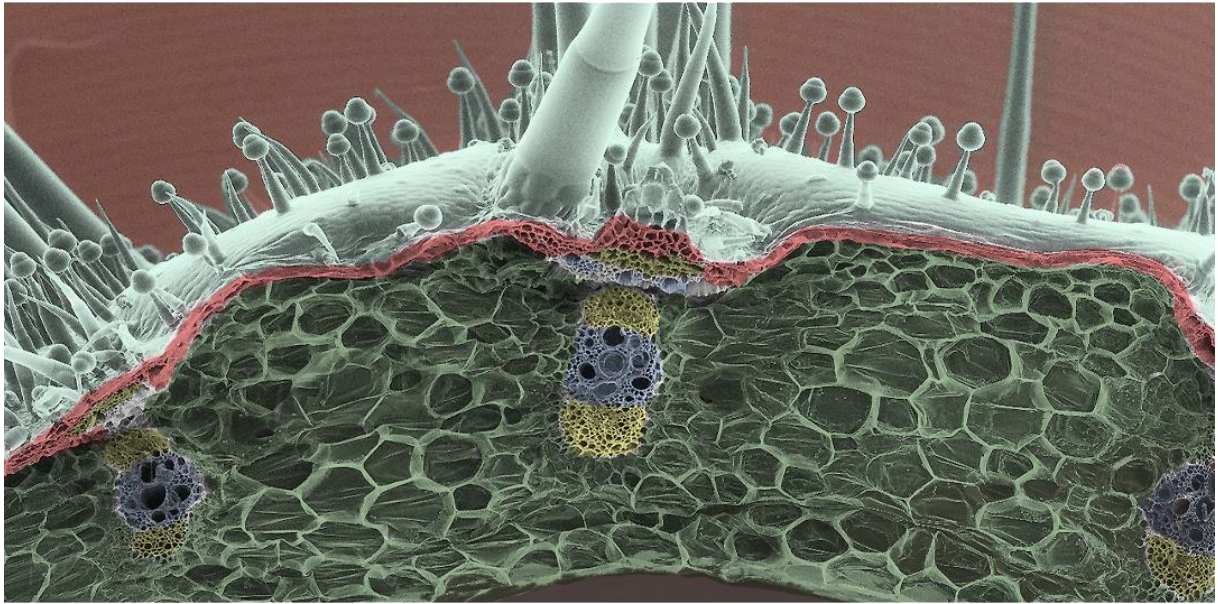


## **Provisional Program**



**Sixth international conference on Plant Vascular Biology  
2022**

**July, 17<sup>th</sup> – 21<sup>st</sup>, 2022**

**Harnack House, Ihnestrasse 16-20, 14195 Berlin, Germany**

### **Local Organizing Committee**

Friedrich Kragler, MPI-MPP, Golm, Germany

Julia Kehr, University Hamburg, Germany

Rainer Hedrich, University Würzburg, Germany

Uwe Sonnewald, FAU, Erlangen, Germany

### **International Advisory Board**

Yong-Ling Ruan, Newcastle, Australia

Yrjo Helariutta, Cambridge, UK

Christine Beveridge, Australia

Michael Knoblauch, WSU, USA

Salome Prat, Barcelona, Spain

Sylvie Dinant, INRA Centre de Versailles-Grignon, France

Mechthild Tegeder, WSU, USA

Kaare Jensen, Copenhagen, Denmark

David Braun, USA

Tim Brodribb, Australia

Missy Holbrook, USA

Gertrud Lohaus, Germany

Yi-Fang Tsay, Academia Sinica, Taiwan

Koh Aoki, Japan

Xiangdong Fu, China

**Plant Vascular BIOLOGY 2022**  
**PROGRAM SCHEDULE**

**Sunday, July 17<sup>th</sup>**

Participant's arrival, registration, Poster set-up (all posters will be on display throughout the conference)

