

An event by



4TH INTERNATIONAL WHEAT CONGRESS



Patrons



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



Accademia
Nazionale
di Agricoltura



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Consiglio per la ricerca in agricoltura
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Associazione Industriali Mugnai d'Italia



PRE CONFERENCE WORKSHOPS

BOLOGNA - ITALY

Sunday, May 24, 2026

Bologna Congress Center,
Piazza della Costituzione, 4

Conference Chair

Roberto Tuberosa

Professor Emeritus Alma Mater Studiorum
Università di Bologna

International Organising Committee
Chair

Rajeev Varshney

Murdoch University, Australia



SPATIAL WHEAT OMICS

ROOM 6

09:00 - 12:30



Avenue media®
Conference & Expo



BOLOGNA, ITALY - MAY 25-29, 2026



Pre-conference Workshops Sunday, 24 May 2026

SPATIAL WHEAT OMICS

Room 6

Co-chair: Zhong-Hua Chen (Adelaide University, Australia), Rajeev Varshney (Murdoch University, Australia)

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|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 09:00 – 09:25 | Exploring intra- and inter-specific multi-omics diversity for wheat improvement
Manuel Spannagl (<i>Helmholtz Munich, Germany</i>) |
| 09:25 – 09:50 | The potential of wheat spatial omics
Scott Boden, Wheat Spatial Omics Consortium (WSOC) (<i>Adelaide University, Australia</i>) |
| 09:50 – 10:10 | Integration of multi-omics data accelerates molecular analysis of common wheat traits
Ning Zhang, Daowen Wang, Min Li, Feng Chen (<i>Henan Agricultural University, China</i>) |
| 10:10 – 10:30 | Whole-genome sequencing of 8,003 mutants supports barley genetics and beyond
Guangqi Gao, Ping Yang, Martin Mascher (<i>IPK, Germany CAAS, China</i>) |
| 10:30 – 10:50 | Morning tea |



BOLOGNA, ITALY - MAY 25-29, 2026



- 10:50 – 11:10 **Functional genomics and rhizosphere colonisation of plant growth promoting bacteria for enhancing wheat adaptation to dryland cropping systems**
Yi Zhou (*Adelaide University, Australia*)
- 11:30 – 11:50 **Seed development in space and time: How spatial transcriptomics completes the picture**
Tori Millsted, Robert Henry (*University of Queensland, Australia*)
- 11:50 – 12:10 **Enhancing multiplex genome editing in common wheat**
Jihu Li, Genying Li (*Shandong Academy of Agricultural Sciences, China*)
- 12:10 – 12:30 **Distal chromatin regulation mediates trade-off between tiller outgrowth and drought responses in wheat**
Ning Zhang (*Shandong Agricultural University, China*)