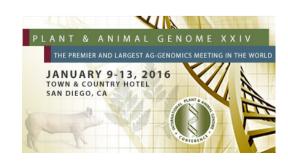
IWGSC Open Business Meeting

Kellye Eversole

IWGSC Executive Director

Plant and Animal Genome Conference San Diego, California 9 January 2016





Agenda

- Presentation of IWGSC leadership and early career awards
- Update of IWGSC
- Communications Report
- Project Status Report
- New Resources and new projects
- Exome Capture
- RNASeq Working Group
- Updated roadmap

IWGSC Awards

 Early career award – Tingting Zhu, UC, Davis

- IWGSC leadership awards
 - Jan Dvorak, UC, Davis

- Ming-Cheng Luo, UC, Davis

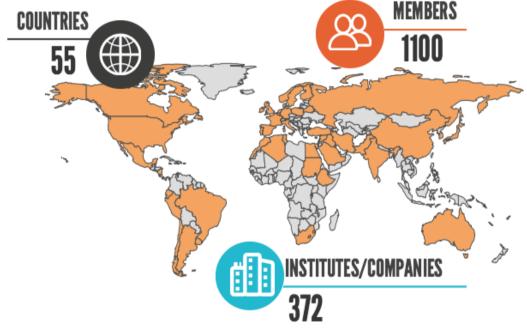
John Jacobs and Bayer CropScience

The International Wheat Genome Sequencing Consortium



2015











Vision and roadmap

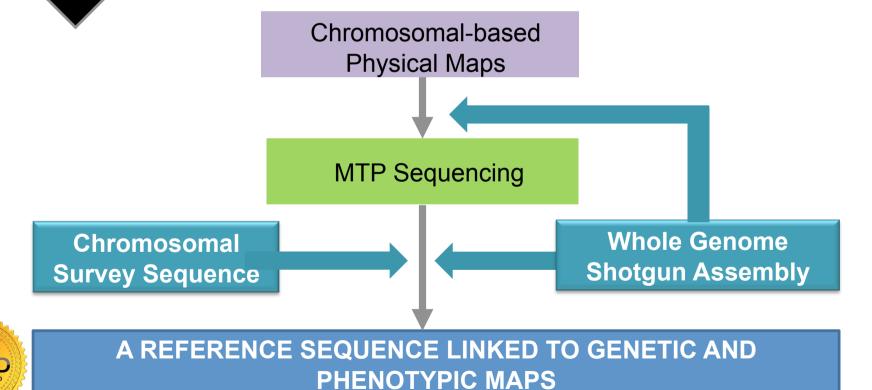


Goal

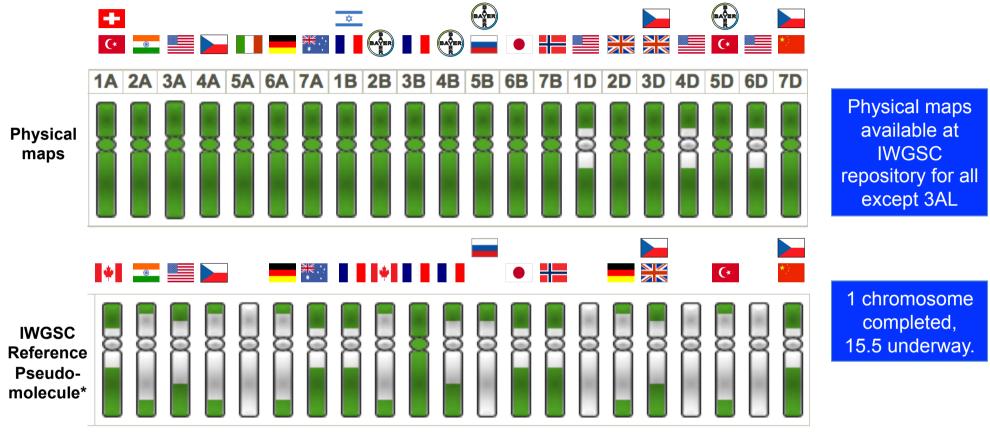
- Lay a foundation to accelerate wheat improvement
- Increase profitability throughout the industry

Vision

- High quality annotated genome sequence, comparable to rice
- Physical map-based, integrated and ordered sequence



