

NCCC-167 REGIONAL CORN BREEDING COORDINATING COMMITTEE ANNUAL REPORT 2014

LETTER OF INVITATION AND MEETING PROGRAM

Joint International Sweet Corn Development Association (ISCDA) and the Corn Breeding Research (CBR – NCCC167) annual meeting

December 9 and 10, 2013

Hyatt Regency Hotel - Chicago, IL

You are invited to attend the 2013-14 joint meeting of the International Sweet Corn Development Association (ISCDA) and the Corn Breeding Research (CBR – NCCC167) to be held at the Hyatt Regency Hotel in Chicago, IL (<http://www.chicagoregency.hyatt.com/en/hotel/home.html>) on December 9 and 10, 2013 during the week of the American Seed Trade Association meeting (http://www.amseed.com/mtg_css13_index.asp) also held at this same hotel. Please contact the hotel directly to make your lodging reservation.

REGISTRATION:

Registration fee is \$90. This registration fee includes meeting cost and morning and afternoon session breaks. The on-line registration site is

https://events.uwex.uwc.edu/cos/getdemo.ei?id=28004&s=_5940QOU8X. On site registration will also be available.

PROGRAM: On site registration will also be available.

A detailed schedule of presentation can be found below. The overall format for this year's ISCDA and CBR-NCCC167 joint meeting includes a Monday morning session focusing on ISCDA business meeting and round table discussion, 15 min volunteered presentations followed by questions during the afternoon of Monday. On Tuesday morning, 40 min invited presentations will take place in the morning followed by a discussion of the current G X E project, 2-min chalk-talks and NCCC167 business meeting during that afternoon.

Please note that all sessions of this meeting are open to all participants. We also encourage those planning to attend this meeting to participate of the ASTA conference. Graduate students have free registration for that conference and entire conference as well as individual day-passes are available for other participants.

ABSTRACTS:

Submission of abstract is volunteer except for those participating of the Larry Darrah student presentation award. Deadline for submission is 5PM CST November 29th. Please send abstracts via email to both program co-organizers (Keith Hardy - keith.hardy@syngenta.com & Natalia de Leon - ndeleongatti@wisc.edu). No abstract is necessary for the Tuesday afternoon chalk-talks.

Abstracts should contain title, authors, author institution affiliations, and text. All text should be 12-point New Times Roman and left justified. Please include all authors in the form last name, first name followed by a numerical footnote to indicate institutional affiliation. Include asterisk following presenting authors name. List institution with footnotes following authors.

Monday		
9:30 – 10:00AM		ISCD A registration
10:00 – 11:30AM		ISCD A business meeting and round table discussion
11:30AM – 12:30PM	Lunch	Lunch on your own
12:30 – 12:55 PM	Jode Edwards	Plant density response and genotype by environment interaction
12:55 – 1:20PM	Junping Chen	Field-based evaluation for high temperature tolerance in maize: A proposed phenotype rating system
1:20 – 1:45PM	Brian DeVries*	Characterization of endosperm carbohydrates in isa2-339 maize and interactions with <i>su1</i>
1:45 – 2:10PM	Brittany Glaza*	Analysis of expression of the <i>Corngrass1 (Cg1)</i> mutation when crossed reciprocally with the maize (<i>Zea mays</i> L.) inbreds B73 and Mo17
2:10 – 2:35PM	Reka Howard*	Parametric and nonparametric statistical methods for genomic selection for epistatic genetic architectures
2:35 – 3:00PM	Stella Salvo*	Regeneration ability - fine mapping
3:00 – 3:30PM	Break	
3:30 – 3:55PM	Brenda F. Owens*	Genome-wide association mapping of carotenoid loci and assessment of genomic prediction models for potential breeding applications
3:55 – 4:20PM	Scott Stelpflug*	Tissue culture induces consistent DNA methylation changes in maize
4:20 – 4:45PM	Wenwei Xu	Performance of recently released inbred lines from Texas A&M AgriLife Research
4:45 – 5:10PM	Nick Haase*	Utilizing bulk segregant analysis for the detection of quantitative trait loci (QTL) in a large population of diverse individuals
5:10 – 5:35PM	Maria Mateos Hernandez	Fine mapping of inflorescence architecture genes in maize using high throughput genotyping and phenotyping
Tuesday		
8:00 – 8:40AM	William Tracy	The genetics and physiology of sugary enhancer gene
8:40 – 9:20AM	Marty Williams	Few crop traits accurately predict variables important to productivity of processing sweet corn
9:20 – 10:00AM	Curt Hannah	Corn yield, climate change and <i>Shrunken-2, et al.</i>
10:00 – 10:30AM	Break	
10:30 – 11:10AM	Aaron Lorenz	The effect of genetic relationships and other factors on genomic prediction accuracy in public plant breeding programs
11:10 – 11:50AM	Liz Lee	Grain yield: indicators, mechanisms & GxE
11:50AM – 2:00PM	Lunch	Lunch on your own
2:00 – 2:10PM	David Ertl	Genomes to Fields – Introduction
2:10 – 2:35PM	Pat Schnable	Genomes to Fields – Initiative description and discussion
2:35 – 3:00PM	Natalia de Leon	G2F 2014 Community building exercise discussion
3:00 – 4:00PM		Panel discussion with industry representatives (DuPont-Pioneer, Monsanto, Syngenta, AgReliant, Dow Agrosiences, BASF)
4:00 – 5:00PM		NCCC167 business meeting/CBEC business meeting

