



22nd Meeting, Graz 2018

Austrian Society of Plant Biology

PROGRAM

Thursday, April 05, 2018

- 11:00 **Start of registration**
- 13:50 – 14:00 **Opening ceremony**
Ilse Kranner, ATSPB president
Maria Müller, head of organising committee
- 14:00 – 15:40 **Talks, Session I: Abiotic Stress**
(Chair: **Ingeborg Lang**)
- 14:00 – 14:20 **Markus Teige**
Chloroplast Ca²⁺- signaling in development and stress response
- 14:20 – 14:40 **Jakob Weismann**
The role of vacuolar invertase in shaping photosynthetic stress response of *Arabidopsis thaliana*
- 14:40 – 15:00 **Maria Köhler**
Analysis of the role of galactinol in abiotic stress responses
- 15:00 – 15:20 **Ján Kováč**
Deposition of lignin and suberin into root tip as a reaction to copper exposure and stress
- 15:20 – 15:40 **Marketa Absolonova**
Surface pH changes and salinity response of *Chara australis*
- 15:40 – 16:10 **Coffee Break**
- 16:10 – 17:30 **Talks, Session II: Plant Molecular Biology**
(Chair: **Raimund Tenhaken**)
- 16:10 – 16:30 **Tomáš Werner**
The role of the endoplasmic reticulum in regulating cytokinin responses
- 16:30 – 16:50 **Andreas Bachmair**
Protein modification and plant responses to the environment
- 16:50 – 17:10 **Julia Richter**
The cell wall as platform for heavy metal sensing
- 17:10 – 17:30 **Doris Lucyshyn**
The role of O-glycosylation in plant developmental transitions
- 17:30 – 19:00 **Poster Session**
and Beer Degustation (presented by **René Rehorska** and **Julia Jamnig**)

- 09:00 – 10:20** **Talks, Session III: Plant Physiology I**
(Chair: **Tomáš Werner**)
- 09:00 – 09:20 **Raimund Tenhaken**
Arabinokinase, a unique fusion protein involved in arabinose toxicity, is challenging the cellular energy homeostasis kinases
- 09:20 – 09:40 **Klaus Herburger**
Significance of hetero-trans- β -glucanase in cell wall metabolism of *Equisetum* and transgenic *Arabidopsis*
- 09:40 – 10:00 **Anna Gasperl**
PGI and 1-FEH activities, a key combination of physiological markers from primary carbohydrate and fructan metabolism to breed high sugar grasses
- 10:00 – 10:20 **Lisa Fürtauer**
Quantifying the subcellular plant metabolome
- 10:20 – 10:50** **Coffee Break**
- 10:50 – 12:10** **Talks, Session IV: Plant Physiology II**
(Chair: **Ilse Kranner**)
- 10:50 – 11:10 **Gábor Kocsy**
Control of photosynthesis, glutathione and amino acid metabolism by light quantity and quality in wheat
- 11:10 – 11:30 **Verena Ibl**
Bridging proteomics, RT-qPCR and microscopy to unravel the spatio-temporal expression changes of hordoinolines across development-dependent changes in barley grains
- 11:30 – 11:50 **Michal Goga**
Localization and identification of calcium oxalate forms in lichens
- 11:50 – 12:10 **Wolfram Weckwerth**
Stress signaling networks in algae and plants
- 12:10 – 14:00** **Poster Session and Lunch**
- 14:00 – 15:40** **Talks, Session V: Cell Biology**
(Chair: **Ursula Lütz-Meindl**)
- 14:00 – 14:20 **Philip Steiner**
Ionic stress induces fusion of mitochondria to 3-D networks: an electron tomography study
- 14:20 – 14:40 **Marieluise Weidinger**
Structure and physiology of giant chloroplasts in the deep shade adapted lycopod *Selaginella erythropus*
- 14:40 – 15:00 **Dominik Harant**
The cortical endoplasmic reticulum before and after plasmolysis in *Physcomitrella patens*
- 15:00 – 15:30** **Coffee Break**

- 15:30 – 17:00 **Guided Tours through the Museum**
- 17:30 – 18:30 **ATSPB General Assembly**
- 19:00 **Conference Dinner at Krebsenkeller**

Saturday, April 07, 2018

- 09:00 – 10:20 Talks, Session VI: Plant Microbe Interaction**
(Chair: **Andreja Urbanek**)
- 09:00 – 09:20 **Armin Djamei**
Dissecting the effectome of the maize pathogen *Ustilago maydis*
- 09:20 – 09:40 **Davide Gerna**
Selective modification of the wheat seed microbiota affects hydrogen peroxide production in wheat seedlings
- 09:40 – 10:00 **Erwann Arc**
Interactive effects of biotic and abiotic stress factors during seed production on *Helianthus annuus* seed quality
- 10:00 – 10:20 **Alexandra Jammer**
Marker-assisted selection for Tomato Mosaic Virus resistance in local varieties of *Solanum lycopersicum* L.
- 10:20 – 10:50 Coffee Break**
- 10:50 – 12:10 Talks, Session VII: Ecophysiology**
(Chair: **Alexandra Jammer**)
- 10:50 – 11:10 **Gerhard Wieser**
Long-term trends in leaf level gas exchange mirror tree-ring derived intrinsic water-use efficiency of *Pinus cembra* at treeline during the last century
- 11:10 – 11:30 **Andrea Ganthaler**
Complex patterns in xylem hydraulics of subalpine dwarf shrubs
- 11:30 – 12:00 Meeting of the Awards Committee**
- 12:10 – 12:30 Awards Ceremony (Best Talk, Best Poster), Closing Remarks**
- 13:30 – ~18:00 Excursion**

