

# DCPS Day 2019

June 20<sup>th</sup>, 2019

**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: Florencia Sena</b>
13:10-13:40	<b>Nico von Wiren – Physiology and Cell Biology, IPK Gatersleben</b> Impact of nutrient signals on the phytohormonal regulation of root architectural traits
13:40-13:55	<b>Katharina Bursch – Light Signaling Networks</b> Illuminating the karrikin signaling pathway in <i>Arabidopsis thaliana</i>
13:55-14:10	<b>Thomas Griebel – Plant Physiology</b> Circuitries of plant cross stress signalling: The plastid antioxidant system
14:10-14:25	<b>Grischa Brokamp – Systematic Botany and Plant Geography</b> Integrated biodiversity management in exemplar regions of Colombia
14:25-15:10	<b>Picture of Participants</b> <b>Coffee Break I</b>
	<b>Session 2 – Chair: Janik Hundacker</b>
15:10-15:40	<b>Michael Lenhard – Institute for Biochemistry and Biology, University of Potsdam</b> The molecular basis of heterostyly
15:40-15:55	<b>Norbert Bittner – Molecular Genetics of Plants</b> Priming of plants and insect eggs
15:55-16:10	<b>Arne Weinhold – Applied Zoology   Animal Ecology</b> Limits of host-microbe manipulations in plants
16:10-16:40	<b>Barbara Jäckel – Pflanzenschutzamt Berlin, Senatsverwaltung für Umwelt, Verkehr und Klimaschutz</b> Gesundes Stadtgrün - eine Herausforderung
16:40-17:00	<b>Coffee Break II</b>

	<b>Session 3 – Chair: Astrid de Mestier du Bourg</b>
17:00-17:30	<b>Gudrun Kadereit – Biodiversity and Evolution of Plants, University of Mainz</b> Diversity of C4 photosynthesis - an example of multiple convergent evolution of a complex trait.
17:30-17:45	<b>Ireen Schwarz – Molecular Developmental Biology of Plants</b> Translational research: Cytokinin genes regulate inflorescence activity and yield in oilseed rape
17:45-18:00	<b>Teresa Kowar – Epigenetics of Plants</b> Understanding the role of the chromatin regulator PRC2 in a unicellular alga
18:00-18:15	<b>Raffaella De Masi – Plant Stress Signaling</b> Profiling an outsider: evolutionary conserved WWE domains and their elusive functions in plants
18:15	<b>Change of Venue: Plant Physiology</b>
18:15-later	<b>Poster Session</b>
19:00-later	<b>Barbecue</b>

## Poster Session at DCPS Day 2019

**1. Katharina Bursch, Elsa Niemann & Henrik Johansson**

The role of BBX proteins in karrikin signaling

**2. Anton Güntsch, Gabriele Dröge, Eva Häffner, Walter Berendsohn, Albert-Dieter Stevens & Thomas Borsch**

Der BGBM- eine integrierte Sammlungs- und Forschungseinrichtung

**3. Melissa Romich, Kora Vyse, Ellen Zuther, Dirk Hinchha & Daniel Schubert**

Role of histone phosphorylation and variants in stress priming and memory

**4. Léa Faivre & Daniel Schubert**

Cold stress memory and trainable genes: the role of histone and DNA methylation

**5. Claire Jourdain, Kalyanikrishna, Pawel Mikulski, Mareike Hohenstatt & Daniel Schubert**

Regulation of the nuclear size by the cohesin cofactor PDS5 in *Arabidopsis*

**6. Lisa Dunst & Julien Bachelier**

Sex differentiation in plants: Early and late abortion before and after meiosis leads to unisexuality in *Silene acaulis*

**7. Manuel Frank, Anne Cortleven, Ondrej Novak and Thomas Schmülling**

An antagonistic function of cytokinin and auxin in photoperiod stress

**8. Anne Cortleven, Walid Abuelsoud, Manuel Frank, Silvia Nitschke, Ivo Feussner & Thomas Schmülling**

Photoperiod stress induced by a longer light period causes a strong oxidative burst and reveals crosstalk between jasmonic acid, cytokinin and the circadian clock

