

U.S. RosEXEC AGENDA

IN PERSON AT PAG 30 AND ZOOM ONLINE

JAN 15 2023, 10-12 AM, TOWN AND COUNTRY SKYVIEW 2

WELCOME

- Standing Officers:
 - Gayle Volk (Chair), Jonathan Fresnedo Ramirez (Vice-Chair), Per McCord (Secretary), Lise Mahoney (Past Chair)
- Attendance: Nahla Bassil (USDA-ARS), Chris Dardick (USDA-ARS), Chris Gottschalk (USDA-ARS), Awais Khan (Cornell), Kostas Alexion (IRTA), Shawn Clare (USDA-ARS), Huiting Zhang (WSU/USDA-ARS), Ksenija Gasic (Clemson), Per McCord (WSU), Luca Bianco (Fondazione Mach), Fabrizio Costa (University of Trento), Nicola Busatto (Fondazione Mach), David Chagné (Plant and Food Research), Sook Jung (WSU), Oscar Riera-Lizarazu (Texas A&M), Veronique Decroocq (INRAE Bordeaux), Herman Silva (University of Chile), Elsa D. Bosuinó (University of Chile), Alejandro Thèrèse Navarro (Wageningen UR), Sara Montanari (Plant and Food Research), Hillel Brukental (ARO), Ariel Orellana (Aurtés Bello University), Dorrie Main (WSU), Gayle Volk (USDA-ARS). Zoom: Jonathan Fresnedo Ramirez (Ohio State), Khalid Mustar, Tom Gradziel (UC-Davis), Loren Honaas (USDA-ARS)
- Minutes from October 2022 RosEXEC meeting are posted:
https://www.rosaceae.org/community/us_rosexec

ROSEXEC MEMBERSHIP

- New elections will be held Fall 2023
 - i. Officers on rotating 1-year terms
 - ii. RosEXEC members serve for 3 years (international 2 years: currently Igor Pacheco, Sara Montanari, Iban Eduardo, Yupeng Han)

GDR ADVISORY BOARD

- Report from GDR (attached with minutes)
 - New SCRI funded in September
 - New SCRI grant will have dedicated data curators for tree fruit and berries
 - Data
 - 7 new genomes added (including annotation, synteny analysis). 107-109 total genomes
 - GRIN data added to GDR, including via BIMS
 - Pangenomes for peach coming soon, plans to develop for all species with enough genomes (with standardized pipelines)
 - Tools
 - Ortholog search added and most search pages are converted to use MegaSearch, etc.

- Outreach
 - NRSP10 Databases workshop at PAG
 - Two new tutorial videos are released every quarter
 - Quarterly newsletters sent out by MailChimp – please join [GDR mailing list](#)
 - Participate in TRIPAL community meetings, pangenome and phenotype to genotype workgroup meetings (AgBioData), and presentations in fruit and nut, fruit and vegetable, Tripal, and sustainability workshops at PAG
- BIMS/Field Book/Breeding Insight breeding tools workshop at NAPB meeting in July
 - Can this be recorded somehow?
- Comments from RosEXEC to GDR
 - Increase frequency of GDR workshops/webinars (a few times per year) to increase accessibility/participation. Perhaps quarterly? Nahla suggested webinar of quarterly updates to GDR, and have RosEXEC leadership include someone in the community to spotlight (2x per year)
 - Upload PAG workshop to GDR for later viewing
 - Veronique asked about uploading genomes (with respect to Pangenes) from outside the RosEXEC community (e.g. China)
 - Sook does reach out to people and Chinese authors do contact GDR with their data. Can also forward to her.
 - Need/request for standardization/quality analysis of published genomes (Journal reviewers/editors bear some of this responsibility)
 - GDR can host pre-publication data for reviewers to access (would be deleted if not published)
 - GDR to have pan gene data
 - May have visualization tools, but database is first priority
 - JBrowse 2 could be used for displaying pan genes
 - Alejandro suggested PanView (from Wageningen) for displaying pan genome data
 - GDR has transcript/expression data, but needs to identify which papers/data should be accepted. (Need processed data, can link to but won't store raw data). Limited bandwidth with only one person
 - Loren suggested consistent batch processing
 - RosEXEC data subcommittee (Chris G., Loren, Sook) working on this
 - API for GDR, or methods to automate searches.