* indicates presentations that are eligible for The Larry Darrah Student Presentation Award which is provided to the best student oral presentation

MINUTES NCCC-167 BUSINESS MEETING

2014 NCCC-167 Corn Breeding Research Meeting Business Meeting Minutes, December 10th, 2013 Hyatt Regency Conference Center, Chicago, IL

Notes: This meeting took place immediately following the Corn Breeding Research meeting that was convened jointly with the International Sweet Corn Development Association. This was considered the 2014 meeting, since NCCC167 is a USDA-NIFA committee. As such, the meeting was held in FY2014. The order of items presented herein is consistent with presentation at the meeting and does not necessarily correspond with the order of proposed agenda items. Due to a file corruption incident, the list of individuals present is not included, nor is there a record of which individuals made and seconded each motion. A quorum was present, and all motions made were brought to a vote that succeeded unanimously.

- 1. Introductory remarks.** The meeting was called to order at 5:15 PM by Natalia de Leon, who presented an on-screen agenda for the meeting and explained that the thrust of the meeting would be to address organizational issues associated with a need to maintain identity and visibility as a group, which was consistent with the resurgence of attendance at recent corn breeding research meetings. Natalia announced that since the 2013 meeting held in March 2013, an Executive Committee for Corn Breeding Research had been formed, and that Bill Tracy would be issuing a report on their activities immediately following the business meeting.
- 2. Approval of 2013 meeting minutes.** Paul Scott, previous secretary for the group submitted a draft copy of the meeting minutes for the 2013 meeting. They were briefly reviewed, and a motion to accept the minutes without alteration was made, seconded and approved by a unanimous vote of the group.
- 3. Approval of 2013 budget report.** Marcelo Carena, outgoing treasurer for the group submitted a copy of the 2013 budget report 2013. The document was briefly reviewed, and a motion to accept the report without alteration was made, seconded and approved by a unanimous vote of the group.
- 4. Election of Officers.** *Treasurer:* Leading up to the 2014 meeting, Marcelo Carena had indicated that the NDSU Conference Center would not be able to continue to conduct meeting support functions after his term as treasurer had ended. As the Chair of the 2014 meeting, Natalia de Leon paved the way for UWEX to conduct these functions for the 2014 meeting, and beyond if the group agreed. As a result Natalia de Leon was nominated to be the Treasurer, effective immediately. She accepted the nomination. A motion to elect Natalia de Leon as Treasurer was made, seconded and approved by a unanimous vote of the group. *Secretary:* Nick Lauter, who began as secretary following the 2013 meeting indicated that he intended to continue on as secretary for at least the 2015 meeting. No vote was taken since no change in status was occurring. *Chair:* At the 2013 meeting, the successional plan of having a past chair, current chair and next chair known at all times to support consistency and ease of meeting facilitation was established. Sherry Flint-Garcia had been elected the 2015 meeting chair at that time. Sherry indicated she was ready to execute these duties. No vote was taken since no change in status was occurring. *Next Chair:* Aaron Lorenz was nominated as the Chair of the 2016 Meeting. Aaron accepted the nomination. A motion to elect Aaron Lorenz as Chair of the 2016 Meeting was made, seconded and approved by a unanimous vote of the group.
- 5. Discussion of Meeting and Committee Names.** To promote better branding of the meeting, it was suggested that we find a way to remove the NCCC167 label from the name of the

meeting. Discussion about whether or not we should remain a NIFA Committee ensued, and the consensus was that we should not dissolve our affiliation with NIFA at this time. A motion to change the meeting name to “Corn Breeding Research Meeting” while maintaining the formal committee name was made, seconded and approved by a unanimous vote of the group.