**9. Walid Abuelsoud, Anne Cortleven, Manuel Frank and Thomas Schmülling**

Photoperiod stress induces a strong oxidative burst

**10. Thomas Schmülling, Eswar Ramireddy, Ireen Schwarz, Isabel Bartrina, Tomáš Werner, Erika Nehnevajova, Elisabeth Otto, Seyed A. Hosseini, Kai Eggert, Heike Gnad, Nicolaus von Wirén, Andrea Stolz, Maria Gerdemann-Knörck, Michael Riefler, Ondřej Novák, Miroslav Strnad, Hilde Nelissen, Dirk Inzé, Marie-Therese Scheirlinck, Ralf-Christian Schmidt, Tobias Brüggemann, Matthias Fladung**

Enhanced growth and organ formation in crop plants by targeted modulation of the cytokinin system

**11. Sören Werner, Isabel Bartrina & Thomas Schmülling**

Cytokinin regulates the juvenile-to-adult phase transition in *Arabidopsis thaliana*

**12. Sylvia Bolt, Stefanie Zintl, Ellen Zuther, Dirk K. Hinchha & Thomas Schmülling**

The *ERF102* to *ERF105* genes of *Arabidopsis thaliana* regulate root architecture and the response to cold stress

**13. Thomas Griebel, Alina Ebert, Hoang Hung Nguyen, Maximilian Gaiko, Georgios Padopoulos & Margarete Baier**

Cold priming memory reduces susceptibility to virulent pathogens and requires functional plastid peroxidases system in *Arabidopsis thaliana*

**14. Victoria Seiml-Buchinger, Andras Bittner & Margarete Baier**

Cold priming affects the chloroplast membrane-associated proteins in *Arabidopsis*

**15. Andras Bittner, Jörn van Buer, Andreas Prescher & Margarete Baier**

Short mild stress primes chloroplast stress signaling for several days in *Arabidopsis thaliana*

**16. Valentin Hammoudi, Carla Castro, Elisa Goldbecker, Maria Singer, Zhenxing Wang & Reinhard Kunze**

Is XlincR a new peptide involved in DNA-damage response?

**17. Florencia Sena, Yue Zheng, Navina Drechsler & Reinhard Kunze**

The potassium transporter NRT1.5 coordinates  $K^+$  and  $NO_3^-$ -homeostasis in *Arabidopsis thaliana*.

**18. Georgios Valsamakis & Vivien Lortzing**

PRIMING BY TIMING: The kinetics of plant anti-herbivore defense primed by insect egg deposition

**19. Sebastian Hosch & Lennart Wirthmüller**

Biochemistry of plant PARPs

**20. Katharina Ziegler & Bitta Tietjen**

Theoretical ecology - How models help to understand ecosystem processes

**21. Tobias Lortzing, Reinhard Kunze, Anke Steppuhn, Monika Hilker & Vivien Lortzing**

A comparative analysis of functional plant transcriptome responses to herbivore eggs and feeding in tobacco, *Arabidopsis*, nightshade and elm

**22. Rainer E.H. Cramer & Anke Steppuhn**

Fitness consequences of oviposition priming in *Nicotiana attenuata*

**23. Georgeta Leonte, Henriette Weber, Matthieu Bourdon & Tomáš Werner**

Identification of novel plasmodesmata-associated proteins altering cytokinin responses in *Arabidopsis*

**24. Sarah C. Lederer, Philipp Schulz & Tina Romeis**

Does calcium influence the longevity of plants?

**25. Bernadette Eichstädt, Anja Liese, Waltraud X. Schulze, K. R. Konrad & Tina Romeis**

Imaging calcium-dependent CDPK conformational change *in vitro* and *in planta* using a FRET-based approach

**26. Johanna Schott, Benjamin Fuchs, Christoph Böttcher, Vivien Firtzlaff, Simone Altmann & Monika Hilker**

Priming of elm anti-herbivore defence

**27. Jenny Engelmann & Tomáš Werner**

Identification and characterization of natural antisense transcripts at *CKX* loci in *Arabidopsis thaliana*