is critical for vegetative and reproductive development in maize

11:25 AM **Gokhan Kir, Iowa State University** [T23]
Control of Maize Shoot Architecture by Brassinosteroid (BR) signaling

11:45 AM **Anding Luo, University of Wyoming** [T24]
Warty2 encodes a putative receptor-like Tyr kinase that contributes to maize leaf blade cell expansion

12:05 PM **Michael Pautler, Cold Spring Harbor Laboratory** [T25]
FASCIATED EAR 4 encodes a bZIP transcription factor required for maize meristem size homeostasis

Saturday, March 16 (continued)

12:30 PM – 1:30 PM	LUNCH (Mega Center)	
1:30 PM – 5:00 PM	POSTER SESSION 2 (Mega Center)	
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: Ed Buckler	(St. Charles Ballroom)
6:00 PM – 7:00 PM	DINNER (Mega Center)	
7:15 PM – 8:55 PM	SESSION 8 – PLENARY TALKS Chair: Phil Becraft	Pages 25 & 26
7:15 PM	Jen Sheen, Massachusetts General Hospital <i>Glucose Signaling Networks</i>	[Plen 3]
8:05 PM	James Holland, USDA-ARS, North Carolina State Univ. <i>The diversity of maize</i>	[Plen 4]
9:00 PM – 2:00 AM	INFORMAL POSTER VIEWING / DANCE (Mega Center)	

Sunday, March 17

7:00 AM – 8:20 AM **BREAKFAST** (Mega Center)

Posters should be taken down by 9 am!

8:20 AM – 9:50 AM **SESSION 9 – NEW RESOURCES & APPROACHES
TO MAIZE RESEARCH**
Chair: John Fowler Talks 26-29. Pages 45 & 46

8:20 AM **ANNOUNCEMENTS** (St. Charles Ballroom)
Phil Becraft

8:30 AM **Justin Walley, University of California San Diego** [T26]
*Reconstruction of Protein Networks from an Atlas of Maize Seed
Proteotypes*

8:50 AM **Yubin Li, Waksman Institute, Rutgers University** [T27]
A sequence-indexed reverse genetics resource for maize

9:10 AM **Jason Wallace, Cornell University** [T28]
*The Relative Contribution of Genic and Intergenic Polymorphisms to
Natural Phenotypic Variation in Maize*

9:30 AM **Carson Andorf, USDA-ARS** [T29]
MaizeGDB: everything old is new again!

9:50 AM **BREAK**

10:20 AM – 11:30 AM **SESSION 10 – NEW RESOURCES & APPROACHES
TO MAIZE RESEARCH II**
Chair: Ann Stapleton Talks 30-32. Pages 47-49

10:20 AM **Christopher Topp, Duke University** [T30]
*Live 3D imaging reveals the effects of long-term recurrent selection for
yield traits on maize root system architecture*

10:40 AM **Manpreet Katari, New York University** [T31]
*VirtualMaize: A Software platform for translational Systems Biology
research in Crops*

11:00 AM **Hilde Nelissen, Flanders Institute of Biotechnology** [T32]
*Growth Dyn-omics: studying the dynamics of transcriptomics and
interactomics within the growth zone of the maize leaf*

11:30 AM **ADJOURNMENT**