**MINUTES**

**RosEXEC Teleconference**

**October 28, 2015 11 am – 1 pm PDT**

Welcome

* Gayle Volk (Chair), Cameron Peace (Vice Chair), Ksenija Gasic (Secretary)
* Attendance; Richard Bell, Stan Hokanson, Gayle Volk, Amy Iezzoni, Michael Wisniewski, Dorrie Main, Des Layne, Sook Jung, Cameron Peace, Gina Fernandez, Chen Chunxian, Michael Dossett, Jill Bushakra, and Ksenija Gasic
  + Adoption of minutes from 23 July 2015 – minutes accepted

Report from the Rosaceae Gene-Naming Standardization subcommittee (Sook Jung)

Subcommittee members: Sook Jung (chair), Robert Schaffer, Lee Meisel, Doug Bielenberg, Carole Bassett, Michela Troggio, Janet Slovin, Dorrie Main, Chris Dardick

* Goal: To come up with Rosaceae gene naming principle and mechanism for enforcement
  + Status: (to be discussed) Sook: paper has been published and the letter has been prepared in the name of RosEXEC and RosIGI and sent to several journal editors.
  + Dorrie: 22 journals received the letter and 50% confirmed to apply it to the further submissions. Gayle asked for manuscript to be sent out to everyone and put it to the GDR as well

Rosaceae species webpages for GDR

* Informational pages (text, tables and pictures) about Rosaceae species
  + Update from Sook: volunteers signing sheet was sent out and so far three people volunteered, Jill volunteered for small fruit, need more people for *Prunus*, *Fragaria*. Sook will send the volunteer sheet again, Richard Bell for *Pyrus*, Chen for *Prunus*. Stan volunteered for rose.
  + Cameron suggest for focus to be on the crops rather than species

GDR Advisory Board

* Report from GDR – Dorrie sent the report for the committee and provided a short overview. Rosaceae breeder survey is planned for next month to comment on improvement of GDR. Fulltime person hired to help with breeder toolbox development. Approximately from 30 publications data collected for markers/QTLs and will soon be available at GDR. Mobile-friendly design of GDR in works. An example was shown of how the new GDR database will look like to provide easier access to users to content of interest to them. At the next RosEXEC meeting Dorrie suggested to provide overview of the year 1 and goals for year 2.
* Comments from RosEXEC to GDR: 30 min of overview would be enough to not cut too much into the January RosEXEC meeting and still provide sufficient opportunity for further discussion within the RosEXEC and RosIGI meeting. RGC8 is scheduled from 21-24 June. New homepage design for GDR approved. It was useful to have list of tasks that are completed, ahead or behind in the report, provides easier evaluation of what is going on with the project. Asked when the GDR new homepage will be available. Dorrie answered: very soon, it is in final stages but not yet ready to be released. The goal is to be live by March 2016).

RosEXEC membership

* 2015 elections for 2016+ membership
  + Process, timeline – Cameron previously sent message via GDR mailing list asking for nominations for RosEXEC. Deadline to submit nominations is November 9. Voting will be carried out shortly afterwards. New members will be known before Christmas and after that and before the PAG meeting we should have internal election for Secretary.
  + Nominations? So far 5 nominations. Gayle: Is there a place where we should house the nominations, not to be publicly available but for archiving purposes. Dorrie: Yes, we can house it on GDR under the community and RosEXEC, under committee and associate document that each member submitted. Voting needs to be kept together but kept private. Cameron: bio should be limited to 100 words max, and statement why the candidate wants to be on the committee hyperlinked to each person’s name. It would be a very good source of information about the committee members. Committee members need to be alerted of this public posting and given an opportunity to update the document. Cameron: Can the additional info pop up when the cursor hovers above the name? Dorrie: Need to think about it. Gayle asked committee if they agree and there was no opposing vote. Gayle and JD will send the previous nomination documents to GDR since there were no elections and voting. Particular needs for new committee member: bioinformatics (said Gayle) and industry (said Cameron).

Coordination and updates

* Non-research update
  + Industry update: not addressed.
  + GMO regulatory & market update (Arctic apples, HoneySweet plum; others?) – Ralph Scorza is still working on HoneySweet data collection for European approval. Any news on Arctic apple? NorthWest apple industry is not in favor of them. There are two plantings in WA of Arctic apple. Having Arctic apples approved for planting and human consumption might be good for Rosaceae community as finally provides examples what is GMO (though not necessarily ideal) and better understanding in public. Outcomes of publicizing the GMO, and Folta appearing to receive money from Monsanto to apparently promote GMO, are not received well with public. Also, Monsanto is shutting down three facilities including phenotyping facility in Research Triangle Park; solely business decision.
  + Extension – info and tech transfer: Des provided overview of the newly launched tree fruit web site at WSU. Also launched new newsletter that is posted on the web site.
* Competitive federal grant project reports
  + Newly funded projects within the Rosaceae: Wells Fargo funded as a gift research on Armillaria root rot to Clemson. Money infusion via newly funded breeding positions – strawberry
  + Other funded AFRI/NSF projects: cider production project not funded but plan on resubmitting. NSF money for tree databases - grant for GDR.
* Leverage of large-scale opportunities
  + RosBREED2 – funded in the second year, newsletter sent quarterly provide update what is going on in the project. Matching partner meeting on Friday before PAG. No agenda yet but it will be genomics based, Cameron suggested topic on how the Rosaceae resources in some of our crop has been leveraged in other crops of our plant family. RosBREED has a new web design. Get in touch with Amy and Dorrie when preparing new project for help with leveraging RosBREED and GDR.
  + NSF for Apple and Peach tree architecture – RBell working on it Susan Brown – apple and Chris Dardick on peaches, Kenong Xu joined
  + Crop Germplasm Committees – Apple CGC meeting organized, Jim Luby is coordinating phenotyping protocols preparation, and minutes will be available very soon. Dorrie – should these minutes be posted on GDR? Gayle, maybe easier to just provide link to the CGC web site. RBell, takes tie to add the minutes to the CGC website but they will be there, almost done for pear.
  + Prunus CGC – not met in 2015. KG and John Preece discussed organizing meeting in 2016 at repository.
  + Small fruit had meeting last week in AL, update of the all vulnerability statements in in works (MDossett), will be available later in the winter. Gayle: is there an interest in sharing vulnerability statements with GDR mailing list? RBell: link to the vulnerability statements at the CGC web pages is sufficient to provide on GDR.
* International project collaborations
  + FruitBreedomics – finished in June
  + EUBerry – no update
  + Horizon 2020 – no update
* 2nd edition of book “Genetic and Genomics of Rosaceae – Recent Advances and Application of Knowledge” – No info since the last meeting in PAG. Sue is exploring not to do whole book but to release chapter as an e-book when they are finished

