



Newsletter N° 3/2020

IWGSC Newsletter – September 2020 to January 2021

The IWGSC

- Membership:
The IWGSC has 3,200 members in 71 countries, working at 884 institutions/companies.
- Sponsors:
 - Currently, the IWGSC has [7 sponsors](#).
 - Sponsor support is essential to ensure continuation of activities. Please inform us if you know of any potential sponsors (research institutes, universities, governmental agencies, or companies).

Projects

- IWGSC-Arbor Biosciences Promoter Capture project
The IWGSC-Arbor Biosciences promoter capture, developed under the leadership of IWGSC Coordinating Committee members Jorge Dubcovsky and Jacob Enk, is currently being tested and is scheduled to be released in the spring of 2021. The Dubcovsky lab remapped the "original" NimbleGene promoter design to IWGSC RefSeq v1.1 and the dataset is available at GrainGenes.
- IWGSC-Arbor Biosciences Expansion Modules
Arbor Biosciences plans to develop other kits which could include low confidence genes from the IWGSC RefSeq v2.1 annotation and an array which captures common introgressions. Arbor Biosciences will also incorporate the updated and annotated IWGSC RefSeq v2.1 and genome-wide SNPs. If you have any suggestions for additional modules, please contact [Kellye Eversole](#).
- IWGSC Wheat Diversity project
Under this project, the IWGSC plans to develop platinum quality sequences of a core set of eight landraces and to add to these data elite and founder lines sequenced to varying levels of quality, as well as publicly available sequences. We have a good rate for sequencing and assembling 8 landraces at high quality (PacBio Sequel II HiFi sequencing at a minimum coverage of 30X). Some IWGSC members already have expressed interest in sequencing one or more of the landraces. If you have sequenced or are planning to sequence an elite line or founder line and want to be involved in the development of the haplotype database, please contact [Kellye Eversole](#).
- IWGSC RefSeq Assembly and Annotation
Updated versions of the wheat genome reference sequence assembly (IWGSC RefSeq v2.1) and annotation (IWGSC RefSeq annotation v2.1) will soon be available to the community at the [IWGSC data repository hosted by URGI-INRAE](#). An article outlining these new resources and the improvements to the wheat reference sequence has been submitted.
- IWGSC RefSeq Annotation beyond 2020
Continued manual and functional annotation of the reference is essential. To facilitate high quality functional annotation, we continue to seek experts willing to take the lead in the functional annotation

of gene families in wheat, contact [Kellye Eversole](#), [Fred Choulet](#), [Rudi Appels](#), or [Hélène Rimbart](#) if you would like to be involved.

People

- Leader Spotlight on [Delfina Barabaschi](#) (Research Centre for Genomics and Bioinformatics– CREA, Italy)

Upcoming Webinars:

All webinars are free and are scheduled at 11am Eastern US Time. They are recorded and subsequently posted on the [IWGSC YouTube channel](#). To never miss a new upload, you can register to the channel.

- 28 January: [Predictive biology: understanding and reversing the evolution of antibiotic resistance](#) presented by Allison Lopatkin (Columbia University, USA), a webinar organized by the Phytobiomes Alliance
- 11 March: [Genetic dissection of disease resistance mechanisms hijacked by a necrotrophic pathogen of wheat](#) presented by Justin Faris (USDA-ARS, USA)

Previous webinars

In case you missed our [past webinars](#), you can watch all recordings on the [IWGSC YouTube channel](#).

Since the last edition of the newsletter, we organized the following webinars:

- [Resistance gene cloning in wheat](#) presented by Burkhard Steuernagel (John Innes Centre, UK)
- [Differential chromatin accessibility map as a new resource for studying wheat genome function & genotype-to-trait relationships](#) presented by Eduard Eduard Akhunov (Kansas State University, USA)
- [Genome-specific primer design with PolyMarker](#) presented by Ricardo Ramirez-Gonzalez (John Innes Centre, UK)
- [Decoding the polyploid wheat genome using gene networks](#) presented by Philippa Borrill (University of Birmingham, UK)
- [NIAB Diverse MAGIC: dissecting trait genetic architecture across 70 years of wheat breeding](#) presented by Michael Scott (University College London, UK)

Upcoming Workshops

- As of now, PAG 2021 is scheduled for May 2021. The IWGSC intends to hold two workshops. Stay tuned for the announcement of calls for speakers and early career award recipient abstracts.

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