

# DCPS Day 2018

July 10<sup>th</sup>, 2018

**Venues** – Lecture Hall of Botanical Museum, Königin-Luise-Str. 6-8 & Plant Physiology, Königin-Luise-Str. 12-16

13.00-13:10	<b>Welcome and Opening</b> – Thomas Schmülling
	<b>Session 1 – Chair: Andras Bittner (PhD student representative)</b>
13:10-13:40	<b>Philipp Franken – Leibniz Institute of Vegetable and Ornamental Crops (IGZ)</b> Root-fungus interactions: Can we get from basic research to application?
13:40-13:55	<b>Dubán Canal Gallego – Structural and Functional Plant Diversity</b> Systematics and evolution of Philodendron Schott (Araceae): the diversification history of a species-rich neotropical genus dominated by epiphytes
13:55-14:10	<b>Manuel Frank – Molecular Developmental Biology of Plants</b> Root-derived <i>trans</i> -zeatin-type cytokinins protect plants against altered photoperiod stress
14:10-14:25	<b>Vivien Lortzing – Applied Zoology   Animal Ecology</b> Insect eggs as warning of future herbivory: How prior egg-deposition affects the transcriptome and metabolome of herbivore-damaged <i>Arabidopsis thaliana</i>
14:25-15:10	<b>Picture of Participants</b> <b>Coffee Break I</b>
	<b>Session 2 – Chair: Manuel Frank (PhD student representative)</b>
15:10-15:40	<b>Herrmann Broll – Bundesinstitut für Risikobewertung, Berlin</b> Transgenic plants in food and elsewhere - products, regulations, safety and new technologies
15:40-15:55	<b>Julia Gravendyck – Structural and Functional Biodiversity</b> Looking at the end-Triassic biotic crisis from a palynofloral perspective
15:55-16:10	<b>Kalyanikrishna – Epigenetics of Plants</b> Does epigenetic gene regulation play a role at the nuclear periphery in <i>Arabidopsis</i> ?
16:10-16:40	<b>Thomas Borsch – Botanical Garden &amp; Botanical Museum Berlin</b> Networking for biodiversity – integrating collections and knowledge at the Botanic

	Garden Berlin
16:40-17:00	<b>Coffee Break II</b>
	<b>Session 3 – Chair: N.N.</b>
17:00-17:30	<b>Sebastian Klie – targenomix GmbH, Potsdam</b> Systems biology approaches for mode-of-action elucidation for herbicidal molecules
17:30-17:45	<b>Florencia Sena – Molecular Genetics of Plants</b> The Arabidopsis potassium transporter NRT1.5 interacts with plasma membrane H <sup>+</sup> -ATPase AHA2
17:45-18:00	<b>Tobias Lortzing – Molecular Ecology</b> Nectar from plant wounds and it`s evolutionary potential
18:00	<b>Change of Venue: Plant Physiology</b>
18:00-19:00	<b>Poster Session</b>
19:00	<b>Barbecue</b>

# DCPS Day 2018 – Poster Session

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## No. Poster

### Epigenetics of Plants

- 1 Teresa Kowar, Pawel Mikulski, Daniel Schubert: *Cyanidioschyzon merolae*: A model to study chromatin silencing in a unicellular eukaryote?
- 2 Melissa Romisch, Kora Vyse, Ellen Zuther, Dirk Hinch, Daniel Schubert: Role of histone phosphorylation and variants in stress priming and memory
- 3 Inês Trindade, Constanze Schmidt, Caren Schulze, Daniel Schubert, Michael Sandmann: The floral meristem is partially reverted to vegetative growth in the *Arabidopsis thaliana myf1* mutant
- 4 Léa Faivre, Daniel Schubert: Cold stress and trainable genes: the role of histone and DNA methylation

### Molecular Developmental Biology of Plants

- 5 Sören Werner, Thomas Schmülling: Cytokinin regulates the juvenile-to-adult phase transition in *Arabidopsis*
- 6 Daniela Pezzetta, Stefanie Zintl, Jan Erik Leuendorf, Thomas Schmülling: Cytokinin negatively influences phytochrome-dependent seed germination in *Arabidopsis thaliana*
- 7 Jan Erik Leuendorf, Mhyeddeen Halawa, Thomas Schmülling: Linking the *Arabidopsis* response regulator proteins to the transcriptional network
- 8 Manuel Frank, Anne Cortleven, Thomas Schmülling: The role of cytokinin in the response to altered photoperiod stress
- 9 Anne Cortleven, Silvia Nitschke, Tim Iven, Ivo Feussner, Michel Havaux, Michael Riefler, Thomas Schmülling: Altered day-night rhythms cause photoperiod stress, a new form of abiotic stress revealing crosstalk between cytokinin, jasmonic acid and the circadian clock

