TUESDAY 25 JUNE 2019

» Session: Opening keynote address

17:30 Opening address
18:00 Elizabeth Kellogg. Diverse development of grass abscission zones
19:30 Opening reception

WEDNESDAY 26 JUNE 2019

» Session S1: Natural diversity and evolution

8:30 Robert Hasterok. Inferring on karyotype structure and evolution in Brachypodium using cross-species chromosome barcoding
9:00 John Doonan. Flower and grain trait variation in Brachypodium
9:15 Sinead Dread. Brachypodium distachyon grains in a comparative and evolutionary context
9:30 Benoit Lefebvre. Brachypodium distachyon genetic variability for beneficial interaction with arbuscular mycorrhizal fungi
9:45 Errol Vela. Typification of names and their taxonomic assignment within the Brachypodium distachyon complex (Poaceae)
10:00 Pilar Catalan. How diverse is Brachypodium? an updated view of annual and perennial compilospecies complexes
10:15 Coffee break

» Session S2: Comparative genomics and transcriptomics

10:45 Robin Buell. Life with 1000 genomes: Defining the pan-genome in maize
11:15 Keiichi Mochida. Transcriptome analysis of gene regulatory network reveals differential organization of rhythmic transcriptome between sub-genomes in the allopolyploid grass Brachypodium hybridum
11:30 Alexander Betekhtin. CRISPR/Cas9-based targeted mutagenesis in Brachypodium distachyon and B. hybridum and its application to study the model grass genome organisation
11:45 János Györgyey. LOB-domain transcription factor gene family of Brachypodium distachyon
12:00 Isabel Marques. Genome-wide analysis of floral genes in perennial temperate grasses: is there a common genomic toolbox to cope with extreme environmental conditions?
12:15 Charles Solomon. Programmed cell death in developing Brachypodium distachyon caryopsis
12:30 Lunch
WEDNESDAY 26 JUNE 2019

» Session S3: Development and growth

13:30  **David des Marais.** Natural diversity in patterns of biomass allocation in annual and perennial Brachypodium

14:00  **Daniel Woods.** Mutations in a predicted DNA polymerase subunit Cdc-27 (ZAO1) result in more rapid flowering of Brachypodium distachyon

14:15  **Liang Wu.** Divergent roles of FTs in flowering control in Brachypodium distachyon

14:30  **Michael Raissig.** Developmental innovations of stomatal form and function in Brachypodium

14:45  **Richard Sibout.** A Leucine Rich Repeat Receptor Kinase regulates vasculature patterning, phloem-xylem polarity and cell wall composition in Brachypodium

15:00  **Thiel Lehman.** Molecular and cell biological characterization of the BUZZ cell division kinase involved in root hair development

15:15  Coffee break

» Session S4: Tolerance and adaptation to abiotic stresses

15:45  **Pubudu Handakumbura.** Genotypic and phenotypic diversity for drought tolerance in Brachypodium distachyon

16:00  **Mhemmed Gandour.** Screening of Brachypodium hybridum genotypes for drought tolerance

16:15  **Shira Penner.** Adaptation to stress in Brachypodium along the aridity gradient in Israel

16:30  **Johannes Metz.** Ecology of annual Brachypodium in Israel: Unexpected ways of adaptation to drier climates at two spatial scales

16:45  **Bruno Contreras.** A pan-genome perspective on the co-expression response of genes to drought in the model grass Brachypodium distachyon

17:00  Poster session: even posters present

» Session: Keynote conference

17:30  **Eviatar Nevo.** Evolution Canyon: sympatric evolution through niche adaptation

18:30  Social events
THURSDAY 27 JUNE 2019

» Session S5: Regulatory elements, networks and epigenomics

8:30  Anne Roulin. **Transposable element evolution in Brachypodium distachyon: what can we learn from population genomics?**

9:00  Mexia Li. **RNA interactome capture in Brachypodium reveals a flowering plant core RBPome**

9:15  Joshua Coomey. **SECONDARY WALL INTERACTING bZIP (SWIZ) regulates secondary cell wall biosynthesis in Brachypodium distachyon in response to mechanical stress**

9:30  Michael Thieme. **Stress-induced mobilization of transposable elements in natural accessions of the model plant Brachypodium distachyon**

9:45  Christoph Stritt. **High sequence turnover and GC bias in the grass Brachypodium distachyon indicate frequent ectopic recombination between retrotransposon copies**

10:00 Kirankumar Mysore. **Insertional mutagenesis in Brachypodium distachyon using the Tnt1 retrotransposon and its potential use to identify novel sources of disease resistance**

10:15  Coffee break

» Session S6: Polyploidy and perenniality

10:45  Pamela Soltis. **Polyploidy as integrator across levels of biological organization: from cells to ecosystems**

11:15  Ruben Sancho. **Reference-genome syntenic mapping and multigene-based phylogenomics reveal the ancestry of homoeologous subgenomes in grass Brachypodium allopolyplids**

