

Preliminary Program

June 14, Wednesday

13:00 Registration open, welcome coffee, poster hanging

14:00 – 14:15 Welcome address

Session 1 – Molecular biology of maize development and physiology (chair: Gabriella Consonni)

14:20 – 15:00 Andrea Gallavotti, The Waksman Institute of Microbiology, Rutgers. Genetic control of maize meristem function

15:00 – 15:15 Martina Balboni, University of Hambur. Live cell imaging of meiosis in maize.

15:15 – 15:30 Andrea R.M. Calhau, University of Lyon. Double fertilization defects in maize haploid inducer lines

15:30 – 15:45 Giulia Castorina, University of Milan. Analysis of genetic components to improve cuticle-dependent leaf permeability in maize

15:45 – 16:00 Miki Kawachi, Georg-August-University Göttingen. Characterization of exosomelike vesicles from maize pollen and their potential role in sRNA trafficking

16:00 – 16:30 Break and poster view

Session 2 – Transposons and epigenetics (Chair: Serena Varotto)

16:30 – 17:10 Clémentine Vitte, CNRS, GQE-Le Moulon, Paris Saclay. Transposable elements contribution to maize tissue differentiation

17:10 – 17:40 Jeff Bennetzen, University of Georgia, Athens, GA, USA. The outlandishly dynamic LTR-retrotransposons and Helitrons in maize and other flowering plants

17:40 – 18:05 Johan Zicola, Georg-August-University Göttingen. Small RNAs as potential regulators of heterosis in maize

18:05 – 18:20 Yan Naing Win, University of Bonn. The European mutant resource BonnMu and its application in gene function analyses in maize

Dinner on your own



June 15, Thursday

Session 3 – Genomic approaches to unravel the interaction with the environment (Chairs: Elisabetta Frascaroli, Cristian Forestan)

9:00 – 9:40 Hannah Schneider, Wageningen University. Genetic control and functional utility of root architectural and anatomical traits for soil resource capture

9:40 – 9:55 Marcel Baer, University of Bonn. Ethylene response factor (erf) genes connect lateral root development and mycorrhizal symbiosis in maize

9:55 – 10:10 Fabio Guffanti, Technical University of Munich. Unravelling the genetic architecture of lateral root length in maize.

 $10{:}10-10{:}25$ Alberto Tassinari, University of Bologna. Insights into the regulatory mechanisms of a major flowering time QTL in maize

10:25 – 10:40 Sebastian Urzinger, Technical University of Munich, NDH mediated cyclic electron flow is required for cold tolerance in the Austrian maize landrace 'Kemater Landmais Gelb'

10:40 – 11:00 Break and poster view

11:00 – 11:40 Peng Yu, Root Functional Biology, INRES, University of Bonn. 'Root system adaptation to water availability during maize domestication and global expansion'

11:40 – 11:55 Leonardo Caproni, Scuola Superiore Sant'Anna di Pisa. Mapping photosynthetic efficiency 'from pot to plot' using a maize multiparent population

11:55 – 12:10 Mariolina Gulli. University of Parma. Toward a sustainable maize cropping: X-omics support the understanding of the effects of some biotechnological practices.

12:10 - 12:25 Finn Hartmann, University of Regensburg. From a proteomic dataset to characterization of novel plant peptides

12:25 - 14:00 Lunch break

14:00 – 14:40 Julia Engelhorn, HHU Düsseldorf, Max Planck Institute for Plant Breeding Research. 'High-throughput cistrome analysis links diversity in transcription factor binding to trait variation'

Poster Session

14:45 – 16:15 Poster view even numbers

16:15 – 17:30 Poster view odd numbers

20:00 Social dinner at Cantina Bentivoglio



June 16, Friday

Session 4 – Molecular genetics and genomics for breeding (Chairs: Hilde Nielssen, Roberto Tuberosa)

9:00 – 9:40 Xiaohong Yang, China Agricultural University, Beijing. Convergent selection of a WD40 protein that enhances grain yield in maize and rice

9:40 – 9:55 Leke Victor Aiyesa, University of Gottingen. Unlocking the genetic architecture of local adaptation of European maize landraces using individual plants populations

9:55 – 10:10 Anna Maria Mastrangelo, Research Centre for Cereal and Industrial Crops (CREA), Foggia. Genetic diversity within a collection of Italian maize inbred lines: a resource for maize genomics and breeding

10:10 - 10:25 Federico Colombo. University of Milan. Non-renewable phosphorus in agriculture: the potential of low-phytate maize mutant and two approaches to restore seed germination.

10:30 - 11:00 Coffee break and poster dismantle

11:00 – 11:15 Lei Wang, University of Bern. Immature leaves are the dominant volatile sensing organs of maize.

11:15 – 11:30 Marcin W. Grzybowski. University of Warsaw and University of Nebraska-Lincoln. A common resequencing-based genetic marker dataset for global maize diversity.

11:30 – 11.45 Yannick Fierlej. University of Lyon, Mass Seeds. Evaluation of genome and base editing tools in maize protoplasts.

11:45 – 12:00 Arthur Beauchet. VIB, Ghent University. BREEDIT: a multiplex genome editing strategy to improve complex quantitative traits in maize

12:00 – 12:10 Closing remarks