

Report
Peanut Genome Project
Executive Committee Teleconference, 6/28/11

PARTICIPANTS

Howard Shapiro
Baozhu Guo
Lutz Froenicke
Mark Burow
Brian Scheffler

Rajeev Varshney
Roy Scott
Victor Nwosu
Peggy Ozias-Akins
Howard Valentine

Richard F. Wilson
David Bertioli
Soraya Bertioli

Valentine convened the 6/28 teleconference. Minutes of the 6/12/11 EC meetings in Brasilia were amended and approved..

Discussion Items:

Meeting with BGI. Howard Shapiro and Xu Xun met in Washington DC to negotiate agreements for work under Component 1 of the PGP. BGI will establish a work sight at UC-Davis. **Shapiro will update the EC in 2-weeks.** A delegation to Beijing in September/October 2011 will participate in a joint announcement of US-Chinese collaboration on work under PGP Component 1. This announcement should facilitate in-country commitments to Chinese collaborators as described in the June 12 minutes.

New EC members

New Ex Officio members of the EC include: Pedro Arraes, Jean-Marcel Ribaut. Invitations have been sent to Chairman Luo (Guo, Zhang) and a member of the Carter Foundation (Valentine). **Valentine agreed to design a logo, slogan and letterhead for the PGC as soon as possible.**

International Liaison members

The following accepted an invitation: West Africa, Farid Waliyar; and Australia, Graeme Wright. Invitations have been extended to; Japan, Sachiko Isobe (Varshney); and Ran Hovav, Israel (Ozias-Akins)

PGC Policies & Procedures

Wilson will draft language for responsibilities of International liaison and Ex Officio positions. Ozias-Akins presented language for PGC policy on technical publications. Pending comments, Wilson will amend the P&P document and post on www.PeanutBioscience.com.

Agreements with International Collaborators

Guo reconfirmed reports that Chairman Luo encouraged the Minister of Technology & Science to support the PGP. The Minister met with the Secretary of USDA during a diplomatic mission to the US in May 2011. The intent was to include collaborative research between Chinese and US members of the PGP as a part of the recently renewed US-China Science & Technology Cooperation on Agriculture & Forestry MOU. Pursuant to these discussions, USDA also is negotiating general agreements under the 'China Most Program', which seeks to expand exchange of technical information, germplasm and cooperative research. UnderSecretary Woteki led a delegation to China earlier this year, but negotiations stalled due to technology 'reach through' issues proposed by the Chinese. These discussions will be resumed in Washington DC in the Fall of 2011. **Roy Scott will inquire about the inclusion of the PGC in the joint multilateral agreement with China, and work with Howard Valentine to develop a strategy. Scott will arrange a meeting with UnderSecretary Woteki prior to the next discussions with the Chinese.** Potential participants include: Shapiro, Valentine, Birdsong, Ozias-Akins, Elder. **Wilson and Scott will draft a briefing paper on the PGC for the UnderSecretary, for EC review by July 11.**

PGP Updates

Component 2: Froenicke and Bertioli reported that about 0.4 Gbase of sequence information has been generated thus far on A genome (90 RIL), B genome (96 RIL) and AABB genome (synthetic x AC-Runner). Concerns were raised about the technical feasibility of de-novo assembling the tetraploid genome. To further understanding of the potential problems, results of an in-silico experiment using homeologous A and B BAC sequences was presented. The A and B sequences assembled satisfactorily using simulated Hi-Seq paired-ends at 60x coverage, but when assembled together, numerous artifactual mixed origin sequences representing only 80% of true sequence length were generated. Bertioli suggested that sample sequencing of BACs from the A and B would provide useful information as to the properties of the tetraploid genome. Ten BACs less than 3 kB bp from A and ten from B-genome would be a good

start. The cost would be about \$20,000. Half of that cost may be available through an EMBRAPA project. **David Bertoli will draft a summary of this concept for further EC consideration and potential inclusion in negotiations with BGI.**

Guo and Froenicke provided Boshou Liao with specifications for preparation of DNA samples from the Chinese mini-core collection. DNA and corresponding phenotypic, morphologic and botanic data will be sent to UC-Davis.

