

18-20 October 2021

### Virtual Conference Agenda

#### Monday, 18 October 2021

Monday, 18 October 2021				
13:00	13:10	Welcome		
		Scientific Programme Committee:  Joy Bergelson, New York University, USA  Kirsten Bomblies, ETH Zurich, Switzerland  Michele Morgante, University of Udine, Italy  Cristobal Uauy, John Innes Centre, UK		
13:10	13:55	Keynote 1		
		Introduction to the session  Chair: Joy Bergelson, University of Chicago, USA		
13:10	13:40	Some interesting questions about plants that we can now hope to answer using genome sequences <u>Deborah Charlesworth, University of Edinburgh, UK</u>		
13:40	13:55	Q&A Chair: Joy Bergelson, University of Chicago, USA Moderator: Kirsten Bomblies, ETH Zurich, Switzerland		
13:55	14:15	Break and Spatial Chat Networking - meet the keynote		
14:15	15:45	Session 1: Genomics of Polyploidy Introduction to the session Chair: Kirsten Bomblies, ETH Zurich, Switzerland		
14:15	14:35	Polyploidy in Siberian Arabidopsis Iyrata  Polina Novikova, MPI Cologne, Germany		
14:35	14:55	Ecological and evolutionary consequences of hybridisation and polyploidy in invasive monkeyflowers  Mario Vallejo-Marin, University of Stirling, UK		
14:55	15:05	The day of the dandelion: cloning the PARTHENOGENESIS gene from triploid apomictic Taraxacum officinale Charles Underwood, Max Planck Institute for Plant Breeding Research, Germany		
15:05	15:15	MicroProteins as promising tools for improving M. sativa (alfalfa), a tetraploid high-value forage crop Maurizio Junior Chiurazi, Copenhagen University, Denmark		



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15:15 15:45 Q&A

Chair: Kirsten Bomblies, ETH Zurich, Switzerland Moderator: Cristobal Uauy, John Innes Centre, UK Panel: Alison Scott, MPI Cologne, Germany

15:45 16:15 Break and Spatial Chat Networking - meet the speakers



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### Monday, 18 October 2021 continued

16:15	18:05	Session 2: Abiotic Adaptation
		Introduction to the session  Chair: Michele Morgante, University of Udine, Italy
16:15	16:35	Stomata-driven Climate-Change Adaptation Through Space and Time Patricia Lang, Stanford University, USA
16:35	16:55	Genomics and phenomics in wheat underpinning food security  Matthew Reynolds, CIMMYT, Mexico
16:55	17:15	Root Cell Type Development to Counteract Abiotic Stress Siobhan Brady, University of California, Davis, USA
17:15	17:25	Stress-ready or Stress-reactive? That is the extremophyte question!  Nick Duppen, Ben-Gurion University of the Negev, Israel
17:25	17:35	Significance of Transcriptional Co-Activator, MBF1c in Responses to Heat stress, Drought and their Combination during the Reproductive Stages of Arabidopsis thaliana Nicholas Raditya Putrawisesa, Sophia University, Japan
17:35	18:05	Q&A Chair: Michele Morgante, University of Udine, Italy Moderator: Joy Bergelson, New York University, USA
18:05	18:35	Spatial Chat Networking - meet the speakers



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### Tuesday, 19 October 2021

13:00	14:30	Session 3: Biotic Interactions
		Introduction to the session
		Chair: Joy Bergelson, New York University, USA
13:00	13:20	Variation patterns of NLR clusters: Understanding NLR haplotype, function and epistasis Eunyoung Chae, National University of Singapore, Singapore
13:20	13:40	The impact of plant domestication on plant pathogen genome evolution <i>Eva Stukenbrock, University of Keil, Germany</i>
13:40	13:50	Prioritizing soybean resistance genes against fungal diseases by integrating GWAS and gene coexpression networks  Fabricio Almeida-Silva, UENIF, Brazil
13:50	14:00	Transcriptome and targeted metabolite analysis of resistant potato varieties as a way forward to generate resistance to Ralstonia solanacearum  Jeny Jose, Centre for Agricultural Research, Hungary
14:00	14:30	Q&A Chair: Joy Bergelson, New York University, USA Moderator: Cristobal Uauy, John Innes Centre, UK
14:30	15:00	Break and Spatial Chat Networking - meet the speakers
15:00	16:15	Lightning Talks
15:00	15:30	Lightning Talks
15:30	16:15	Interactive Spatial Chat Networking - meet the presenters
15:30 <b>16:15</b>	16:15 <b>16:25</b>	Interactive Spatial Chat Networking - meet the presenters  Break
16:15	16:25	Break
16:15	16:25	Break  Session 4: Emerging Technology  Introduction to the session  Chair: Michele Morgante, University of Udine, Italy  Understanding cell states and their temporal dynamics during tomato meristem differentiation and reprogramming
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16:15 16:25 16:25	16:25 17:55 16:45 17:05	Break  Session 4: Emerging Technology  Introduction to the session  Chair: Michele Morgante, University of Udine, Italy  Understanding cell states and their temporal dynamics during tomato meristem differentiation and reprogramming  Amos Tanay, Weizzman Institute, Israel  Overcoming bottlenecks in editing plant genomes  Dan Voytas, University of Minnesota, USA  Spatially resolved RNA sequencing of the wheat spike reveals larger variation within a single spike than across developmental timepoints



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17:25 17:55 Q&A

Chair: Michele Morgante, University of Udine, Italy Moderator: Kirsten Bomblies, ETH Zurich, Switzerland

17:55 18:20 Spatial Chat Networking - meet the speakers



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### Wednesday, 20 October 2021

13:00	14:50	Session 5: Plant Evolutionary Genomics
		Introduction to the session  Chair: Joy Bergelson, New York University, USA
13:00	13:20	Parental conflict and the rapid evolution of reproductive isolation in Mimulus Andrea Sweigart, University of Georgia, USA
13:20	13:40	The molecular and genetic basis of maize highland adaptation  Ruben Rellan-Alvarez, NC State, USA
13:40	14:00	Revisiting the role of structural variation in plant adaptation and specification <i>Loren Rieseberg, University of British Columbia, Canada</i>
14:00	14:10	The physiological and transcriptional control of growth rate variation  David Des Marais, Massachusetts Institute of Technology, USA
14:10	14:20	Unlocking the genetic potential of the African orphan crop fonio for agriculture in a changing climate  Hanin Ahmed, King Abdullah University of Science and Technology, Saudi Arabia
14:20	14:50	Q&A Chair: Joy Bergelson, New York University, USA Moderator: Cristobal Uauy, John Innes Centre, UK
14:50	15:20	Break and Spatial Chat Networking - meet the speakers
15:20	16:05	Keynote 2
		Introduction to the session Chair: Cristobal Uauy, John Innes Centre, UK
15:20	15:50	Tuning genes, Genomes and Traits in Plants and Agriculture  Zachary Lippman, CSHL, USA
15:50	16:05	Q&A Chair: Cristobal Uauy, John Innes Centre, UK Moderator: Michele Morgante, University of Udine, Italy
16:05	16:25	Spatial Chat Networking - meet the keynote
16:25	16:35	Closing remarks

#### Scientific Programme Committee:

Joy Bergelson, New York University, USA Kirsten Bomblies, ETH Zurich, Switzerland Michele Morgante, University of Udine, Italy



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Cristobal Uauy, John Innes Centre, UK