Research fields and technology updates

* Whole genome sequences and physical maps
  + Updates on status of Rosaceae genomes from community. Black raspberry genome sequence not yet sent to GDR. Student is writing the paper and will be asked to provide the data once the paper is submitted.
* Enabling technologies in genomics
  + Sequencing
  + Annotation
  + Transcriptional profiling
  + Genome-scanning SNP arrays – Cameron: we are planning to adding 9K SNPs to each of the peach, cherry, and apple 20K arrays, general timeline is the spring 2016 to be ready for genotyping. All involved with RosBREED will have $29-34 price per sample plus the scanning. Current price is $24 per sample for peach and cherry and $29 for 20K apple. Anyone that has any SNPs that they want to add to the array should send them to Cameron and Nahla. Gayle, how do the arrays work in the wild species? Cameron, if the wild species is close to main species then expect ~5% SNPs will be polymorphic but if they are further apart then expect closer to 1-2%. So this is the opportunity to add the SNPs from related wild species to extend the use of the array. Existing arrays made for crops cannot distinguish differences within wild species. Gayle - any talk of using these array to tell the cultivars apart? Cameron, can be done now with within research project But, for future wider use in that way, RosBREED will be transitioning to commercial service providers for such needs. Would be a very useful resource for everyone but there is a need for service provider that would do it and house the entire raw data, similar like for human genotyping.
* Genetics
  + Reference maps
  + MTLs and QTLs located – Jill aphid resistance in black raspberry working with MDossett. Project ends August 2016 so there should be many QTL for both red and black. Developing all in raspberry so the markers can be usable in both species M. sieversii x Gala markers (Gayle) Mike W with Jay started looking for fire blight resistance, then blue mold resistance. Four years of phenotypic data, maps started with SSRs, added SNPs from apple array. Map developed using GBS data was the most successful, strong QTL on LG3 for blue mold resistance, Jay working with Cameron within RB2 for DNA test development for blue mold, population also segregates for WUE. Gayle: Would access to GBS data be of use for apple array SNP addition? Cameron: Yes, already have access to that useful data but the specific SNPs to be added should be chosen by community.
  + DNA tests developed (locus-specific, performance-predictive) – DNA test for blue mold in development, pipeline in CPeace lab for test development. Graduate student in CP lab working on DNA test development. “DNA test cards” being developed and provided to the breeders.
  + Genome-scanning at low resolution (genome-wide, performance-predictive) – still using existing large scale medium resolution arrays because the price is reduced, but expect to pursue development of low resolution arrays (Cameron)
  + Parentage/pedigree verification – approaches and progress – SNP array data extremely powerful for detecting parentage/pedigrees (Cameron)
* Germplasm/genetic resources
  + RosBREED Crop Reference Sets as germplasm resources? Would be helpful for the germplasm collections to know which materials in the RosBREED Crop Reference Sets are not in the National Plant Germplasm System. RosBREED material was described in the paper published by Peace et al (2014).
  + Other germplasm resources – Most collections are program-specific. In apple, Gala x M. sieversii cross is available in Geneva for a while but will be pushed out at some point of time. Gayle, it should be publicized when the collections are ready to be removed.
* Phenotyping
  + USDA collection evaluation data (GRIN) – In RB (Cameron) the heritability of the traits was considered in deciding how many years of data is needed.

Announcements for upcoming meetings

* + *Horticulture Research* journal organizing meeting: Oct 2015 (Nanjing?)
  + PAG: 9-13 Jan 2016, at San Diego, CA
  + 3rd International Symposium on Biotechnology of Fruit Species: 27 Apr - 1 May 2016, at Antalya, Turkey
  + RGC8: 21-24 Jun 2016, at Angers, France – Website and more information would be operational in November (Dorrie). European soccer championships will be happening in Europe at that time.
  + 11th International Symposium on Integrating Canopy, Rootstock and Environmental Physiology in Orchard Systems: 28 Aug – 2 Sep 2016, at Bologna, Italy
  + 4th Symposium in Molecular Markers in Horticulture: 7-10 Mar 2017, at Napier, NZ
  + ASHS Atlanta, GA in August 2016. Cameron – DNA informed breeding workshop before conference is in plans – whole day.
  + ISH in Quebec City in August 2016

Meeting concluded at 1:43pm PST. Minutes takes by Ksenija Gasic, edited by Cameron Peace