Welcome Reception & Evening Lecture by **William J. Lucas**

**Monday, July 18<sup>th</sup>**

**Session I: Vascular Transport - Sugars**

Chairperson:

- |                          |   |
|--------------------------|---|
| 09:00-09:45              | Keynote Lecture <b>Michael Knoblauch</b> "How Sieve Elements work"                              |
| 09:45-10:10              | Lecture <b>Ekkehard Neuhaus</b> "Dynamic changes of intracellular sugar transport under stress" |
| 10:00-10:25              | Short Talk (N.N.)   |
| 10:25-10:40              | Short Talk (N.N.)   |
| 10:40-11:00 Coffee Break |   |

**Session II: Vascular Transport – More than sugars**

Chairperson:

- |             |   |
|-------------|---|
| 11:00-11:25 | Lecture <b>Christine Beveridge</b> "Overlapping pathways of sugars and hormones"                    |
| 11:25-11:50 | Lecture <b>Salome Prat</b> "Vascular-related gene expression during early potato tuber development" |
| 11:50-12:05 | Short Talk (N.N.)   |
| 12:05-12:20 | Short Talk (N.N.)   |

13:00-14:00 Lunch

### **Session III: Vascular Transport – Harmonizing C and N-allocation**

Chairperson:

- 14:00-14:25      Lecture **Mechthild Tegeder**, “Altering assimilate partitioning to improve seed yield and quality”
- 14:25-14:50.    Lecture **Yi-Fang Tsay** “Phloem and xylem transport of nitrate”
- 14:50-15:15    Lecture **Xiangdong Fu** “The coordinated regulation of plant architecture and nitrogen metabolism for sustainable agriculture”
- 15:15-15:30    Short Talk (N.N.)

15:35-16:00 Coffee break

### **Session IV: Vascular Transport – When altitude matters**

Chairperson:

- 16:00-16:25    Lecture **Andrew Groover** “Regulation of vessel traits impacting drought resistance in trees”
- 16:25-16:50    Lecture **Ari Pekka** “Cambial development: at the crossroads of signaling“
- 16:50-17:15    Lecture **Tim Brodribb** “Vascular catastrophes, do they kill leaves”
- 17:15-17:30    Short Talk **Michele Holbrook** “Contagion! How does the xylem resist invasion and spread?”
- 17:30-17:45    Short Talk (N.N.)
- 17:45-18:00    Spotlight Talks (three presentations, 5 minutes each)

18:30-20:00 Dinner

20:00-21:30 Poster Session

**Tuesday, July 19<sup>th</sup>**

## **Session V: (When) microbes gain access**

Chairperson:

- 09:00-09:45 Keynote Lecture **Giles Oldroyd** "Improving sustainable productivity through microbial associations"
- 09:45-10:10 Lecture **Katharina Markmann** "Systemic control of symbiotic competence through mobile miRNAs"
- 10:00-10:25 Short Talk (N.N.)
- 10:25-10:40 Short Talk (N.N.)
- 10:40-11:00 Coffee Break

## **Session IV: Vascular differentiation is key**

Chairperson:

- 11:00-11:25 Lecture **Yrjo Helariutta** "Towards morphogenesis and functionality of phloem"
- 11:25-11:50 Lecture **Laura Ragni** "Coordination, Regulation and Specificity of Lateral Meristems"
- 11:50-12:05 Short Talk (N.N.)
- 12:05-12:20 Short Talk (N.N.)
- 13:00-14:00 Lunch

## **Session VII: Interspecific plant-plant connections**

Chairperson:

- 14:00-14:25 Lecture **Satoko Yoshida** "Vascular hijacking by parasitic plants"
- 14:25-14:50 Lecture **Markus Albert** "Host Resistance mechanisms in plant-plant interactions"
- 14:50-15:15 Lecture **Koh Aoki** "Trans-species symplastic communication in the complex of parasitic and host plants"

”

15:15-15:30 Short Talk (Steven Runo)

15:30-15:45 Short Talk (N.N.)

