

Newsletter N° 1/2016

IWGSC Newsletter – January to March 2016

Dear IWGSC Members and Friends,

Published three times a year, the IWGSC newsletter keeps you abreast of the latest news and activities of the IWGSC.

The IWGSC

- As of April 2016, the IWGSC had 1100 members, working in 372 institutes/companies in 55 countries. Check out the <u>map</u>.
- Currently, the IWGSC has <u>21 sponsors</u>. Sponsor support is essential to ensuring the delivery of the reference sequence. Please inform us if you know of any potential sponsors (research institutes, universities, governmental agencies, or companies).
- Check out the new IWGSC Brochure

Projects

- Consistent with the sequencing strategy adopted in 2013, the IWGSC is pleased to report
 that a high quality, whole genome sequence is finally possible. The <u>IWGSC whole genome
 assembly</u> (IWGSC WGA) of *Chinese Spring* is based on Illumina short sequence reads
 assembled with NRGene's DeNovoMAGIC[™] software. Quality control of the assembly is
 underway and chromosome-based sequences and resources will be integrated into the
 assembly.
- The <u>projects progress overview</u> was updated earlier this year. Completion of
 pseudomolecules for individual chromosomes is advancing well towards achieving the
 standard of 3B on 8.5 chromosomes and funding for pseudomolecule completion was
 secured for the remaining chromosomes with all scheduled to be integrated into the IWGSC
 WGA to the extent practicable this year. More details on individual projects can be found on
 the reference sequencing page.
- The IWGSC wheat data repository at URGI reported the release of the IWGSC survey sequence version 3 which was generated by A. Sharpe, D. Konkin, and C. Pozniak at the National Research Council Canada and University of Saskatchewan. The new assembly incorporates ca. 185 Gb mate pair sequence data and improves scaffolding and gap-filling in the CSS.
- URGI have also released <u>new genetic data for wheat</u> and a new synteny viewer to visualise genic comparisons between bread wheat CSSv2, rice, Brachypodium and Sorghum.
- A project sponsored by Bayer CropScience to <u>generate tag sequences</u> from minimal tile
 path clones of physical maps that were built from fluorescent fingerprints providing links
 between physical maps and sequence resources is almost completed.

People

Throughout the year, the IWGSC highlights the work of its members by profiling them on the website and presenting them with Awards.

- Leader Spotlight: Sebastien Praud, Research Manager at Biogemma
- <u>Leadership Award</u>:
 - Jan Dvorak (University of California, Davis) was awarded an IWGSC Outstanding Leadership Award in recognition and appreciation of his leadership in completing the reference sequence for Ae. tauschii – the progenitor of wheat D genome.



- Ming-Cheng Luo (University of California, Davis) was awarded an IWGSC
 Outstanding Leadership Award in recognition and appreciation of his leadership in
 completing the reference sequence for Ae. tauschii the progenitor of the wheat D
 genome.
- John Jacobs and Bayer CropScience were awarded an IWGSC Outstanding Leadership Award in recognition and appreciation of their leadership for advancing significantly the IWGSC efforts to complete the reference sequence of the bread wheat genome.
- Early Career award: Tingting Zhu (University of California, Davis) was awarded an IWGSC Early Career Award and received her award in January 2016 at PAG.

Meetings/Workshops

- June 2016 PAG Asia 2016
 On June 7 2016, The IWGSC will hold a workshop at PAG Asia 2016 organized by Rudi Appels and Kellye Eversole. The workshop which will be chaired by Dr. Appels.
- January 2016 PAG 2016
 The IWGSC held two workshops and a business meeting at the <u>Plant and Animal Genome</u> <u>Conference XXIV</u>, 9-13 January 2016, San Diego, USA.
 - Main workshop (<u>program and presentations</u>, <u>speaker profiles</u>)
 - Standards and Protocols workshop (<u>program and presentations</u>)
 - o Photo album on Flickr

Presentations

- 02/05 <u>Eversole presentation</u>, National Association of Wheat Growers, Washington DC, USA
- 01/09 Eversole presentation, IWGSC Business Meeting, PAG San Diego, USA
- 01/09 Caugant presentation, IWGSC Communication activities, PAG San Diego, USA
- 01/08 <u>Feuillet presentation</u>, IWGSC progress report to the Wheat Initiative, San Diego, USA

IWGSC Publications

- Press releases
 - 01/06/2016 IWGSC announced the production of a whole genome assembly of bread wheat: Wheat Genome Sequencing Gets Major Boost
- Infographics: <u>How to separate chromosomes</u>

Community news:

• 02/04: Publication: chromosome-based BioNano maps

Resources for members:

- Slides reflecting the status, as of January 2016, for both the physical maps and the reference sequencing projects. <u>Updated IWGSC chromosomes with flags</u>
- <u>Set of slides for members</u> to use in their presentations: general presentation of the IWGSC (membership, structure, vision, roadmap), major achievements, progress, sponsors. Updated January 2015

And don't forget to follow us on <u>Twitter</u> and <u>Facebook</u>