

Newsletter N° 3/2015

IWGSC Newsletter – September 2015 to 8 January 2016

Dear IWGSC Members and Friends,

Happy New Year!

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

The IWGSC

- As of December 2015, the IWGSC had 1166 members, working in 372 institutes/companies in 55 countries. Check out the map.
- Currently, the IWGSC has <u>21 sponsors</u>. Two new sponsors have joined recently (IPK Gatersleben, Institute of Experimental Botany Olomouc). 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).

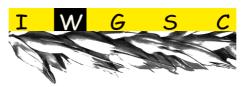
Projects

The projects progress overview is regularly updated.

- A new project announced in December will provide funding in Germany to complete pseudomolecules for chromosomes 6A & 2D
- Reference sequencing projects are now underway for 15.5 chromosomes that are expected to reach the standard of chromosome 3B within the next 1-2 years. More details on individual projects can be found on the reference sequencing page.
- The <u>IWGSC wheat data repository at URGI</u> has been updated to provide access to additional physical maps. The latest additions are physical maps for chromosome arms <u>2BS</u>, <u>2BL</u>, <u>2DS</u>, <u>2DL</u>, <u>4BS</u>, <u>4BL</u>, <u>5BL</u>, and <u>5DL</u>. With this latest update, all physical maps are available at URGI, except for 3AL, which will be added shortly. The repository added links to easily order BAC clones at INRA CNRGV through a dedicated "BAC Libraries" tab in the physical map browser.
- A new version of the IWGSC CSS wheat survey sequence (IWGSC CSSv3) has been generated by the incorporation of ca. 185 Gbp of mate pair sequence data produced from libraries ranging in size from 1-40kb from a Chinese Spring + 7EL addition line. The assembly has been produced by A. Sharpe, D. Konkin and C. Pozniak, at the National Research Council Canada and the University of Saskatchewan, Canada.
- 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 underway.
- To complement the chromosome sequencing efforts, the IWGSC is coordinating a <u>project</u> to <u>produce a whole genome assembly</u> (IWGSC WGA) of *Chinese Spring* based on Illumina short sequence reads assembled with NRGene's DeNovoMAGIC[™] software.

Meetings/Workshops

January 2016 – PAG 2016
 The IWGSC will hold two workshops and a business meeting at the <u>Plant and Animal Genome Conference XXIV</u>, 9-13 January 2016, San Diego, USA.



- Saturday 9 January from 8:00 to 10:10 am Main workshop (<u>program</u>, <u>speaker</u> <u>profiles</u>) Room: Town and Country
- Saturday 9 January 2016 from 6:20 to 8:20 pm Business meeting Room: Pacific Salon 4-5 (2nd Floor)
- Tuesday 12 January from 1:30 to 6:10 pm Standards and Protocols workshop (program) – Room: Pacific Salon 3

IWGSC Publications

- Press releases
 - 01/06/2016 IWGSC announced the production of a whole genome assembly of bread wheat: <u>Wheat Genome Sequencing Gets Major Boost</u>
 - o 12/02 Germany Steps Up Its Wheat Sequencing Effort
 - 11/16 Grégoire Berthe, Céréales Vallée CEO, receives the IWGSC Outstanding Leadership Award
 - o 11/04 Wheat Sequencing Consortium is Producing New Tools for Wheat Breeders
 - 09/29 <u>Canadian Genomics Project Is Leading the Way in Wheat Breeding</u> Innovation
- Articles in magazines:
 - Seed World: Wheat genome sequencing catching up
- Infographics:
 - Sequencing the bread wheat genome
 - The bread wheat genome

People

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

- <u>Leader Spotlight</u>: <u>Hana Simkova</u>, senior scientist at the Institute of Experimental Botany (IEB) and lecturer at Palacký University (both located in Olomouc in the Czech Republic.
- <u>Leadership Award</u>: <u>Grégoire Berthe</u> was awarded an IWGSC Outstanding Leadership Award in recognition of his continuous support to the International Wheat Genome Sequencing Consortium (IWGSC) over the last 10 years.
- <u>Early Career award</u>: <u>Tingting Zhu</u> was awarded an IWGSC Early Career Award and will receive her award in January 2016 at PAG.

Community news:

- 11/16: New wheat genome assembly available at TGAC
- 11/13 Publication: <u>Proceedings of the 12th International Wheat Genetics Symposium</u> (Yokahoma, Japan, 2013)
- 11/10 New physical map data publicly available at URGI
- 10/06 Publication: <u>Sequence Assembly and Analysis of Chromosome 5Mg of Aegilops</u> geniculata

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</u> for members to use in their presentations: general presentation of the IWGSC (membership, structure, vision, roadmap), major achievements, progress, sponsors. Updated January 2015



• Flickr photo album: sequencing steps, from seedling to BAC library

Presentations

- 12/02 Stein presentation, Berlin, Germany
- 11/16 Eversole presentation, Clermont-Ferrand, France
- 09/23 Caugant presentation, Olomouc, Czech Republic

IWGSC 10th anniversary:

The IWGSC turned 10 in 2015. In celebration of this milestone, we developed:

- a timeline with the major events over the last 10 years
- an image gallery
- a <u>video</u> featuring interviews of individuals who had this vision, decided to join force and embarked on this long, frustrating at times, but rewarding journey.

Looking forward to seeing you at PAG!

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