

MON

FEBRUARY 10th

16:00 - 16:10 Opening and welcome address
Christopher Grefen, Bochum

Session 1 **Molecular Physiology**

Chair Gabriel Schaaf, Bonn

16:10 - 16:30 The importance of barriers in a functional relationship
Tonni Grube Andersen (*MPI Köln*) ●

16:30 - 16:45 NUDIX Hydrolases Target Specific Inositol Pyrophosphates
and Regulate Phosphate and Iron Homeostasis, and the
Expression of Defense
Klea Lami (*University of Bonn*) ●

16:45 - 17:00 Endoplasmic reticulum-localized bivalent cation transporters:
crucial for plant development, fertility, and nutrition
Oriana Mariani (*University of Halle-Wittenberg*) ●

17:00 - 17:15 Regulation of the gravitropic set-point angle in lateral roots
by SHOOT GRAVITROPISM 9
Sophie Zoe Farkas (*University of Freiburg*) ●

17:15 - 17:30 Substrate Recognition in Auxin Transporters
Lukas Schulz (*TU München*) ●

17:30 - 18:50 Dinner



Keynote Lecture

19:00 - 20:00 Ground rules for flexible development in leaves
Dominique Bergman, Stanford University

Poster Session 1

20:00 Poster presentations (odd-numbered) & beverages
Rooms Euskirchen and Aula

TUE

FEBRUARY 11th

7:00 - 8:20 Breakfast

Session 2

Chair

Development

Martin Bayer, Tübingen

8:30 - 8:55 Molecular mechanisms of seed initiation in flowering plants
Duarte Figueiredo (*MPI Golm*)

8:55 - 9:15 Cell division in freshwater algae and land plants governed by a novel, conserved plant peptide hormone
Karina van der Linde (*University of Regensburg*) ●

9:15 - 9:30 Molecular basis of cellular dormancy in plants
Juan Carlos De la Concepcion (*GMI Wien*) ●

9:30 - 9:45 Strigolactones optimise plant water usage by modulating vessel formation
Kiara Kaeufer (*University of Heidelberg*) ●

9:45 - 10:00 Signaling cascades for zygote polarization in flowering plants
Alexa Maria Wangler (*University of Tübingen*) ●

10:15 - 10:30 Coffee break

Session 3

Chair

Cell Biology

Elke Barbez, Freiburg

10:30 - 10:55 Switch to final xylem maturation relies on a non-cell-autonomous peptide-dependent mechanism
Ora Hazek (*University of Münster*)

10:55 - 11:15 Cell polarity establishment and its restriction during pollen germination
Philipp Denninger (*TU München*) ●

11:15 - 11:30 A phospholipid bilayer module orchestrates GET pathway receptor dimerization to regulate root hair growth in *Arabidopsis*

Lei Zhang (University of Bochum) ●

11:30 - 11:45 Genetic control of the barley root angle

Gwendolyn K. Kirschner (James Hutton Institute, Dundee) ●

11:45 - 12:00 GEF3 dynamics determine the size of the polar domain during root hair initiation

Daša Wernerová (University of Düsseldorf) ●

12:00 - 13:20 Lunch

Session 4 Signal Transduction

Chair

David Scheuring, Kaiserslautern

13:30 - 13:55 Memorizing cold stress in *Arabidopsis*

Margarete Baier (FU Berlin)

13:55 - 14:15 Transient efflux inhibition improves plant regeneration by natural auxins

Omid Karami (University of Potsdam) ●

14:15 - 14:30 Homolog-aware binding analysis of *Brassica napus* transcription factors involved in seed development

Anja Meierhenrich (University of Bielefeld) ●

14:30 - 14:45 From membrane nanodomains to polar domains: the regulation of Rho GTPase membrane dynamics and their impact on signaling output

Clara Paola Igisch (University of Lyon) ●

14:45 - 15:00 Cysteine-rich receptor-like kinase 7 functions as a receptor for wall teichoic acid, a MAMP specific for gram-positive bacteria with non-canonical activities in *Arabidopsis thaliana*

Leon Pierdzig (University of Göttingen) ●

15:00 - 15:45 Coffee break & Group picture

Session 5 **Tools & Resources**

Chair **Tobias Jores, Düsseldorf**

15:45 - 16:10 The world of plant science publishing

Katherine Denby (*The Plant Journal*)

16:10 - 16:35 High-throughput platforms as powerful tools for industrial herbicide research

Josephine Mittendorf (*Bayer*)

16:35 - 17:05 DataPLANT, MAdLand, and Galaxy:
Tools and Resources for Plant Research

Deepti Varshney & Saskia Hiltemann (*MAdLand Consortium*)

18:00 - 19:30 Dinner

Poster Session 2

19:30 Poster presentations (even-numbered) & beverages

Rooms Euskirchen and Aula

WED

FEBRUARY 12th

7:00 - 8:20 Breakfast

Session 6 **Omics & Evolution**

Chair **Andrea Bräutigam, Bielefeld**

8:30 - 8:50 A transcriptional module primes plant root hairs for rhizobium infection