11:30  Virginia Markham. **Transposon traps and kissing chromosomes: 3D chromatin interactions in a hybrid nucleus**

11:45  Antonio Manzaneda. **Homoeologous gene expression and subgenome contributions in response to water stress in the allotetraploid Brachypodium hybridum (Poaceae)**

12:00  Natalia Borowska-Zuchowska. **The fate of 35S rRNA genes in allotetraploid Brachypodium hybridum – an evolutionary point of view**

12:15  Nir Sade. **The perennial model grass Brachypodium sylvaticum -stress tolerance of two accessions growing in contrasting climate**

12:30  Lunch

13:30  Poster session: even posters present

14:00  Half day field trip to Somontano area

21:00  Banquet dinner
FRIDAY 28 JUNE 2019

» Session S7: Ecology and Environment

8:30  David Lowry. The genetic and physiological basis of local adaptation along environmental gradients
9:00  Megan Korte. Facilitation as a driver of within population variation in Brachypodium
9:15  Pedro Rey. Influence of leaf functional trait variation on the response to insect herbivory in the Brachypodium distachyon species complex
9:30  Xavier Picó. The value of regional collections of natural populations to unravel the ecological and genetic basis of adaptive variation in Arabidopsis thaliana
9:45  Agnieszka Gladala-Kostarz. The impact of wind stress and mechanical stimulation on the growth and composition of Brachypodium distachyon stems
10:00 Luis Mur. Genetic, epigenetic and metabolomic differentiation of Turkish Brachypodium distachyon accessions into two geographically distinct populations
10:15 Coffee break

» Session S8: Adaptation to abiotic and biotic constrains

10:45  Borjana Arsova. Use of non-invasive phenotyping, molecular approaches and beneficial microbes in the understanding and improvement of Brachypodium nutrient uptake with focus on Nitrogen, Phosphorus and Zinc
11:15  Yusuke Kouzai. Rapid activation of WRKY-dependent immunity facilitates native resistance against the sheath blight pathogen, Rhizoctonia solani, in Brachypodium distachyon
11:30  Macarena Mellado-Sanchez. The SNF2 family of chromatin remodelers is conserved in Brachypodium distachyon and involved in the response to combinatorial abiotic stresses
11:45  Emma Aronson. Brachypodium distachyon and B. hybridum root, rhizosphere and bulk soil bacterial communities differ between native and invaded ranges
12:00  Rajiv Kumar Tripathi. Molecular characterization of SPL/miR156 regulatory component in Brachypodium spp.
12:15  Marlon De la Peña Cuao. Brachypodium distachyon: a good model to study ammonium assimilation, nutrition and stress in cereals
12:30 Lunch
FRIDAY 28 JUNE 2019

» Session S9: Crop and biomass crop translation

13:30 Klaus Mayer. From genome to genomes. Charting the genome landscape(s) of western civilisation
14:00 Manuel Becana. Hemoglobins of vascular plants: from model plants to crops (and way back)
14:15 Miguel Alfonso-Lozano. Functional analysis of fatty acid elongase TaFAE1 gene from biofuel feedstock Thlaspi arvense reveals differences in seed-oil biosynthesis among Brassicaceae
14:30 Ernesto Igartua. Diversification of cultivated barley and selection footprints in the landraces of the Iberian Peninsula
14:45 Aurora Díaz. Molecular passport of a new Zea weed emerged in European maize fields
15:00 Thomas Girin. From models to crops: using Brachypodium toward an improvement of Nitrogen Use Efficiency in cereals

15:15 Coffee break

15:45 Poster session: odd posters present

Session: Closing keynote address

17:00 John Vogel. More, more, more, the genus Brachypodium as a sequence-enabled functional genomics model
17:30 Closing address
18:00 Social events

SATURDAY 29 JUNE 2019

Postconference field trips

7:00-20:00 Ordesa National Park
7:00-20:00 Rio Vero Canyon
WEDNESDAY 26 JUNE 2019 17:00-17:30

» Session S1: Natural diversity and evolution

P01  Multiple founder events explain the genetic diversity and structure of the model allopolyplpoid grass Brachypodium hybridum in the Iberian Peninsula hotspot.

P02  Exhaustive cytogenetic search within perennial Mediterranean and Eurasian Brachypodium taxa untapped new cytotypes and potential new species.

P03  Genomics and phylogeography of Brachypodium sylvaticum in western Eurasia.
M.A. Decena, A. Diaz-Pérez, P. Catalan, E. Perez-Collazos.

P04  A RADseq phylogeography of the model circum-Mediterranean grass Brachypodium stacei.

P05  Underscoring fungal endophytes of temperate Brachypodium and Loliinae grasses through NGS techniques: genomic diversity and host distribution.
M. F. Moreno, J. Hackel, M.A. Decena, P. Catalan.

P06  Phylogenetic reconstruction of Brachypodium using genome skimming data.

