

Plant Genomes in a Changing Environment

12-14 October 2020

Virtual Conference Agenda

Monday, 12 October

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| 13:00 | 13:10 | Welcome |
| <i>Scientific Programme Committee:</i> Joy Bergelson, University of Chicago, USA Michele Morgante, University of Udine, Italy Cristobal Uauy, John Innes Centre, UK | | |
| 13:10 | 14:15 | Session 1: Biotic Interactions |
| Introduction to the session <i>Chair: Cristobal Uauy, John Innes Centre, UK</i> | | |
| 13:10 | 13:35 | Arabidopsis immunity signalling and effects of temperature Jane Parker, MPI Cologne, Germany |
| 13:35 | 13:45 | Mapping barley genes shaping the rhizosphere bacterial microbiota <i>Carmen Escudero Martinez, University of Dundee, UK</i> |
| 13:45 | 13:55 | Dissecting the co-transcriptome landscape of plants and microbiota <i>Tatsuya Nobori, Salk Institute, USA</i> |
| 13:55 | 14:15 | Q&A <i>Chair: Cristobal Uauy, John Innes Centre, UK</i> <i>Moderator: Michele Morgante, University of Udine, Italy</i> |
| 14:15 | 14:35 | Break |
| 14:35 | 15:20 | Keynote 1 |
| Introduction to the session <i>Chair: Joy Bergelson, University of Chicago, USA</i> | | |
| 14:35 | 15:10 | Transforming agricultural sustainability through beneficial microbial associations Giles Oldroyd, Sainsbury Laboratory, UK |
| 15:10 | 15:20 | Q&A <i>Chair: Joy Bergelson, University of Chicago, USA</i> <i>Moderator: Michele Morgante, University of Udine, Italy</i> |
| 15:20 | 15:30 | Break |
| 15:30 | 17:00 | Session 1: Biotic Interactions continued |
| Introduction to the session <i>Chair: Joy Bergelson, University of Chicago, USA</i> | | |
| 15:30 | 15:55 | Secondary siRNAs confer disease resistance through trans-species RNAi Wenbo Ma, TSL, UK |
| 15:55 | 16:20 | Bi-directional signaling along the microbiome-root-shoot axis Corne Pieterse, Utrecht University, The Netherlands |
| 16:20 | 16:30 | Precision transcriptomics of viral foci reveals spatial regulation of immune-signaling genes and identifies RBOHD as an important player in the incompatible interaction between potato virus Y and potato <i>Kristina Gruden, National Institute of Biology, Slovenia</i> |

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| 16:30 | 16:40 | Plant immune signalling network analysis identifies StSAPK8 as a novel regulator of potato immunity <i>Spela Baebler, National Institute of Biology, Slovenia</i> |
| 16:40 | 17:00 | Q&A <i>Chair: Joy Bergelson, University of Chicago, USA</i> <i>Moderator: Cristobal Uauy, John Innes Centre, UK</i> |
| 17:00 | 17:20 | Break |
| 17:20 | 17:35 | Poster lightning talks |
| 17:35 | 18:35 | Poster session |

Tuesday, 13 October

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| 13:00 | 14:30 | Session 2: Abiotic Adaptation |
| | | Introduction to the session <i>Chair: Michele Morgante, University of Udine, Italy</i> |
| 13:00 | 13:25 | Surviving the deluge: strategies of flooding tolerance in plants Francesco Lucausi, University of Oxford, UK |
| 13:25 | 13:50 | Talk title TBC Ana Cano-Delgado, CRAG, Spain |
| 13:50 | 14:00 | Interrogating hormone and stress responses at cellular resolution using time series single-cell transcriptomics <i>Trevor Nolan, Duke University, USA</i> |
| 14:00 | 14:10 | Success factors under drought: What makes rapeseed deal with water shortage? <i>Sarah Schiessl Weidenweber, Justus Liebig University Giessen, Germany</i> |
| 14:10 | 14:30 | Q&A <i>Chair: Michele Morgante, University of Udine, Italy</i> <i>Moderator: Cristobal Uauy, John Innes Centre, UK</i> |
| 14:30 | 14:50 | Break |
| 14:50 | 15:35 | Keynote 2 |
| | | Introduction to the session <i>Chair: Cristobal Uauy, John Innes Centre, UK</i> |
| 14:50 | 15:25 | At the root of cellular responses to water extremes in rice Julia Bailey-Serres, University of California, Riverside, USA |
| 15:25 | 15:35 | Q&A <i>Chair: Cristobal Uauy, John Innes Centre, UK</i> <i>Moderator: Michele Morgante, University of Udine, Italy</i> |
| 15:35 | 15:45 | Break |

