

Program

Wednesday 11th May 2016

- 17:00-20:00 Registration and poster set-up (Hotel Lone, Conference centre)
20:00-22:00 Welcome reception (Hotel Lone)

Thursday 12th May 2016

- From 8:00 Registration (Conference centre)
8:30-9:00 Welcome addresses and organizational information

Session 1: Polyploidy in deep time (long-term consequences of polyploidy)

Chairperson: Aleš Kovarik

- 9:00-9:30 **Jonathan F. Wendel:** The wondrous cycles of polyploidy in plants
9:30-10:00 **M. Eric Schranz:** Ancient angiosperm MADS-Box transcription factor duplications revealed by Synteny-Network (SynNet) phylogenomic analysis
10:00-10:30 Coffee break
10:30-10:50 **Dirk Albach:** Is genome downsizing correlated with diversification of polyploid lineages?
10:50-11:10 **Alexandre Pelé:** The poor lonesome *Brassica napus* A subgenome may not survive without its mate
11:10-11:30 **Hanna Weiss-Schneeweiss:** More than meets the eye: contrasting evolutionary trajectories in polyploids of the *Prospero autumnale* complex (Hyacinthaceae)
11:30-11:50 **Blaine Marchant:** How polyploidy, transposable elements, and life history traits shape fern genome evolution
11:50-12:05 **Itay Mayrose:** *PloiDB*: a phylogenetic framework for investigating the evolutionary consequences of polyploidy
12:05-12:20 **Armel Salmon:** How to detect duplicated sequences within highly polyploid species without any reference? An introduction to the use of the Pyro- and Illu-haplotyper pipelines for *Spartina* genomics
12:20-12:35 **Sarah Marburger:** Causes of genome size expansion in neotropical catfish – unravelling the evolutionary history of the Corydoradinae
12:45-14:00 Lunch break

Session 1: Polyploidy in deep time (long-term consequences of polyploidy)

Session 2: Polyploidy at shallower time-scales (immediate responses to polyploidy)

Chairperson: Andrew Leitch

- 14:00-14:30 **Pamela S. Soltis and Douglas E. Soltis:** Polyploidy and evolutionary novelty across microevolutionary and macroevolutionary timescales
14:30-15:00 **Malika Ainouche:** Genome merger as evolutionary springboard: Insights from recurrent hybridization and polyploidy in *Spartina*
15:00-15:30 Coffee break

Session 1: Polyploidy in deep time (long-term consequences of polyploidy)
Session 2: Polyploidy at shallower time-scales (immediate responses to polyploidy)
Chairperson: Pamela Soltis

- 15:30-15:45 *Yves Van de Peer*: Of dups and dinos: evolution at the K/Pg boundary
15:45-16:05 *Keith Adams*: Reshaped patterns of alternative splicing after allopolyploidy in *Brassica napus*
16:05-16:25 *Natasha Glover*: Homoeologs: What are they? How to infer them? What are they useful for?
16:25-16:40 *James J Clarkson*: Diploidisation through time: comparing neopolyploids and established polyploids
16:40-16:55 *Annaliese S. Mason*: Multi-genome meiosis in synthetic *Brassica* hybrids and polyploids
16:55-17:10 *Antoine Fort*: Maternal parent hypermethylation overcomes inter-ploidy and inter-species F1 seed abortion blocks in *Arabidopsis thaliana*
17:10-17:25 *Mischa A. Olson*: Perturbations of meiotic recombination in neopolyploid maize
17:30-18:30 **Poster sessions 1 and 2** (PS1-1/PS1-25; PS2-1/PS2-19)

Friday 13th May 2016

Session 1: Polyploidy in deep time (long-term consequences of polyploidy)
Session 2: Polyploidy at shallower time-scales (immediate responses to polyploidy)
Chairperson: Ovidiu Paun

- 9:00-9:25 *Aleš Kovarik*: Epigenetic impacts of recent allopolyploidy on ribosomal RNA genes in *Tragopogon mirus* and its interpopulation hybrids
9:25-9:45 *Terezie Mandáková*: Multiple patterns of genome evolution in the Brassicaceae: a lesson from the polyploid-rich genus *Cardamine*
9:45-10:00 *Elvira Hörandl*: The evolution of apomixis in angiosperms: a consequence of hybridity, polyploidy, or of environmental influence?
10:00-10:30 Coffee break

Session 1: Polyploidy in deep time (long-term consequences of polyploidy)
Session 2: Polyploidy at shallower time-scales (immediate responses to polyploidy)
Chairperson: Hanna Weiss-Schneeweiss