» Session S2: Comparative genomics and transcriptomics

P07  The SNF2 family of chromatin remodelers is conserved in Brachypodium distachyon and involved in the response to combinatorial abiotic stresses.
C. Barrero-Sicilia, M. Mellado, J. Engelhorn, C. Kroner, S. Farrona.

P08  Optimisation of an Agrobacterium-delivered CRISPR/Cas9 system for targeted mutagenesis in Brachypodium species.

» Session S3: Development and growth

P09  Biosynthesis of Brassinosteroids in Brachypodium distachyon.

P38  Thermocycles are the prevailing cue in determining Brachypodium distachyon diurnal gene regulation.
THURSDAY 27 JUNE 2019 13:30-14:00

» Session S3: Development and growth

P10 Optimizing Brachypodium growth with light-emitting diodes.

P11 Comparative analysis of Brachypodium distachyon anatomical features with Kazakhstani wheat varieties upon infection with brown leaf rust.
N. Omirbekova, A. Akhmetova, Z. Zhunusbayeva, A. Zhussupova, D. Mynbaeva.

P12 Using Brachypodium as a Model to Study Key Genes Regulating Reproductive Development in Temperate Grasses.
S. Saada, S. Drea,

P13 SVP-like genes are responsive to vernalisation and ambient temperature in Brachypodium distachyon.
A. Kennedy, M. Li, K. Geuten.

P14 The conservation of the cell-type-specific communication during lateral root formation from Arabidopsis in Brachypodium distachyon.
C. De Jesus Vieira Teixeira, D. Stöckle, J. E.M. Vermeer.

P15 Contrasting developmental plasticity in response to nitrate availability in two Brachypodium distachyon accessions.
S. Smith, D. Garvin, O. Leyser.

P16 Role of the NBCL genes in Brachypodium distachyon development.

P17 The Sowing of Brachypodium retusum in quarries restoration.
M. Jorba

» Session S4: Tolerance and adaptation to abiotic stresses

P18 Comparative structural analysis of the drought responsive dehydrin and aquaporin gene families in Brachypodium and close grasses.
FRIDAY 28 JUNE 2019 15:45-17:00

» Session S4: Tolerance and adaptation to abiotic stresses

P20 Trials to Develop the Brachypodium Resources in RIKEN BRC.

P21 Whole plant phenotyping and molecular identification of Zn transporters during Zn deficiency and excess in the monocotyledon plant model Brachypodium distachyon at two developmental stages. 

» Session S5: Regulatory elements, networks and epigenomics

P22 GRASS NAC REPRESSOR OF FLOWERING is a transcriptional repressor that forms a negative feedback loop with SWAM1 to control secondary wall thickening in Brachypodium distachyon.

P23 Progress in the Recognition Process Between Chitosan and Brachypodium Root Tissue
R. Cazalis.

P24 Impact of intra-specific TE variations on local epigenetic states and gene expression.
M. Wyler.

P25 Regulation of flowering time in Brachypodium distachyon.

» Session S6: Polyploidy and perenniality

P26 The Brachypodium distachyon species-complex as a model for dissecting the role of allopolyploidy in plant adaptation.
F. Corke, C. Nibau, L. Mur, A. Gladala-Kostarz, R. Hasterok, J. Doonan, P. Catalan, A. Manzaneda.

» Session S7: Ecology and environment

P27 Mycobiome diversity of Brachypodium rupestrae from high and low diverse grasslands.

P28 Metabolomic characterisation of Turkish soils as potential drivers of Brachypodium distachyon genotype diversity.

P29 Characterization of Brachypodium varieties as tree cover crops in Mediterranean conditions.
J. A. Gomez, M. P. Hernández, M.A. Soriano.

P30 Genetic, epigenetic and metabolomic differentiation of Turkish Brachypodium distachyon accessions into two geographically distinct populations.
FRIDAY 28 JUNE 2019 15:45-17:00

Session S8: Adaptation to abiotic and biotic constrains

P31  Circadian clock genes under drought stress in Brachypodium distachyon.  
M. Gombos, Z. Zombori, N. Hapek, É. Kiss, J. Györgyey.

P32  P. koreensis: A plant growth-promoting bacterium for Brachypodium distachyon growing with limited nitrogen.  
S. Sanow, B. Arsova, F. Demir, W. Kuang, P. Huesgen, M. Watt.

P33  Infrared spectromicroscopy of live Brachypodium root hair and cap cells to discover specialized environmental monitoring.  

P34  Greater N capture by Brachypodium roots promoted by beneficial bacteria: A whole plant phenotyping approach advancing EcoFabs with non-invasive imaging and dynamic analyses.  

P35  Characterization of a nitrate high-affinity transport system in Brachypodium distachyon.  

P36  Using Brachypodium as a tool for screening resistance against wheat root diseases.  
M. Santos, L. González-Penadés, P. Nicholson.

P37  Modifying Brachypodium distachyon resistance to Fusarium Head Blight and Fusarium Root Rot with Plant Hormones.  