15:45-16:00 Coffee break

### **Session VIII: Breaking new grounds**

Chairperson:

16:00-16:45 Keynote lecture **Howard A. Stone** "Understanding Phloem Micro Fluidics "

16:45-17:10 Lecture (N.N.)

17:10-17:25 Short Talk (N.N.)

17:25-17:40 Short Talk (N.N.)

17:40-18:00 Spotlight Talks (three presentations, 5 minutes each)

18:30-20:00 Dinner

20:00-21:30 Poster Session

**Wednesday, July 20<sup>th</sup>**

### **Session IX: Bill's playlist**

Chairperson: **Bill Lucas**

09:00-09:45 Keynote Lecture **Ron Mittler** "Key mediators of rapid systemic signals"

09:45-10:10 Lecture **Sandrine Ruffel** "Regulatory Network behind Systemic Nitrogen Signaling"

10:00-10:25 Lecture **Byung-Kook Ham** "Role of vascular system in nutrient-stress signaling"

10:25-10:40 Short Talk (N.N.)

10:40-11:00 Coffee Break

## **Session X: Calcium-Electric Signaling 1**

Chairperson:

- 11:00-11:25      Lecture **Ingo Dreyer** “Mechanistic insights into electrical signaling in plants“
- 11:25-11:50      Lecture **Myriam Charpentier** “Calcium signalling in legume root endosymbioses”
- 11:50-12:05      Short Talk (N.N.)
- 12:05-12:20      Short Talk (N.N.)

13:00-14:00 Lunch

14:00 -15:00 **PVB board meeting**

### **Free Afternoon, Sight Seeing**

No Dinner

**Thursday, July 21<sup>st</sup>**

## **Session XI: Calcium-Electric Signaling 2**

Chairperson:

- 09:00-09:45      Keynote Lecture **Ted Farmer** “Phloem-xylem interaction in wound-response electrical signalling”
- 09:45-10:10      Lecture **Masatsugu Toyota** “Calcium-based rapid defense movements in Mimosa pudica”
- 10:10-10:25      Short Talk (N.N.)
- 10:25-10:40      Short Talk (N.N.)

10:40-11:00 Coffee Break

## **Session XII: Leaf shape meets vascular function**

Chairperson:

- 11:00-11:45 Keynote Lecture **Miltos Tsiantis** “Leaf Shape Diversity: From Genetic Modules to Computational Models”
- 11:45-12:10 Lecture **Florence Danila** “Tunnels and walls: importance of plasmodesmata and suberin lamellae in C<sub>4</sub> photosynthesis”
- 12:10-12:35 Lecture (N.N.)
- 12:35-12:50 Short Talk (N.N.)

13:00-14:00 Lunch

### **Session XIII: Development and Evolution**

Chairperson:

- 14:00-14:25 Lecture **Anita Rodriguez-Villalon** “tba”
- 14:25-14:50 Lecture **Scott McAdam** “How stomatal evolution has shaped the evolution of xylem”
- 14:50-15:05 Short Talk (N.N.)
- 15:05-15:20 Short Talk (N.N.)
- 15:20-15:35 Short Talk (N.N.)

15:35-16:00 Coffee break

### **Session XIV: In silico plant**

Chairperson:

- 16:00-16:25 Lecture **Marjorie Lundgren** “Adaptation of vascular tissue to C<sub>4</sub> metabolism”
- 16:25-16:50 Lecture **Richard Morris** “How plants broadcast their pain”
- 16:50-17:05 Short Talk (N.N.)
- 17:05-17:20 Short Talk (N.N.)

17:20-18:15 Closing Remarks & Evening Lecture by **Aart J.E. van Bel**

18:30-20:00 BBQ



20:00-21:30 Poster Session

**Friday, July 22<sup>nd</sup>**

Farewell and Departure