- 10:30-10:50 *Mario Vallejo-Marín*: Interfertility and phenotype of independently originated populations of the neo-allopolyploid *Mimulus peregrinus* (Phrymaceae)
10:50-11:05 *Thomas Wolfe*: The impact of allopolyploidy on gene expression in *Dactylorhiza*
11:05-11:20 *Clayton J. Visger*: Using synthetic spike-in RNAs to quantify expression level divergence following autopolyploidy
11:20-11:35 *Ovidiu Paun*: Molecular basis of adaptive diffusion after recurrent allopolyploidization in *Dactylorhiza*
11:35-11:50 *Boulos Chalhoub*: Deciphering the post-neolithic *Brassica napus* oilseed genome reveals the fascinating diversifying force of polyploidy
11:50-12:05 *David Kopecký*: Unexpected gene expression changes in newly developed *Festuca* × *Lolium* hybrids
12:05-12:20 *Jasna Pužina*: Triparental origin of triploid onion *Allium* × *cornutum* (Clementi ex Visiani, 1842) ($2n = 3x = 24$)
12:20-12:35 *Juraj Paule*: Polyploidy and range expansion in the South American genus *Fosterella* (Bromeliaceae)

12:45-14:00 Lunch break

Session 1: Polyploidy in deep time (long-term consequences of polyploidy)
Session 2: Polyploidy at shallower time-scales (immediate responses to polyploidy)
Chairperson: Maurine Neiman

- 14:00-14:30 **Rob Denton:** Polyploid *Ambystoma* salamanders at the interface of environment, genomics, and ecology
- 14:30-15:00 **Michael S. Barker:** Multiple whole genome duplications during the evolution of hexapods
- 15:00-15:30 **Anna Selmecki:** Polyploidy can drive rapid adaptation in yeast
- 16:00 Bus departure to Bale (Histria aromatica - autochthonous aromatic herb plantation) and Svetvinčenat (conference dinner)

Saturday 14th May 2016

Session 2: Polyploidy at shallower time-scales (immediate responses to polyploidy)
Session 3. Polyploidy in light of ecological genetics
Chairperson: Malika Ainouche

- 9:00-9:25 **Andrew R. Leitch:** Genome size and chromosomal ploidal level influence angiosperm species biomass under nitrogen and phosphorus limitation
- 9:25-9:45 **Kirsten Bomblies:** Adaptive evolution of meiosis in response to whole genome duplication and habitat
- 9:45-10:00 **Kentaro Shimizu:** Advantages and tradeoffs of “general purpose genotype”: zinc accumulation, cold response and genome-wide homeolog expression in the self-compatible allopolyploid *Arabidopsis kamchatica*
- 10:00-10:30 Coffee break

Session 3. Polyploidy in light of ecological genetics
Chairperson: Jonathan Wendel

- 10:30-10:50 **Petr Šmarda:** The worldwide distribution of polyploid plants
- 10:50-11:05 **Magdalena Holcová:** Adaptive evolution of meiosis in diploid and polyploid *Arabidopsis arenosa* across its native range
- 11:05-11:20 **Julie Ferreira de Carvalho:** Dead-end trajectory of young triploid apomicts: Can transposable elements improve their adaptive potential?
- 11:20-11:35 **Thomas Dejaco:** Diploidization without reduction of genome size in an Alpine jumping bristletail
- 11:35-11:50 **Peter Schönswetter:** Evolutionary patterns, contact zones and ecological segregation in an alpine autopolyploid complex
- 11:50-12:05 **Jun Sese:** Genome-wide statistical detection of hyper-biased homeologs in allopolyploid and their changes after hybridization
- 12:05-12:20 **Warren Albertin:** Hybridization in yeast is associated with phenotypic novelty for life-history, metabolic and proteomic traits
- 12:20-12:35 **Jeannette Whitton:** Disentangling the causes of differences in distribution of diploid sexual and autopolyploid apomictic Easter daisies (*Townsendia hookeri*: Asteraceae)
- 12:45-14:00 Lunch break

Session 2: Polyploidy at shallower time-scales (immediate responses to polyploidy)

Session 3. Polyploidy in light of ecological genetics

Chairperson: Jasna Puizina

- 14:00-14:30 **Maurine Neiman**: Sex, phosphorus & polyploidy: Can nutrient costs of nucleic acids contribute to ploidy and sex polymorphism in nature?
- 14:30-15:00 **Levi Yant**: Borrowed alleles and convergence: serpentine adaptation in the face of inter- and intraspecific gene flow
- 15:00-15:30 Coffee break
- 15:30-15:45 **Laura Bankers**: Influences of ploidy level and reproductive mode on patterns of adaptive molecular evolution in a New Zealand freshwater snail
- 15:45-16:00 **Kyle McElroy**: Evaluating the dynamics of transposable element evolution in non-hybrid polyploids
- 16:00-16:15 **Veit Herklotz**: The fate of ribosomal RNA genes in spontaneous dogrose hybrids (*Rosa* L. sect. *Caninae* (DC.))
- 16:15-16:30 **Helene Rousseau**: Polyploidy and phenotypic novelty: Phylogenetic context of DMSP (dimethylsulfoniopropionate) biosynthesis in *Spartina* (Poaceae, Chloridoideae)
- 16:30-16:45 **Leen Leus**: Are tetraploid roses better resistant to stress compared to diploids?
- 17:00-18:00 **Poster session 3** (PS3-1/PS3-35)
- 18:00 Poster awards and closing ceremony