Other:

Varshney and Ribaut had discussions with Andy Paterson about PGP member access to information developed under the GENERATION Challenge Grant program, which may include: a physical map of the A-genome, fingerprint files, and raw sequence data from wild and cultivated genomes. Paterson agreed to make these data available as long as his publication rights were secure. An MTA may be provided.

Varshney and D. Bertoli will work with Paterson to move forward on this issue.

Strategic Plan

Wilson will coordinate the drafting of the next Strategic Plan with the writing team:

Allelic Diversity & Germplasm Resources (T. Stalker, J. Valls)

Genetic Mapping & Gene Discovery (P Ozias-Akins, R. Varshney)

Genome Sequence & Structure (S. Jackson, D. Bertoli)

Product Quality & Safety (V. Nwosu, B. Guo)

Crop Improvement (C. Holbrook, I. Godoy, Mark Burow)

A first draft is due by July 9, 2011. Highest priority objectives from the Strategic Plan will be used to develop an Action Plan for fund raising (Nwosu)

Meetings & Publicity

Valentine will work with the National Peanut Board to develop a public relations strategy for launching the PGP. A press release will be developed for release in PGC member countries.

Valentine will coordinate development of a PGC logo and branding message (slogan).

Varshney agreed to include at least one technical presentation from the PGP in his session at the 2012 Plant & Animal Genome meeting in San Diego, CA. Howard Shapiro will be asked to arrange a PGC luncheon meeting during PAG. A full workshop for PGP may be approved for PAG in 2013.

Varshney proposed to include one workshop on peanut in the program for the VI International Conference on Legume Genetics and Genomics (VI ICLGG) in Hyderabad, during October 3- 8, 2012. For more details, please visit <http://www.icrisat.org/gt-bt/VI-ICLGG/homepage.htm>.

Ozias-Akins proposed to organize a Peanut Genetics workshop/symposium at APRES in 2012.

Next Meetings:

July 11, 2011 PGI at APRES, San Antonio TX

August 1, 2011 EC Teleconference at 11 AM EDT

January, 2012 Plant & Animal Genome Meeting, San Diego CA

October 3-8, 2012 VI International Conference on Legume Genetics & Genomics, Hyderabad India

Early April, 2013, 6th AAGB, Zhengzhou, China

Action Items for the August 1 EC Teleconference

Shapiro will update the EC in 2-weeks on negotiations with BGI.

Valentine will invite a member of the Carter Foundation to serve as an Ex Officio member of the EC.

Valentine will design a logo, slogan and letterhead for the PGC as soon as possible.

Baozhu Guo and Xinyou Zhang will identify a primary contact for all Chinese collaborators (excluding BGI)

Invitations to the following candidates for international liaison: Japan, Sachiko Isobe (**Varshney**); Ran Hovav, Israel (**Ozias-Akins**)

Wilson will draft language for responsibilities of International liaison and Ex Officio positions. Ozias-Akins presented language for PGC policy on technical publications. Pending comments, Wilson will amend the P&P document and post on www.PeanutBioscience.com.

Roy Scott will inquire about the inclusion of the PGC in the joint multilateral agreement with China, and work with **Valentine** to develop a strategy for a meeting with USDA. **Scott** will arrange a meeting with UnderSecretary Woteki prior to the next discussions with the Chinese.

Wilson & Scott will draft a briefing paper on the PGC for the UnderSecretary, for EC review by July 11.

D. Bertioli will draft a summary of his concept for sequencing random A & B genome BACs, for further EC consideration and potential inclusion in negotiations with BGI.

Varshney and **D. Bertioli** will work with Paterson to move forward on the data access issue.

Holbrook will lead an ad hoc committee including **Guo, Varshney, and Bertioli** to develop a uniform list of phenotypic trait descriptors.

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Howard Shapiro agreed to arrange a PGC luncheon meeting during PAG.

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