ROSEXEC ACTIVITIES

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

ROSACEAE INTERNATIONAL GENOMICS INITIATIVE (RosIGI) DISCUSSION:

RosIGI is an organization that serves to:

- Ensure communication among Rosaceae researchers and organize the biennial Rosaceae Genomics Conference.
- Coordinate international efforts on several key initiatives within the areas of Comparative Genomics, Structural Genomics, and Functional Genomics.
- Facilitate scientific interaction among members of the research community.

Inactive (according to minutes on website) since 2013

Website: <https://www.rosaceae.org/community/rosgi>

Proposed action: Discontinue RosIGI and either remove or archive website. Merge RosIGI activities into RosEXEC through the inclusion of international members.

General feeling is to keep and re-energize RosIGI. Proposed to make international members of RosEXEC the officers of RosIGI. Annual meeting could be held at RGC (RGC meeting in March, sub-meeting held to accomplish this).

ONGOING ACTIVITIES

- **One-page RosEXEC summaries**
Summary was provided as part of the October GDR newsletter. Plan to continue this coordinated effort going forward. Future RosEXEC meetings are proposed to coincide with GDR newsletter releases. Minutes written by RosEXEC Secretary. Summary written by RosEXEC Vice-Chair based on the minutes. Gayle encouraged attendees to get on GDR mailing list to receive RosEXEC summary.
- **“RosBREED” like session at meetings** to allow real/virtual participants to be more involved. Loren Honaas will coordinate this effort during PAG30 RosEXEC or ASHS meeting and see if it works. Strategy could be used at future possible conference-associated meetings. Such as RGC, ASHS.

Additional proposed activities

- GDR: additional taskforces (such as for GBS/genomics)
 - Expression data group already formed/operating
- GDR interoperability with GRIN-Global via BrAPI
 - Nahla would like to work on this
- Dorrie plans to request Breeding Insight to include Tripal databases
 - Discussions are in progress
- Community resource for standardized protocols, ‘bigger picture’ items (across taxa/groups)- a role for GDR?
 - Methods for data collection, etc.
 - Per offering to assist, will meet with Gayle to discuss further

Other ideas and suggestions?

COORDINATION AND UPDATES

- Non-research update (industry, info and tech transfer)
- Competitive federal grant project reports
 - Recently funded projects within the Rosaceae
 - SCRI grant to Texas A&M Rose Rosette Disease (Oscar)
 - Updates on large-scale projects
 - SNP Array development (David Chagné)
 - Illumina Bead arrays are now gone, need an alternative
 - Looking to develop new, cost-effective multi-species (apple, peach, cherry) array within next few months (discussions with various providers). Company needs guarantee of 20K samples submitted over three years.
 - Luca Bianco's group has some experience with a multi-species array (Affymetrix), estimate ~15K SNPs/species. No minimum order. Estimated cost (including extraction) \$32 per sample.

RESEARCH FIELDS AND TECHNOLOGY UPDATES

WHITE PAPERS?

- n/a

PERSONNEL CHANGES

ANNOUNCEMENTS FOR UPCOMING MEETINGS

- Upcoming meeting announcements
 - Rosaceae Genomics Conference 11: March 14-16, 2023, Nelson, New Zealand
 - ASHS July 31-Aug 4, 2023, Orlando, FL
 - National Association of Plant Breeders, July-16-19 2023, Greenville, SC
- Next RosEXEC meetings
 - April 2023
 - July 2023
 - October 2023