Manuel Frank (*Aarhus University*) •

8:50 - 9:10 A first-generation pan-cistrome in plants as a new tool transform crop improvement

Thomas Hartwig (*MPI Köln*) •

9:10 - 9:25 From aqua to terra: Evolutionary adaptations of division plane control in plants

Pradeep Dahiya (*University of Marburg*) ●

9:25 - 9:40 Telescripting in plants: A novel mechanism ensuring complete mRNA transcription

Luise Nagel (*University of Halle-Wittenberg*) ●

9:40 - 9:55 The *Eschscholzia* genome provides insights into evolutionary dynamics across gene families

Le Han Rössner (*University of Bayreuth*) ●

10:00 - 10:30 Coffee break

Session 7 **Abiotic Interactions**

Chair

Deborah Gasperini, Halle

10:30 - 10:50 Cytosolic fructose – an underestimated player in the regulation of the sucrose cycle?

Lisa Fürtauer (*University of Aachen*) ●

10:50 - 11:10 Upstream open reading frames - another feature in temperature-controlled gene expression

Martin Balcerowicz (*University of Dundee*) ●

11:10 - 11:30 AFC kinases function as thermosensors that regulate warm temperature-responsive growth in *Arabidopsis*

Daniel Maag (*University of Würzburg*) ●

11:30 - 11:45 Connecting dots: Actin-binding proteins as rapid integrators of stress in developmental pathways

Tomás María Tessi (*University of Heidelberg*) ●

11:45 - 12:00 Unraveling the link between rain and flooding-induced hypoxia stress acclimation in plants

Rim Chaudhury (*University of Freiburg*) ●

12:00 - 13:20 Lunch

Session 8

Organelles

Chair

Markus Schwarzländer, Münster

- 13:30- 13:55 The complete structure of Photosystem I and its plasticity in higher order assemblies
Alexey Amunts (*MPI Dortmund*)
- 13:55 - 14:10 Understanding the function of RAF1 during Rubisco assembly in *Chlamydomonas*
Lisa Desiree Westrich (*University of Paris*) ●
- 14:10 - 14:25 Networked proteins redundantly interact with VAP27 and RABG3 to regulate membrane tethering at the vacuole and beyond
Sabrina Kaiser (*TU Kaiserslautern*) ●
- 14:25 - 14:40 STIC2 selectively binds ribosome-nascent chain complexes in the cotranslational sorting of *Arabidopsis* thylakoid proteins
Lena Osterhoff (*University of Bochum*) ●
- 14:40 - 14:55 LEA proteins support mitochondrial plasticity during early germination
Dennis Brandt (*University of Münster*) ●

14:55

SciComm Award Presentation

15:15 - 15:45 Coffee break - hand in red dot award voting cards

16:00 - 17:30

Indoor Football

(PhD students + Postdocs) vs. (Junior + Senior PIs)

Reinhold-von-Sengbusch Lecture

18:00 - 19:00 Pattern recognition in plant immunity - evolution and function
Thorsten Nürnberger, Tübingen

19:00 - 21:00 Conference dinner

21:00 Party

THU **FEBRUARY 13th**

7:30 - 8:50 Breakfast

Session 9 **Biotic Interactions**

Chair

Isabel Saur, Köln

9:00 - 9:25 Molecular mechanisms of plant - parasitic plant interactions
Markus Albert (*University of Erlangen*)

9:25 - 9:45 A membrane-anchored papain-like cysteine protease inhibitor from *Pseudomonas* promotes root colonisation
Johana C. Misas Villamil (*University of Köln*) ●

9:45 - 10:00 Mucoromycotina 'Fine Root Endophytes' - a new window into the evolution of mycorrhizal symbioses
Alan Wanke (*University of Cambridge*) ●

10:00 - 10:15 Spatially resolved immune responses of *Arabidopsis thaliana* to colonization by *Fusarium oxysporum*
Marc Somssich (*MPI Köln*) ●

10:15 - 10:30 The soil-borne fungus *Verticillium dahliae* differentially employs molecular tools to establish interactions with phylogenetically distant terrestrial microalgae
Hanna Rövenich (*University of Köln*) ●

10:30 - 11:00 Coffee break,
hand in Plant Journal (●) & Agrisera (●) award voting cards

Reinhold-von-Sengbusch Poster and Talk Awards

11:00 - 11:20 presented by the von Sengbusch family
Short presentation of the winning posters

The Plant Journal & Agrisera Talk Awards

11:20 - 11:30 presented by TPJ Editor-in-chief Katherine Denby, University of York
and Joanna Porankiewicz-Asplund, Agrisera

Farewell Lecture

11:30 - 12:15 What happens in the dark? Light signaling in the control of
plant growth and development
Ute Höcker, Köln

Closing remarks

12:15 - 12:25 Hans-Henning Kunz, München

12:30 Small lunch and departure
