U.S. RosEXEC MINUTES

# zoom online

# August 24, 2022 10am – 11:30 PM PDT

### WElcome

* Standing Officers:
  + Gayle Volk (Chair), Jonathan Fresnedo Ramirez (Vice-Chair), Per McCord (Secretary), Lise Mahoney (Past Chair)
* Attendance (based on Zoom sign-ins)
* Per McCord, Dorrie Main, Chris Gottschalk, Gayle Volk, Jonathan Fresnedo Ramirez (had to leave early), Ksenija Gasic, Loren Honaas, Vance Whitaker, Sook Jung, Igor Pacheco, Tom Gradziel, Cameron Peace, Nahla Bassil, Chris Dardick,

### RosEXEC MEmbership

* + Congratulations to Per McCord, elected Secretary of RosEXEC

Maintain attendance/minutes, ensure they are uploaded to GDR

### GDR Advisory Board

* Report from GDR (Dorrie)
  + Need better accessibility to GRIN data
  + Lots of tools added/updated
    - Moving away from individual searches (MegaSearch)
  + New SCRI database proposal recommended for funding
    - Good support letters, stakeholder relevance statement (RosEXEC provided a letter of support)
    - Getting data into GDR, training users (including breeders, etc.)
  + Workshop planned for PAG (Jan. 2023)
  + Workshop for RGC 11 in New Zealand (March 2023)
* Comments from RosEXEC to GDR
  + Gayle expects apple SNP data (from NPGS collection) to be submitted to GDR soon
  + Ksenija has peach, apricot GBS data (also from NPGS) to submit to GDR as well
  + Loren asked about transcriptome matrices in GDR; Sook referred to expression heatmaps. Meg Staton’s group may have an updated module for this purpose. Need to convene a GDR taskforce for GBS/genomics data.

### RosEXEC PLANning

### **ROSEXEC Mission**

* Serve as a communication and coordination focal point for the US Rosaceae genomics, genetics and breeding community.
* Define research priorities based on input from the industry and research community.
* Facilitate scientific interaction and foster dynamic research teams.
* Promote research priorities.
* Coordinate educational efforts from the research community to the industry and the public.
* Serve as an official steering committee for the Genome Database for Rosaceae

Discussion about how RosEXEC can be effective for the entire community

Brainstorm RosEXEC projects/efforts (focus on community at large):

1. **GDR: additional taskforces (such as for GBS/genomics)**
2. **Mailing list (GDR-specific): forward to students, other Rosaceae community members**
3. **Has GRIN’s BrAPI compliance helped vis-a-vis GDR?**
4. **Dorrie plans to request Breeding Insight to include Tripal databases**
5. **Sook suggested sending RosExec minutes out to GDR mailing list (or add to newsletter as highlights, with links to full minutes) – Minutes may need to be reviewed in advance in case some information cannot be publicly disclosed.**
   1. **Need highlights sent to GDR for newsletter (Vice chair (Jonathan))**
6. **Add ‘RosBREED-like’ session to ASHS workshop or collaboration session (with snacks)**
   1. **Virtual option (especially for those with travel restrictions)**
   2. **Hybrid option at PAG (Dorrie could organize), RGC**
   3. **Loren offered to head up taskforce for this (Gayle, Vance, Dorrie, and Cameron participating). Use recent pear meeting as an example**
7. **Plan for RosEXEC meeting at PAG (could test template for item 6 here)**
   1. **Open session (non-RosEXEC members welcome)**
   2. **Meet for dinner Saturday evening?**
8. Community resource for standardized protocols, ‘bigger picture’ items (across taxa/groups)- a role for GDR?

Select highest priorities for this cycle

### Coordination and updates

* Non-research update (industry, info and tech transfer)
  + PNW cherry crop down (cold spring), FL strawberry crop up (COVID-related consumption increase)
* Competitive federal grant project reports
  + Recently funded projects within the Rosaceae
  + Updates on large-scale projects
    - FFAR funding for controlled environment research (flavor) in strawberry (still unofficial)
    - SCRI for breeding for disease resistance in strawberry (~$6 million)
* International project collaborations
  + EU-funded breeding project (small fruits)- “breeding better berries for Europe”- Announced 2021
* Any other important research funding coordination opportunities

### Research fields and technology updates

* Germplasm (genetic resources)
  + Crop Germplasm Committees and USDA-ARS germplasm status, current and recent evaluation funding, other germplasm resources?
  + Apple received evaluation grant for increased SNP genotyping (including crop wild relatives). Chris also received funding for whole genome sequences for apple relatives. Apple CGC meeting expected this fall.
  + Prunus: planning for CGC meeting this fall. New curator in place (Claire Heinitz). Evaluation funding received for Geneva collection (cryopreservation).
  + No NCC212 (small fruit) meeting yet (October in Arkansas, coinciding with John Clark’s retirement). Small fruit CGC meeting will coincide
  + Pear CGC met virtually a few months ago (Jessica Waite new chair)
* Phenotyping
  + Standardized phenotyping, High-throughput/high-resolution phenotyping/phenomics, USDA collection evaluation data (GRIN-Global)
  + Sweet cherry collection (Davis) evaluated for powdery mildew, canker, and X-disease. Report at next Prunus CGC meeting
* Whole genome sequences and physical maps
  + Updates on status of Rosaceae genomes
    - Honeycrisp is done and soon to be posted on GDR; other pome cultivars in progress.
    - Nonpareil almond published and all the data has been shared with GDR, it will be posted soon.
* Enabling technologies in genomics and genetics
  + Sequencing, annotation, transcriptional profiling, genome-scanning SNP arrays, reference linkage maps, QTL & MTL methods/software and discoveries, MAB: evaluation (trait predictions) – available DNA tests and platforms, MAB: characterization (identity/parentage/ancestry/relatedness) – approaches and progress
  + WTFRC continues funding for biomarker work in pome fruit (massive expression profiling, machine learning)

### White Papers?

* ?

### usrosexec_logoPersonnel changes

* Retirements and other departures, new positions available, recent positions filled, graduating students, candidates looking for positions (e.g., promising grad students, postdocs)
* New phenomics hire at UF: Kevin Wang

### Announcements for upcoming meetings

* Upcoming meeting announcements
  + Plant and Animal Genome Jan. 13-18, 2023, San Diego, CA, USA
  + Rosaceae Genomics Conference 11: March 14-16, 2023, Nelson, New Zealand

### Next RosEXEC meeting

* October 19. 10-11:30 AM Pacific Time