



# WHEAT CONGRESS

## Workshop 12: Innovative Multi-Omics Technologies for Wheat and Beyond

Sunday, 22 September 2024

Perth Conference & Exhibition Centre (PCEC), Perth, Western Australia

Meeting Room 6, PCEC

Tentative Program		
Sunday, 22 September 2024		
Time	Co-Chairs: Mr Richard Harrison, MGI Tech, Australia Dr Cen Tong, BGI Research/Murdoch University, China/Australia	
13:00 – 13:10	Introduction	
13:10 – 13:30	Single-cell spatial transcriptomics drives a new era in plant research	<b>Dr. Xun Xu</b> BGI-Research, China
13:30 – 13:50	Going against the grain: Investigating C4 Wheat Theory Through STOmics Spatial Transcriptomics Platform	<b>Tori Millstead</b> The University of Queensland, Queensland Alliance for Agriculture and Food Innovation, Australia
13:50 – 14:10	Dynamic Gene Regulation in Developing Wheat Spike at Single-Cell Spatiotemporal Resolution	<b>Prof Jun Xiao</b> Institute of Genetics and Developmental Biology, Chinese Academy of Science, China
14:10 – 14:30	Single-cell Transcription Atlas of Seed Germination in Barley	<b>Dr. Cen Tong</b> BGI-Research; Murdoch University, China/Australia
14:30 – 14:50	Tea/Coffee break	
14:50 – 15:10	Spatial Transcriptomic Study of Early Developing Wheat Inflorescence Using STOmics Stereo-seq	<b>Dr. Yue Qu (Julian)</b> The University of Adelaide, Australia
15:10 – 15:30	Optimising Plant Breeding Research with Low-pass Whole Genome Sequencing	<b>Dr. Dou Hu</b> MGI Tech, China

15:30 – 15:50	CropGS-Hub: A Comprehensive Database of Genotype and Phenotype Resources for Genomic Prediction in Major Crops	<b>Dr. Cong Tan</b> BGI-Research; BGI-Bioverse, China
15:50 – 16:10	A Bumper Crop: Latest Multi-Omics tools for Agriculture	<b>Dr. Paul Donohoe</b> MGI Tech, Australia and New Zealand
16:10 – 16:15	Closing remarks by Co-Chairs	