

08:45 - 09:10 Registration & Welcome Coffee

09:10 - 09:15 Welcome by Geert De Jaeger

TECHNOLOGY AND TRANSLATION

chair: Geert De Jaeger

09:15 - 10:05 KEYNOTE: (Epi)genomic Diversity and the Regulatory DNA Landscape
Joseph Ecker, Salk Institute, US

10:05 - 10:40 Tuning a molecular amplifier: mechanistic insights into the rapid re-organization of interphase microtubule arrays by blue light perception in higher plants
David Ehrhardt, Carnegie Institution for Science, Stanford University, US

10:40 - 11:10 Coffee Break

11:10 - 11:45 Tuning transpiration using synthetic and chemical biology
Sean Cutler, University of California - Riverside, US

11:45 - 12:20 Translating knowledge of stem cell proliferation and maturation to engineer improved crop productivity
Zachary Lippman, Cold Spring Harbor Laboratory, US

12.20 - 12.45 Cereal transformation at DuPont Pioneer - meeting future demands for genome modification
Todd J. Jones, DuPont Pioneer, US

12.45 - 13.30 Lunch

13.30 - 14.30 Poster Session - odd numbers

PLANT DEVELOPMENT

chair: Dirk Inzé

14:30 - 15:05 New pathways in plant stem cells and mechanistic insights into yield traits
David Jackson, Cold Spring Harbor Laboratory, US

15:05 - 15:40 Molecular and cellular events during gamete activation and fusion
Stefanie Sprunck, Institute of Plant Sciences, University of Regensburg, DE

15:40 - 15:55 *Selected abstract:* Translation regulation of uORFs-containing genes in *Arabidopsis*
Catharina Merchante, University of Málaga, ES

15:55 - 16:00 *Sponsored talk:* Bayer: Science for a better life
Fred Van Ex, Senior Group Leader Genomics, Bayer CropScience, BE

16:00 - 16.25 Coffee Break

16:25 - 17:00 Spatiotemporal regulatory networks in plant root development
Siobhan Brady, University of California, Davis, US

17.00 - 17.35 SCHENGEN mutants define a diffusion barrier surveillance pathway in plants
Niko Geldner, University Lausanne, CH

17.35 - 18.10 A spatiotemporal DNA endoploidy map of the *Arabidopsis thaliana* root
Steven Maere, VIB-UGent Center for Plant Systems biology, BE

18.10 - 19.00 Reception

19.45 - 22.30 Conference Dinner

08:45 - 09:15 Welcome Coffee

PLANT BIOTIC INTERACTIONS AND DEFENSE

chair: Patrick Van Dijck

- 09:15 - 09:50 Reductionist approaches to explore plant microbiota functions
Ruben Garrido-Oter, MPI for Plant Breeding Research, DE
- 09:50 - 10:25 The leaf microbiota: disassembling and rebuilding to explore plant microbe interactions
Julia Vorholt, ETH, Zurich, CH
- 10:25 - 10:40 *Selected Abstract:* Quantitative genetics analysis of root hydraulics uncovers novel pathways of plant adaptation to the environment
Christophe Maurel, CNRS / INRA, FR
- 10:40 - 11:10 Coffee Break
- 10:40 - 11:10 *Meet the Expert:* Julia Vorholt
- 11:10 - 11:45 The root microbiome and plant health
Corné Pieterse, Utrecht University, NL
- 11:45 - 12:20 Engineering Plant Specialized Metabolism: 'Can We Break the Multiple Feedback Loops?
Alain Goossens, VIB-UGent Center for Plant Systems biology, BE
- 12:20 - 12:55 Regulation of receptor kinase-mediated immune signaling
Cyril Zipfel, Sainsbury Laboratory, UK
- 12:55 - 13:40 Lunch
- 13:40 - 14:40 Poster Session - even numbers

PLANT EVOLUTION AND SPECIATION

chair: Steven Maere

- 14:40 - 15:30 KEYNOTE: Contrasts in adaptation: new mutations and old variants
Detlef Weigel, Max Planck Institute for Developmental Biology, DE
- 15:30 - 16:05 Germline Reprogramming and Epigenetic Inheritance
Rob Martienssen, Cold Spring Harbor Laboratory, US
- 16:05 - 16:35 Coffee Break
- 16:35 - 16:50 *Selected abstract:* Global impacts of transgenerational acquired resistance on DNA methylation
Joost Stassen, The University of Sheffield, UK
- 16:50 - 17:25 Epigenetic regulation of transposable elements drives plant speciation
Claudia Köhler, Swedish University of Agricultural Sciences and Linnean Center for Plant Biology, Uppsala, SE
- 17:25 - 17:40 *Selected abstract:* Small RNA as new players of hybrid vigour in plants
Sara Lopez-Gomollon, University of Cambridge, UK
- 17:40 - 17:50 Closing Remarks by Dirk Inzé