

Newsletter Nº 1/2018

IWGSC Newsletter – January to March 2018

The IWGSC

Membership:

As of Dec 2017, the IWGSC had 2100 members, working in 610 institutes/companies in 64 countries. Check out the <u>map</u>.

• Sponsors:

Currently, the IWGSC has <u>13 sponsors</u>. Sponsor support is essential to ensure continuation of Phase II activities. Please inform us if you know of any potential sponsors (research institutes, universities, governmental agencies, or companies).

Phase II

In January, the Coordinating Committee (CC) approved these Phase II activities:

- IWGSC Exome Array based on the reference sequence (Task Force: Burkhard Steuernagel, Sreya Ghosh, Sébastien Praud, Hikmet Budak, Etienne Paux, Ute Baumann and Kellye Eversole)
- Wheat pan-genome based on de novo sequencing and assembly of multiple wheat genomes (landraces and elite varieties) that cover the breadth of wheat diversity (Leaders: Sébastien Praud, Etienne Paux, and Kellye Eversole)
- IWGSC Gold Standard: maintenance, updates, and integration of manual and functional annotation to the reference sequence (Leaders: Rudi Appels, Fred Choulet, and Kellye Eversole)
- User-friendly, integrated databases and tools to benefit public breeders and the full range of industry partners, from SME to large companies (Task Force: Fred van Ex, Magalie Leveugle, Matthieu Conte, Michael Alaux, and Kellye Eversole)

A new component of achieving the Gold Standard is the exploration of deep learning approaches for functionally annotation of the reference sequence. (Task Force: Fred van Ex, Xi Wang, Ken Heyndrickx, Wesley De Neve, Kellye Eversole, Yvan Saeys, and Fred Choulet)

Projects

- An analysis of the reference wheat genome sequence (IWGSC RefSeq v1.0 and annotation v1.1) has been submitted to a journal and is under review; a number of companion papers have been or will be submitted soon to several journals.
 - All data are being made available before publication for <u>download and BLAST</u> at the IWGSC Repository hosted by URGI in accordance with the <u>Toronto Agreement</u> under which the IWGSC reserves the right to publish the first global analyses of the data. For specific access terms, see the <u>IWGSC General Data Access agreement</u>.
 - All data will be made available without restriction upon publication of the IWGSC RefSeq v1.0 paper.
- IWGSC Exome Array project: The IWGSC has teamed up with Arbor Biosciences to
 develop an IWGSC exome array based on the IWGSC RefSEq annotation v1.1. In order to
 ensure that the exome array is designed in a way useful for everybody's need, the IWGSC
 is circulating a <u>brief survey</u> in the wheat community. The deadline to complete the survey is
 15 April.



People

Leader Spotlight: <u>Cristobal Uauv</u>

• Early Career Awardee: <u>Joanna Melonek</u>

- <u>Leadership Awards</u>:
 - Hélène Rimbert
 - Manuel Spannagl
 - o Cristobal Uauy, Philippa Borrill and Ricardo H. Ramirez-Gonzalez
 - o Catherine Feuillet

Meetings/Workshops

- 14-15 June 2018, Wheats&Women International Conference, Rome, Italy
- 30 May-1 June 2018, <u>PAG Asia</u>, Seoul, South Korea. The IWGSC will hold a workshop on Wednesday 30 May 2018.
- 13-17 January 2018: The IWGSC organized two workshops and a business meeting at PAG XXV, San Diego, USA
 - o <u>Main Workshop</u> <u>Speaker profiles</u>
 - o Standards and Protocols Workshop
 - o PAG pictures

Presentations

- Eversole presentation, <u>IWGSC Phase II: What's Next for the IWGSC</u>, PAG, San Diego, 16 January 2018
- IWGSC workshop presentations, PAG, San Diego, 13 January 2018,
- <u>IWGSC Standards and Protocols workshop presentations</u>, PAG, San Diego, 16 January 2018

Publications/resources

- Fact Sheet: <u>How Breeders Use a Genome Reference Sequence</u>
- The Economist article: Why the genome of wheat is so massive
- PAG poster
- Set of slides for members to use in their presentations Updated February 2018

And don't forget to follow us on **Twitter** and **Facebook**.