List of Poster Presentations

(in alphabetical order)

- Poster 1 **Sebastian J. Antreich**
Lignification of endocarp cells during the development of the walnut fruit
- Poster 2 **Margret Eckhard**
A fast cryo-preservation technique of *Physcomitrella patens* for element analysis in the electron microscope
- Poster 3 **Reinmar S. Eggers**
In vivo and in vitro characterization of monolignol oxidoreductases from the berberine bridge enzyme-like protein family in *Arabidopsis thaliana*
- Poster 4 **Ilse Foissner**
Constitutive endocytosis in *Chara* internodal cells: comparison between plasma membrane dyes and fluid phase markers
- Poster 5 **Gábor Galiba**
Transcript and phytohormone analysis based prediction of genotype-specific biological processes in cold-treated wheat
- Poster 6 **Karina Eva Hauer**
Cellulases and pectic enzymes – the armoury of plant pathogen *Colletotrichum coccodes*?
- Poster 7 **Assiyeh Hamidipour**
Investigating enzyme activity in some *Pinguicula* species
- Poster 8 **Mihaela Jancar**
Plant pathogen interactions of *Fusarium ssp.* and *Armoracia rusticana* and possibilities for prevention
- Poster 9 **Ursula Ladinig**
Vegetative and reproductive performance along a climatic gradient does not explain GP in *Ranunculus kuepferi*
- Poster 10 **Stephan Manhalter**
Ni tolerance and its distinguished amelioration by chelating agents in *B. napus* cultivars
- Poster 11 **Margaréta Marcinčinová**
Calcium and iron content in biofilms of active travertine springs in Slovakia
- Poster 12 **Gilbert Neuner**
Deep supercooling of buds of *Alnus alnobetula*: surface impregnation with lipophilic substances allows innocuous growth of ice masses between leaf primordia
- Poster 13 **Gregor Pichler**
Phytohormone release by the optionally lichenized alga *Coccomyxa sp.*
- Poster 14 **Wolfgang Punz**
Cold air talus sites in the Eastern Alps
- Poster 15 **Kerstin Reibenschuh**
Can sulfur fertilization improve the defense reaction of the Styrian oil pumpkin after *Didymella bryoniae* treatment?
- Poster 16 **Thomas Roach**
Distinguishing the mechanistic contributions to NPQ in *Chlamydomonas reinhardtii*
- Poster 17 **Valentina Romagna**
Heavy metal uptake via endocytosis during vesicle turnover in growing root hairs of *Triticum aestivum*

- Poster 18 **Dajana Ručová**
Does usnic acid influence ploidy levels in mosses?
- Poster 19 **Nadia Sasani**
Impact of drought stress on the cell wall design of larch trees
- Poster 20 **Sarah-Salome Sidra**
Yeast in bioremediation – experiments with *A. arenosa* on zinc contaminated soils
- Poster 21 **Matthias Stegner**
Testing viability of plant cells: can loss of turgor potential signalize cell death?
- Poster 22 **Gerhard Strauß**
Trichomes on flowers of *Lavandula angustifolia*
- Poster 23 **Lisa Marie Strobl**
Sensitivity loss of *Venturia inaequalis* against the plant protection product Delan WG and its effect on the germination behaviour of the conidia
- Poster 24 **Polona Sušnik**
Following mulberry (*Morus sp.*) footprints: Geographic distribution and diversity of leaf morphology of heritage trees in Slovenia
- Poster 25 **Teuschler Larissa**
Microscopic-analytical characterization of different sweet potato varieties (*Ipomoea batatas*)
- Poster 26 **Katrin Thiering**
The organization of some subcellular structures in the model moss *Physcomitrella patens*
- Poster 27 **Marina Toplak**
Uncovering the role of the single berberine bridge enzyme homolog of *Physcomitrella patens*
- Poster 28 **Tina Ugulin**
Morphometric analyses of phytoliths in different mulberry genotypes
- Poster 29 **Johanna Wagner**
Winter snow cover is essential for flower bud survival in high mountain plants
- Poster 30 **Angelika Waibel**
Reduced sensitivity of *Venturia inaequalis* against a multi-site fungicide tested in different apple orchards in Styria, Austria
- Poster 31 **Nannan Xiao**
Unravelling hierarchical microstructure and chemical changes of walnut shells