National Plant Germplasm Coordinating Committee Notes

College Station, TX

June 2, 2015

Participants: David Baltensperger, Peter Bretting, Tim Cupka, Jim Moyer, Larry Chandler, Eric Young

Phone participants: Ann Marie Thro, Gan-Yuan Zhong

Guest: Craig Nessler, Richard Percy, Steve Haig, Bill McCutchen

- 1. Welcome Craig Nessler, Director Texas A&M AgriLife Research
 - Climate change is a primary concern
 - o Using adaptive agriculture as a strategy
 - o Not involved in debate about causes for climate change, just how to address it
 - o Critically focused on germplasm, using tropical sources in many programs
 - o Active in partnerships with industry for both funding and variety release and use of GE traits
 - o Key to adaptive breeding is germplasm availability

2. ARS and NPGS Update - Peter Bretting - PowerPoint

- $\sim 570,000$ distinct genetic samples in NPGS now
- FY 15 budget has rebounded from 2013 low approx ½ way to 2012 level
- In inflation adjusted dollars, budget has decreased slightly
- Current President's FY16 budget proposal has ~ \$3.5 Million increase in NPGS
 - One area is \$500,000 for providing training and techinal assistance to Native American groups who
 have establised plant genebanks. Native American groups maintain plant germplasm for three
 primary purposes
 - Preserving cultural identity
 - Traditional foods to combat health issues such as diabetes
 - Local food production for economic and youth development
- General ARS budget also has funds to defray the 1% pay increase
- Significant current issue is developing policy and practices for maintaining genetically engineered varieties that have gone off IPR protection. Some are still covered by EPA registrations
 - o ASTA has also been working on policies for this for a couple years
- Another concern is how to know and preserve breeding program materials when program is being closed for various reasons

- o Need a mechanism to notify AES directors, particularly in neighboring states, when plans are being made to close a LGU plant breeding program
- DiversitySeek Initiative
 - o See PowerPoint slides for program description
 - Mission is to enable breeders and researchers to mobilize a vast range of plant genetic variation to accelerate the rate of crop improvement and furnish food and agricultural products to the growing human population.
 - o Elements
 - 58 partners currently
 - In-kind support of staff to support activities
 - Eight representatives of partners form a steering committee to be more efficient in decision making
 - o First meeting of steering committee was May 2 in Rome
 - o Current members have signed a letter of intent
 - A document is being developed that new members may sign to join and operating procedures are being developed

3. PGOC, Regional Plant Introduction Stations, and NRSP-6 Update - Gan-Yuan Zhong - PowerPoint

- Update on activates at four regional plant introduction stations and potato gene bank
- 4. NIFA and AFRI Update Ann Marie Thro handout
 - Update on NIFA budgets and programs related to plant breeding
 - Summary of the USDA's Plant Breeding Working Group activities and the draft USDA Plant Breeding Action Plan (posted at www.ocs.usda.gov)
 - Funding models for future is still significant issue
 - o Being highlighted more in AFRI, but still need base support through capacity funding
 - Education of new plant breeders is also significant issue
 - o Industry should not train their own breeders because training would be too narrow, need Land Grant Universities to give broad training in many techniques
 - OSTP has invited PBWG to collaborate on an event of some type on plant breeding and education
 - o This may be a summit or workshop where new initiatives could be highlighted, mainly from industry
 - o Focus of event has evolved into applied agricultural research, rather than just breeding
 - o ASTA is aware of this collaboration
 - o Hoping to have this event in fall or early winter
- 5. ASTA Report Tim Cupka
 - Monsanto and Syngenta merger will cause another big shake up in industry
 - o Syngenta germplasm and IP division will be sold off, probably right after merger

- Other potential industry changes
 - o DOW is also for sale and may be bought by BASF
 - o Monsanto may sell its vegetable division (Seminis)
 - o DuPont may sell off Pioneer
 - o DOW may sell off DOW AgroScience
- 6. NAPB Report David Baltensperger
 - Annual meeting in Pullman, WA July 28-30
 - Initiated a dues structure this year
 - NAPB is still dependent on corporate sponsorship, but industries are asking for more member commitment
 - Strategic plan has been completed
 - SCC 80, Plant Breeding Coordinating Committee has developed new 5-year project proposal that's now in review
 - Motion to accept Plant Breeding Coordinating Committee's request for a liaison to NPGCC. Bretting moved and Chandler seconded - Approved unanimously

7. ARS BMP's for GE Traits in Germplasm - Peter Bretting - PowerPoint

- Reviewed by National Genetics Research Advisory Council in March, first external group. Very supportive with only minor changes suggested
- After National Plant Germplasm Coordinating Committee input, it will go to AC-21 committee, assuming it
 meets in the near future
- Then it will go out broadly to Land Grant Universities and industry
- Three issues with GE plants
 - o Regulations from APHIS, FDA, and/or EPA on use of transgene
 - o Plant Variety Protection and /or patents that protects IP rights of GE trait owner
 - o Registration by EPA of any pesticide-type GE trait
- Document deals only with varieties that have gone off PVP
- In order to use the variety or trait commercially, still have to follow APHIS, FDA, and/EPA regulations and maintain EPA registration
- BMP's are the most important aspect of this protocol, testing for unintended traits is secondary
- Testing is very expensive for Land Grant Universities and ARS, but industry may be willing to help do this if we come to them with a unified plan
- Also important for Land Grant Universities to have BMP's in place too
- NPGCC review of draft document
 - o Comments to Eric by June 19. Eric will compile and send to Peter
 - o Look particularly for major flaw or something that wasn't taken into account

- o For Land Grant Universities representatives, is it workable in a University environment? What's not feasible?
- 8. National Genetics Research Advisory Council Report Peter Bretting PowerPoint
 - Update on NGRAC activities and recommendations
- 9. NRSP-10 Database Resources for Crop Genomics, Genetics and Breeding Research Update Jim Moyer handout
 - Updates on progress under each objective

10. 2016 Meeting

- PGOC meets in Ft. Collins, NPGCCin 2016 and could meet in conjunction with this meeting if it doesn't conflict with other key meetings in June, Peter is checking dates for PGOC
- ARS Administrative Council meets week of June 6 in Beltsville
- Eric will check on 2016 meeting dates for ASTA, AOSCA, and NAPB and get back with Jim and Peter to make a decision on NPGCC dates and location