### Molecular Ecology

- 10 Rainer E. H. Cramer, Tina Kasal-Slavik, Björn G. Wang, Michele Bandoly, Daniel Geuß, Sylvia J. Drok, Anke Steppuhn: Plant priming of anti-herbivore defences by insect oviposition

### Molecular Plant Genetics

- 11 Valentin Hammoudi, Reinhard Kunze: Role of long non-coding RNA (lncRNA) in response to DNA-damage stresses
- 12 Florencia Sena, Yue Zheng, Reinhard Kunze: The *Arabidopsis* potassium transporter NRT1.5 interacts with plasma membrane H<sup>+</sup>-ATPase AHA2

### **Plant Molecular and Cell Biology**

- 13 Georgeta Leonte, Tomáš Werner: Identification of novel plasmodesmata-associated proteins altering cytokinin responses in *Arabidopsis*

### **Plant Physiology**

- 14 Andras Bittner, Jörn van Buer, Tobias Lortzing, Anke Steppuhn, Margarete Baier: Comparing abiotic *cis*- and *trans*-priming in *Arabidopsis thaliana*
- 15 Jörn van Buer, Andras Bittner, Andreas Prescher, Alexander Erban, Joachim Kopka, Margarete Baier: How plants store and forget information on cold stress via the chloroplast antioxidant system
- 16 Andreas Prescher, Tobias Lortzing, Anke Steppuhn, Margarete Baier: Two AP2/ERF1-b transcription factors modulate the cold stress response
- 17 Aneth Sarmiento, Margarete Baier: First insights into chloroplast antioxidant response during drought stress in *Jatropha curcas*

### **Plant Stress Signalling**

- 18 Soyanni Holness, Lennart Wirthmüller: Role of DNA damage signaling in priming of plant defense
- 19 Raffaella De Masi, Lennart Wirthmüller: The salinity tolerance-conferring wheat protein SRO1 is not a canonical ADP-ribosyl-transferase
- 20 Sebastian Hosch, Lennart Wirthmüller: Hide-and-peek – The chase for ADP-ribosylated plant proteins

### **Structural and Functional Plant Diversity**

- 21 Lisa Dunst, Julien B. Bachelier: Flower development in *Silene acaulis* and its implication for floral sex expression and the evolution between unisexual and bisexual flowers in flowering plants

### **Systematic Botany and Geography of Plants**

- 22 Katja Reichel: Population genetic analyses of partially clonal plants – practice, predictions and paradigms

### **Applied Zoology / Animal Ecology**

- 23 Johanna Schott, Benjamin Fuchs, Christoph Böttcher, Vivien Firtzlaff, Simone Altmann, Monika Hilker: Priming of elm anti-herbivore defence
- 24 Luis R. Paniagua Voirol, Nina E. Fatouros, Paul R. Johnston, Monika Hilker: The role of the *Pieris brassicae* microbiome during a host plant shift

### **Biochemistry of Plants**

- 25 Sarah C. Lederer, P. Schulz, Tina Romeis: Does calcium influence the longevity of plants?

### **Biodiversity - Ecological Modelling**

- 26 Katharina Ziegler, India Mansour, Stefanie Maaß, Britta Tietjen, Florian Jeltsch: Spatial modelling of plant root distribution
- 27 Sebastian Fiedler, José Monteiro, Michaels P. Perring, Britta Tietjen: Resilient and multifunctional Mediterranean-type ecosystems: Improving restoration by trait-based simulation modelling
- 28 Jianshuang Wu, Minghua Song, Weiling Ma, Zhenxi Shen, Paolo Tarolli, Susanne Wurst, Peili Shi, Gregor Ratzmann, Yunfei Feng, Meng Li, Xiangtao Wang, Xianzhou Zhang, Britta Tietjen: Climate, soil nutrients, and plant diversity interact to drive the spatial patterns of plant and soil delta15N in the Tibetan grasslands

### **Botanisches Museum und Botanischer Garten**

- 29 Michael Diepenbroek, Katrin Böhnin-Gaese, Frank Oliver Glöckner, Anton Güntsch, Robert Huber, Birgitta König-Ries, Jens Nieschulze, Bernhard Seeger, Dagmar Triebel, Christian Wirth: German Federation for Biological Data (GFBio)
- 30 Robert Lücking: From 1 to 200 in a decade: Unrecognized species richness in a tropical basidiolichen
- 31 Robert Lücking: From letters, no voucher: hidden diversity in the dark matter fungi