

# National Plant Germplasm Coordinating Committee

## June 1, 2017

### Attendees:

Eric Young, SAAESD  
Ann Marie Thro, USDA/NIFA (by phone)  
Clarence Watson, University of Arkansas  
Tim Cupka, ASTA – AgReliant Genetics  
Margaret Smith, PBCC – Cornell University  
Jim Moyer, Washington State University  
Jan Nyrop, Cornell University  
Rachel Melnick, USDA/NIFA  
Ed Kaleikau, USDA/NIFA  
Peter Bretting, USDA/ARS, Office of National Programs, Beltsville  
Larry Chandler, USDA-ARS, Plains Area, Ft. Collins, CO  
Gan-Yuan Zhong, USDA-ARS, Geneva, NY

1. ARS/NPGS Update – Peter Bretting (powerpoint)
  - NPGS accessions ~ 575,000, increasing 1% a year (2016)
  - Distribution ~ 250,000, stable (2016)
    - Approximately 30% of collection overall is distributed each year
  - Budget stable at \$44 Million in FY'17, FY'18 it's expected to decrease
  - Flat budget is a challenge considering increasing collection size, curator retirements, managing accessions with GE traits and adventitious presence, and applying cryopreservation techniques to extend seed life, and conserving clonally-propagated germplasm
  - Hired a new taxonomist for GRIN Taxonomy at NGRL, Beltsville, to step in when current taxonomist retires next year
  - 2016 Retrospective Review of ARS National Program 301, which covers all of ARS's germplasm, genomics, and breeding efforts.
    - NP 301 External Review Panel Report was delivered a year ago and emphasized how important the NPGS is
    - Among the recommendations to ARS were:
      - Define more clearly the goals, products, final output, and criteria for quality
      - Increase effort in crop improvement in nutritional value based on consumer and industry needs
  - There's a need for training/education in germplasm curation to train the next generation of curators
    - Possibly a distance education course offered collaboratively by land-grant university staff in conjunction with by one of the NPGS Plant Intro Stations
2. PGO & RPIS Update – Gan-Yuan Zhong (powerpoint)
  - 2017 PGO meeting has been postponed until 2018 for budget reasons
  - Critical new issue is distribution of germplasm to fill requests from non-researchers and general public, many of these cases are difficult to handle

- How is impact of distributed accessions determined? Difficult to get specific impact from breeders due to long term nature of crop improvement
    - ARS has approximately a dozen specific examples of impact from NPGS accessions on variety improvement and the profitability and value of specific US crops
3. NIFA Update – Rachel Melnick and Ed Kaleikau (powerpoint)
- Received some budget increases in 2017, but those might go away in 2018 budget
  - In 2016 offered Plant Breeding for Ag Production as Foundational Program in AFRI
  - In 2016 Food Security offered phenomics and Breeding
  - In 2017 offering
    - Water for Food Production Challenge Area
    - Social Implications of Emerging Technologies Foundational Program
    - Food and Ag Cyber informatics and Tools Initiatives, Conference grants in 2017 and Foundational and Challenge grants in 2018
  - Plant breeding priority has increased over past few years and funding in that area has increased
4. Liaison Comments
- AOSCA – Chet Boruff (written report only)
  - ASTA – Tim Cupka
    - Several years of poor commodity prices have led to mergers and a lot of “Chaos”
      - Syngenta and ChemChina
      - Monsanto and Bayer
      - Dow and DuPont
    - Layoffs prior to mergers, especially from Dow, have resulted in larger than normal number of breeders looking for jobs
  - PBCC – Margaret Smith
    - Objectives
      - Collect and disseminate information on US public plant breeding
        - Survey being done now
      - Promote plant genetic resources preservation and utilization
        - Publication submitted to Crop Science on value of NPGS
      - Identify BMP for public sector IP protection
        - Proceedings of 2016 workshop will be released soon
      - Promote public private partnerships to help educate future breeders
      - Communication with federal agencies about issues related to breeding
5. National Genetics Resource Advisory Council – Peter Bretting (powerpoint)
- Council has completed responding to the AC21 report and now is focused more broadly on the following topics
    - Crop genetic resources
    - Animal genetic resources
    - Aquatic genetic resources
    - Tribal genetic resource issues and natural resources
  - New Council members reflect the more diverse portfolio for the Council

- Council has appointed a Crop Vulnerability Subcommittee
  - Also appointed an Animal Genetics Subcommittee to assess needs of animal and aquatic genetic resources
  - Next meeting in July '17 in Kansas City
6. International Treaty – Peter Bretting (powerpoint)
- Ratified by the Senate on September 29, 2016 and US officially became a party to the treaty on March 13, 2017
  - NPGS will have the primary responsibility for implementing the treaty, it doesn't add any obligations to public or private breeders
7. NRSP 10 – Jim Moyer (powerpoint and handout)
- Overall objective is to have genetic information on specialty crops in a common database that also communicates with other databases
  - Four of five databases converted to Tripal
  - Developing tablet application
  - Developing interface with commonly used databases
  - Developing curation tools
  - Developing online version of GENSAS
  - Conducting numerous webinars and workshops
8. Publication – Margaret Smith
- Timely and important information
  - It would be very helpful to produce a “one-pager” of the critical points that can be used with decision-makers to promote NPGS
  - This publication in Crop Science will lend credibility to the issue
9. 2018 Meeting
- Peter will check with NRSP-6 coordinator, John Bamberg, about meeting in Sturgeon Bay at their potato genebank facility
  - Timing for the NPGCC meeting should avoid conflicts with ARS Administrative Council, ASTA, and AOSCA meetings