NCCC215 meeting Dec 4-5, 2017

Holiday Inn-Chicago O’Hare area

(North Central Coordinating Committee)

Chair: Benoit Bizimungu (AB)

Vice-chair: Jeff Endelman (WI)

Secretary: Dennis Halterman (USDA, WI)

**Monday, December 4**

Call to order by Benoit Bizimungu at 1:01 PM. Benoit welcomed the attendees and reviewed the agenda.

Susie Thompson began a discussion on the costs associated with the meeting (room, projector screen, refreshments, etc). These costs typically run between $1000-2000 each year. Currently, there is no mechanism to collect funds to cover these costs and they have been covered by the chip variety trial group or the NCCC215 committee chair. Jeff Endelman asked if there are any funds available through the NCCC program for the meeting. Ray Hammershmit said that funds are available for travel and registration for representatives from member universities. Shelley Jansky suggested that room costs could be tied to registration fees for the 4 member universities. Benoit mentioned that this could be discussed more tomorrow.

- Introductions

- Approval of minutes

Jansky 1st, Thompson 2nd, approved by acclamation

- Comments from Administrative Advisor: Ray Hammershmidt (MI) gave an overview of the NCCC215 5-year review.

Comments/improvements that could be made: Better documentation of interactions between groups; better description of role of stakeholders and how info is distributed; ultimate impact of the committee – variety release? Genetics should also be included

The committee was approved for another 5 years

Reporting: To facilitate the process, a form will be distributed to each PI for reporting following the meeting

- Genebank update: John Bamberg (USDA, WI) gave a brief overview/update of the NRSP-6 project. NRSP-6 is coming up to a mid-term review to determine whether to continue funding the NRSP-6 project. John solicited the attendees to help support the project.

Research Project Reports

**Michigan**

Kate Shaw - Diploid potato production

Norma Manrique-Carpintero – using dihaploids to unravel genetic load and heterozygosity

Maher Alsahlany – redesigning diploid potato breeding with self-compatibility

Emily Pawa – Late blight resistance QTL in a S. microdontum mapping population

Natalie Kirkwyland – Colorado potato beetle resistance in diploid potato

Felix Enciso-Rodriguez – genomic selection for late blight and scab resistance in tetraploid potato

David Douches (for Swathi Nadakuduti) – Impact of genome editing with CRISPR/Cas9 and TALENs on genome-wide variability in diploid potato

**Minnesota**

Colin Jones – potato breeding at UMN

**Wisconsin**

Maria Caraza Salas – Skin set and color in red potatoes

Cari Schmitz Carley – Multi-environment analyses of the NCPT

Sushan Ru – Applying genotyping by sequencing in autotetraploid potato

Dennis Halterman – Review of projects associated with disease resistance

Sidrat Abdullah – Diploid progenies of populations segregating for disease resistance

Ryan Alpers – Germination of true potato seed and RIL update

Shelley Jansky and Andy Hammernik – Self compatibility within wild species accessions; high-througput dihaploid production; hybrid vigor; pollen viability

Nathan Butler – Targeted mutagenesis and inheritance using CRISPR/Cas9

Meeting adjourned at 6:00

**Tuesday, December 5th**

Meeting called to order at 8:05

Benoit brought up scheduling for next year’s meeting.

Jeff Endelman - EAPR breeding section will be held the first week of December in 2018. Jeff suggested that the NCCC215 meeting be held the second week of December. On the 10th and 1th

Research project reports

**Wisconsin (continued)**

John Bamberg and Alfonso Del Rio– review of ongoing projects at the US Potato Genebank

Variety Development reports

Benoit Bizimungu – Alberta

David Douches – Michigan

Laura Shannon – Minnesota

Walter DeJong – New York

New Business

Joshua Parsons (PepsiCo) talked about Frito Lay working with Illumina to develop a smaller SNP chip with fewer markers. Joshua with report back after talking with Illumina.

David Douches talked about a high-density (35k) Illumina SNP array in development that incorporates SNPs from a wider diversity of genotypes.

Benoit brought back up the costs associated with holding the meeting. Ideas discussed were charging a registration fee for future meetings. Craig Yencho noted that receipts needed in order for people to get reimbursed for registration fees.

Election of new officer

Laura Shannon nominated by Susie Thompson, Shelley Jansky 2nd. Laura accepted the nomination. Approved by acclamation.

2018 Officers: Jeff Endelman, Chair; Dennis Halterman, Vice-chair; Laura Shannon, Secretary

2018 meeting will be held December 10-11.

Meeting adjourned at 12:00