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| 15:45 16:50 Session 2: Abiotic Adaptation continued | | |
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| Introduction to the session <i>Chair: Joy Bergelson, University of Chicago, USA</i> | | |
| 15:45 | 16:10 | Increasing photosynthetic efficiency through genetic modification for sustainable and future-proofed crop yield improvement Steve Long, University of Illinois, USA/Lancaster University, UK |
| 16:10 | 16:20 | Identification of novel genes involved in phosphate accumulation in <i>Lotus japonicus</i> through Genome Wide Association mapping of root system architecture and anion content <i>Marco Giovannetti, University of Padova, Italy</i> |
| 16:20 | 16:30 | Network approaches to cell-type and condition specific gene regulation in rice <i>Alexander Borowsky, University of California, Riverside, USA</i> |
| 16:30 | 16:50 | Q&A <i>Chair: Joy Bergelson, University of Chicago, USA</i> <i>Moderator: Cristobal Uauy, John Innes Centre, UK</i> |
| 16:50 17:10 Break | | |
| 17:10 | 17:25 | Poster lightning talks |
| 17:25 | 18:25 | Poster session |

| Wednesday, 14 October | | |
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| 13:00 14:30 Session 3: Yield | | |
| Introduction to the session <i>Chair: Michele Morgante, University of Udine, Italy</i> | | |
| 13:00 | 13:25 | Overexpression of a Maize Transcription Factor in Maize Increases Grain Yield in the Field <i>Jeff Habben, Corteva, USA</i> |
| 13:25 | 13:50 | Defining the molecular mechanisms of cereal development to boost grain yield and quality Sarah McKim, University of Dundee, UK |
| 13:50 | 14:00 | Identification of new leaf intrinsic yield genes using cross-species network analysis in plants <i>Klaas Vandepoele, VIB-Ugent Center for Plant Systems Biology, Belgium</i> |
| 14:00 | 14:10 | Bryophyte solutions to land plant environmental problems: new and old tricks <i>Facundo Romani, CONICET, Argentina</i> |
| 14:10 | 14:30 | Q&A <i>Chair: Michele Morgante, University of Udine, Italy</i> <i>Moderator: Cristobal Uauy, John Innes Centre, UK</i> |
| 14:30 14:50 Break | | |

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| 14:50 | 16:20 | Session 4: Domestication and Adaptation |
| | | Introduction to the session <i>Chair: Cristobal Uauy, John Innes Centre, UK</i> |
| 14:50 | 15:15 | Plant diversity - evolutionary solutions to changing environments Sandra Knapp, Natural History Museum-London, UK |
| 15:15 | 15:40 | The geographic spread of rice Michael Purugganan, New York University, USA |
| 15:40 | 15:50 | Bringing agricultural weeds into the molecular lab <i>Dana MacGregor, Rothamsted Research, UK</i> |
| 15:50 | 16:00 | Temporal and spatial genetic diversity of a wild wheat population under climate change <i>Tal Dahan Meir, Weizmann Institute of Science, Israel</i> |
| 16:00 | 16:20 | Q&A <i>Chair: Cristobal Uauy, John Innes Centre, UK</i> <i>Moderator: Michele Morgante, University of Udine, Italy</i> |
| 16:20 | 16:40 | Break |
| 16:40 | 16:55 | Poster lightning talks |
| 16:55 | 17:55 | Poster session |
| 17:55 | 16:05 | Closing remarks |
| | | <i>Scientific Programme Committee:</i> Joy Bergelson, University of Chicago, USA Michele Morgante, University of Udine, Italy Cristobal Uauy, John Innes Centre, UK |