Progress towards completion of Bread Wheat Reference Genome Sequence



*Flags represent countries where work is underway with funding, as of January 2016

New Resources

 Physical maps and MTPs funded by Bayer CropScience for 2B, 2D, 4B, 5BL, and 5DL



Copies of all BAC libraries at CNRGV





IWGSC CSS v3 – integrated mate pair data



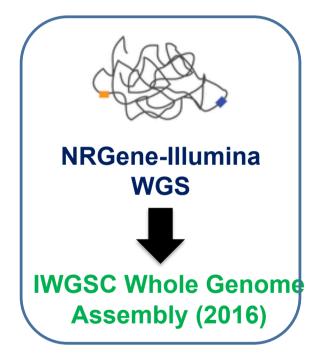


New Projects/Activities

- Bayer CropScience-IWGSC project to generate WGP sequence tags for MTP BACs from fluorescently fingerprinted physical maps
- CS PacBio/Illumina Assembly
- RNASeq Working Group
- Exome Capture
- IWGSC Whole Genome Assembly

Roadmap to the Wheat Genome Sequence

Illumina sequencing of Physical maps of individual chromosomes individual chromosomes 86% **Chromosome Survey MTP** sequencing **Sequence v2 (2014)** 42% Whole genome mate **Pseudomolecule** pairs assembly Chromosome 3B (2014) **IWGSC CSS v3 (2016)** 9 chromosomes (2016)



BioNanoGenomics, optical, RH, HiC maps



Genetic, LD maps MTP sequence tags.....

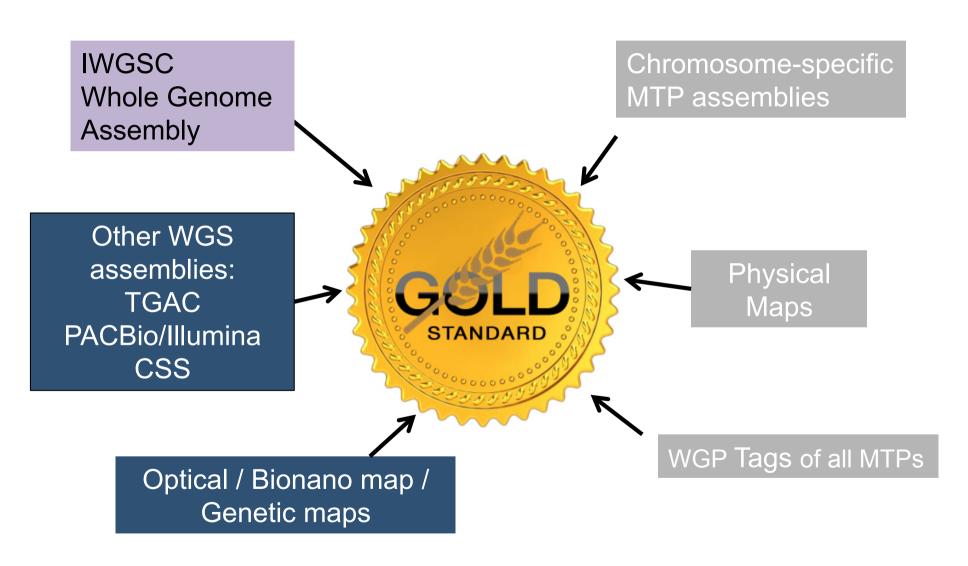


Reference genome sequence (2017)





Goal -- Achieving Reference release IWGSC v1.... 2016?



Discussions underway at IWGSC Coordinating Committee



IWGSC Next Steps

- Monday IWGSC CC
 - what needs to be done to have first reference sequence this year
 - next steps for the consortium post 1st reference

 Tuesday – Standards & Protocols Workshop

Acknowledgements

- IWGSC Leadership Team:
 - Rudi Appels, Murdoch University
 - Catherine Feuillet, Bayer CropScience
 - Beat Keller, University of Zurich
 - Jane Rogers, IWGSC
 - Kellye Eversole, IWGSC
- Members of the Coordinating Committee
- Leaders of the various physical mapping and sequencing projects, their team members, and collaborators
- IWGSC Staff Lori Leach and Isabelle Caugant
- And.....



IWGSC Sponsors

















































Thank you!