6. **Membership, voting and communication.** As a NIFA committee, there is a set of investigators that are formally designated as representatives of the various organizations (universities). A head count indicated that at least 6 of these individuals were present, but it was recognized that no formal list was present at the meeting. Discussion about membership and voting ensued, and expanded to whether or not there should be a special email list for the designated representatives. Since we are an agreeable group and are gathering in the spirit of sharing outcomes, training scientists, and organizing joint work (rather than assigning research responsibilities as was the case in the early history of NCCC167), the consensus was that we should keep it open and simple. A motion to make membership a self-designation process and allow all those who attended business meetings to vote was made, seconded and approved by a unanimous vote of the group. Sherry Flint-Garcia volunteered to continue to maintain two email lists, one for the whole group and one for the designated representatives only. All posts would continue go through Sherry, and the larger list would include all of those people who wish to be considered members of the Corn Breeding Research community. No vote was taken on this issue since it represented no change from our *de facto* procedures.
7. **Long-term planning for meeting location and timing.** To promote future consistency in attendance and continued deepening of the scope of the Corn Breeding Research Meeting, discussion about if we could loosely establish a long-term plan was entertained. It was determined that an annual meeting schedule that alternated between March meetings in St Charles, IL and December meetings in Chicago IL was favorable for supporting connections to both the maize genetics and seed industry communities. Moreover, as a NIFA committee, this is consistent with one meeting per fiscal year, even though the inter-meeting intervals alternate between 8 and 16 months under this plan. A motion to adopt this framework until new circumstances cause reconsideration was made, seconded and approved by a unanimous vote of the group. Related comments were offered regarding the length and cost of the meeting. It was determined that the formats for the 2013 and 2014 meetings would serve as templates and that meeting fees would be adjusted according to UWEX recommendations. Also, based on past practice and the success of the 2014 research meeting held jointly with ISCD, it was suggested that we invite them to meet jointly at every other December/Chicago meeting, where December 2017 would be the next one. No vote was taken on these issues since they represented no change from our *de facto* procedures.
8. **Adjournment.** The meeting was adjourned at 6:05 PM by Natalia de Leon.

This final copy of the minutes for the 2014 NCCC167 Corn Breeding Research is respectfully submitted to the committee by Nick Lauter, Secretary, following approval at the 2015 meeting.

LIST OF ATTENDEES

On site registrants:

Beiriger, Robert – University of Florida – Belle Glade, FL – papilio@ufl.edu
Fisher, Dave – Seminis Vegetable Seeds – DeForest, WI – dave.fisher@monsanto.com
Thornton, Alyson – Harris Moran – Sun Prairie, WI – a.thornton@hmclause.com
Hookstra, Gene – ESTA – Longmont, CO – genehookstra@eurofinsus.com
Asgar, Shir – ESTA – Longmont, CO
Owens, Brenda – Purdue University – West Lafayette, IN

Online registrants:

Event Participant List

Joint ISCDA and the CBR - NCCC167 Annual Meeting

December 9-10, 2013

Name	Organization	Address, City, State, ZIP, Country	Email	Phone
1 Tabare Abadie	Pioneer	, ,	tabare.abadie@pioneer.com	
2 Adriane Alexander	Truman State University	100 E Normal, Kirksville, MO 63501 USA	ana1251@truman.edu	6607854280
3 Carson Andorf	USDA-ARS	Iowa State University, Ames, IA 50011 USA	carson.andorf@ars.usda.gov	515-294-2019
4 Calli Anibas	University of Wisconsin-Madison	1575 Linden Dr, Madison, WI 53706 USA	canibas@wisc.edu	608-262-0193
5 Camila Bastos Ribeiro	University of Wisconsin-Madison	1575 Linden Dr, Madison, WI 53706 USA	bastosribeir@wisc.edu	608-262-0193
6 Tim Beissinger	University of Wisconsin-Madison	1575 Linden Dr, Madison, WI 53706 USA	beissinger@wisc.edu	608-262-0193
7 Jeffrey Block	HM Clause	1677 Muller Rd., Sun Prairie, WI 53590 USA	j.block@hmclause.com	608-333-7823
8 Martin Bohn	University of Illinois	1102 S Goodwin Ave, Urbana, IL 61801 USA	mbohn@illinois.edu	217-244-2536
9 Peter Bretting	USDA ARS	5601 Sunnyside Avenue, Beltsville, MD 20707 USA	peter.bretting@ars.usda.gov	301-504-5541
10 Wesley Bruce	BASF	, ,	wes.bruce@basf.com	
11 Edward Buckler	USDA-ARS	159 Biotechnology Building, Ithaca, NY 14853 USA	esb33@cornell.edu	607-255-1809
12 David Butruille	Monsanto	, ,	david.butruille@monsanto.com	
13 Mark Campbell	Truman State University	100 E Normal, Kirksville, MO 63501 USA	campbell@truman.edu	6607854280
14 Marcelo Carena	North Dakota State University	Department of Plant Sciences, Fargo, ND 58108 USA	marcelo.carena@ndsu.edu	701-231-8138
15 Mario Carlone	Dupont Pioneer	19741 Highway 26, Princeton, IL 61356 USA	mario.carlone@pioneer.com	815-875-6523
16 Sara Chappell	Truman State University	100 E Normal, Kirksville, MO 63501 USA	sec7221@truman.edu	6607854280
17 Junping Chen	USDA-ARS	3810 4th Street, Lubbock, TX 79415 USA	junping.chen@ars.usda.gov	806-749-5560
18 Eunsoo Choe	usda-ars	s306 turner hall 1102 s goodwin, urbana, IL 61801 USA	echoe1@illinois.edu	2177210774
19 Donn Cummings	Monsanto	228W 700S, Lebanon, IN 46052 USA	donn.cummings@monsanto.com	765-438-0359
20 Natalia de Leon	UW-Madison	459 Moore Hall, Madison, WI 53706 USA	ndeleongatti@wisc.edu	608-262-0193
21 Brian De Vries	University of Wisconsin-Madison	1575 Linden Drive, Madison, WI 53706 USA	bddevries@wisc.edu	641-780-5074
22 Tanner Edward	Truman State University	100 E Normal, Kirksville, MO 63501 USA	tge5111@truman.edu	6607854280
23 Jode Edwards	USDA ARS	CICG, Ames, IA 50011 USA	jode.edwards@ars.usda.gov	515-294-7607
24 Marianne Emery	Iowa State University	103 Stanton Ave, Ames, IA 50014 USA	mlemery@iastate.edu	3146161927
25 Marianne Emery	Iowa State University	, ,	mlemery@iastate.edu	

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Event Participant List

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Name	Organization	Address, City, State, ZIP, Country	Email	Phone
26 David Ertl	Iowa Corn	5505 NW 88th St, Johnston, IA 50131 USA	dertl@iowacorn.org	515-225-9242
27 Sherry Flint-Garcia	USDA-ARS	301 Curtis Hall, Columbia, MO 65211 USA	sherry.flint-garcia@ars.usda.gov	573-884-0116
28 Ursula Frei	Iowa State University	100 Osborn Drive, Ames, IA 50011 USA	ufrei@iastate.edu	515-294-2756
29 Joe Gage	University of Wisconsin-Madison	1575 Linden Dr, Madison, WI 53706 USA	jgage2@wisc.edu	608-262-0193
30 Candice Gardner	USDA-ARS Plant Introduction	G212 Agronomy Hall, Ames, IA 50011 USA	candice.gardner@ars.usda.gov	515-294-7967
31 Brittany Glaza	UW-Madison	929 High Street, Madison, WI 53715 USA	glaza@wisc.edu	608-206-6124
32 Byron Good	University of Guelph	50 Stone Rd E., Guelph, ON N1G 2W1 CANADA	bgood@uoguelph.ca	519-835-5223
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35 Curt Hannah	University of Florida	Horticultural Science Dept., Gainesville, FL 32611 USA	lchannah@ufl.edu	352-392-6957
36 Candice Hirsch	University of Minnesota	1991 Upper Buford Circle, St. Paul, MN 55108 USA	cnhirsch@umn.edu	612-301-9522
37 Reka Howard	Iowa State University	3307 Nixon Ave, Ames, IA 50010 USA	howardr@iastate.edu	515-509-1415
38 Chutinan Jaroenchai	University of Guelph	50 Stone Road East, Guelph, ON N1G2W1 CANADA	cjaroenc@uoguelph.ca	519-731-5128
39 Shawn Kaeppler	UW-Madison	1575 Linden Drive, Madison, WI 53706 USA	smkaeppl@wisc.edu	608-262-9571
40 Avinash Karn	University of Missouri-Columbia	1301 Old Hwy 63 South, Columbia, MO 65201 USA	akarn@mail.missouri.edu	660-349-0212
41 Tom Koch	AgReliant	, ,	tom.koch@agreliantgenetics.com	
42 Klaus Koehler	Dow Agrosiences	, ,	kkoebler@dow.com	
43 Matthew Krakowsky	USDA-ARS	1236 Williams Hall, Raleigh, NC 27695 USA	Matt.Krakowsky@ars.usda.gov	919-515-7039
44 Nick Lauter	USDA-ARS	1026 Crop Genome Informatics Laboratory, Ames, IA	nick.lauter@ars.usda.gov	515-294-8260
45 Carolyn Lawrence	USDA-ARS	1034 CGIL, Ames, IA 50011 USA	carolyn.lawrence@ars.usda.gov	515-294-4294
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48 John MacKenzie	University of Guelph	18 Tomlin Court, Barrie, ON L4N7H1 CANADA	jmacke02@uoguelph.ca	705-717-4433
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Name	Organization	Address, City, State, ZIP, Country	Email	Phone
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52 Mark Millard	USDA-ARS Plant Introduction	G212 Agronomy Hall, Ames, IA 50011 USA	mark.millard@ars.usda.gov	515-294-3715
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57 Tessa Peters	UW-Madison	1575 Linden Dr, Madison, WI 53706	tepeters2@wisc.edu	608-262-2587
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59 Renato Rodrigues Silva	University of Wisconsin-Madison	1575 Linden Dr, Madison, WI 53706 USA	rodriguesill@wisc.edu	608-262-0193
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61 Mary Schaeffer	USDA - ARS	208 Curtis Hall, Columbia, MO 65211 USA	mary.schaeffer@ars.usda.gov	573-884-7873
62 Patrick Schnable	Iowa State University	2035B Roy J Carver Co-Laboratory, Ames, IA 50011 USA	schnable@iastate.edu	515-294-0975
63 Ashley Schneider	University of Wisconsin-Madison	1575 Linden Drive, Madison, WI 53706 USA	akschneider3@wisc.edu	920-377-6352
64 Bruce Schnicker	Monsanto Company	800 N. Lindbergh Ave., St. Louis, MO 63167 USA	bruce.schnicker@monsanto.com	636-737-7845
65 Paul Scott	USDA-ARS	1407 Agronomy Hall, Ames, IA 50011 USA	paul.scott@ars.usda.gov	515-294-7825
66 Adrienne Shelton	University of Wisconsin-Madison	1575 Linden Drive, Madison, WI 53706 USA	acs Shelton@wisc.edu	703-231-5377
67 Jack Shu	Beijing Lantron Seed Corp.	2211 Bldg 1, Tianzuoquoji Complex, Beijing, 100081	xugp2011@163.com	781-218-3087
68 Margaret Smith	Cornell University	G42 Emerson Hall, Ithaca, NY 14853 USA	mes25@cornell.edu	607-255-1654
69 Nathan Springer	University of Minnesota	250 Biological Science Center, St. Paul, MN 55108 USA	springer@umn.edu	612-624-6241
70 Michael Stein	Iowa State University	4110 Maricopa Dr., Ames, IA 50014 USA	mjstein@iastate.edu	763-227-7106
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73 Glen Weaver	ConAgra Mills	11-380 ConAgra Drive, Omaha, NE 68102 USA	glen.weaver@conagrafoods.com	402-240-4370
74 Marty Williams	University of Illinois	Dept. of Crop Sciences, Urbana, IL 61801 USA	mmwillms@illinois.edu	217-244-5476
75 Hannah Worral	Iowa State University	, ,	hworral@iastate.edu	

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Name	Organization	Address, City, State, ZIP, Country	Email	Phone
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Total Attending: 78

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