

Wednesday 26 August

09:30-10:30 **Arrival/Registration**

10:30-10:50 **Welcome**

Keynote

10:50-11:20 **Seth Davis** (University of York)

Natural variation links the circadian clock to thermomorphogenesis

Session: Temperature, photoperiod & the circadian clock

11:20-11:40 **Thijs van Loo** (Utrecht University)

Understanding thermomorphogenesis in short day & long day photo periods through modelling

11:40-12:00 **Peter Danks** (University of York)

The Phytochrome polyploid puzzle: Utilizing TILLING derived phytochrome C mutants in bread wheat to assess homoeologue role under varying photoperiods

Flash talks: Transcriptional & epigenetic regulation

12:00-12:05 **Kirti Pandey** (CSIR-Institute of Himalayan Bioresource Technology)

Epigenetic Regulation of Thermotolerance by Heat-Activated JMJ29 in Arabidopsis

12:05-12:10 **Orlando Maciel** (Martin-Luther-Universität Halle-Wittenberg)

Single-cell Transcriptomics for *A. thaliana* root thermomorphogenesis

12:10-12:15 **Amrita Singh** (ICGEB New Delhi)

Hidden underground: MED17 drives root adaptation to elevated temperature

12:15-12:20 **Alba Lloret Compañ** (IBMCP Valencia)

Single-cell insights into temperature responses in Arabidopsis

12:20-12:25 **Anran Zhang** (Ghent University)

Heat stress intolerance and induced chromocenter decondensation in HIT4 and HIT4LIKE Arabidopsis mutants

12:30-13:30 **Lunch**

Session: Temperature & metabolism

13:30-13:50 **Vanessa Wahl** (James Hutton Institute)

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13:50-14:10 **Yongjian Qiu** (University of Mississippi)

Cell-type-specific metabolic responses underlie root thermomorphogenesis

14:10-14:30 **Aashish Ranjan** (BRIC-NIPGR, New Delhi)

Genetic integration of ROS homeostasis in thermomorphogenesis

Flash talks: Development & phenotypic plasticity

14:30-14:35 **Monica Garcia Gomez** (Utrecht University)

Modelling the effects of high sublethal temperature on shoot vascular patterning in *Arabidopsis thaliana*

14:35-14:40 **Asier Briones Moreno** (IBMCP Valencia)

Identifying Novel Players in Root Thermomorphogenesis

14:40-14:45 **Kaijing Zhang** (IGZ Großbeeren)

Nitrogen availability rewires temperature-dependent growth programs

14:45-14:50 **Melisa Luquet** (Université de Neuchâtel)

At the apex of thermomorphogenesis

14:50-14:55 **Buddhika Gayathri Pathirana** (University of Potsdam)
Temperature-Driven Phenotypic Plasticity of Cambial Secondary Growth in Arabidopsis

15:00-15:40 **Coffee break**

Session: Development & phenotypic plasticity

15:40-16:00 **José A. Abelenda** (MBG CSIC)

Living on the edge. Molecular and environmental regulation of the leaf margin.

16:00-16:20 **Sinah Tabea Ehlert** (Max-Planck-Institute of Molecular Plant Physiology Golm)

Influence of Temperature on Apomictic Seed Traits in Brassicaceae

16:20-16:40 **Kumud Saini** (Sainsbury Laboratory Cambridge University)

Mechanical cues in thermomorphogenesis

16:40-17:00 **Joanna Edwards** (Durham University)

Brassinosteroid regulation of ambient temperature flowering in Arabidopsis

Thursday 27 August

Session: Post-transcriptional regulation

- 09:00-09:20 **Dominique Vuarambon** (Universität Bern)
Early response to warm temperature in Arabidopsis
- 09:20-09:40 **Emma Hardy** (University of Dundee)
Upstream Open Reading Frames as Novel Regulators of Translation at Warm Ambient Temperatures
- 09:40-10:00 **Matt Jones** (University of Glasgow)
Chilling responses regulated by alternative splicing
- 10:00-10:20 **Jing Min Hua** (Universität Bern)
RNA Fate Control by Nuclear Export and mRNA Decay Shapes Root Thermomorphogenesis

10:20-11:00 Coffee break

Session: Post-translational regulation I

- 11:00-11:20 **Martijn van Zanten** (Utrecht University)
Thermomorphogenesis regulation by PLATZ1 phosphorylation
- 11:20-11:40 **Shao-Li Yang** (VIB UGent)
Stress granules facilitate phosphorylation signaling in guard cells in response to heat stress
- 11:40-12:00 **Subiyya Haque** (COS, Universität Heidelberg)
Drivers of phyB photobody thermostability

Flash talks: Post-transcriptional regulation

- 12:00-12:05 **Madhab Kumar Sen** (Swedish University of Agricultural Sciences)
Turning up the spliceosome to engineer heat-resilient plants
- 12:05-12:10 **Aminin Taqir Akramin** (University of Dundee)
Temperature effects on translation regulation in plants
- 12:10-12:15 **Moray Smith** (University of Dundee)
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- 12:15-12:20 **Borys Alexander Leon Alcivar** (Universität Bern)
RNA turnover modulates root response to increasing temperatures
- 12:20-12:25 **Danny Geelen** (Ghent University)
Heat stress induces the formation of unreduced male gametes by targeting translation in Arabidopsis meiocytes

12:30-13:30 Lunch

Session: Post-translational regulation II

- 13:30-13:50 **Tilman Jacob** (Martin-Luther-Universität Halle-Wittenberg)
Root thermomorphogenesis is mediated by cell cycle-activating kinase TARGET OF RAPAMYCIN (TOR)
- 13:50-14:10 **Prakash Kumar Bhagat** (Durham University)
SUMO-SIM interaction regulates the thermomorphogenesis through PIF4
- 14:10-14:30 **Jian Xia** (Martin-Luther-Universität Halle-Wittenberg)
Functional proteoform variation in thermomorphogenesis master regulators

Flash talks: Post-translational regulation; stress responses

- 14:30-14:35 **Yajie Zhang** (VIB-Ugent)
Capturing high temperature-mediated dynamic changes in Arabidopsis proteome by using Limited-Proteolysis coupled with Mass Spectrometry (LiP-MS)
- 14:35-14:40 **Wei Liu** (Nanjing Normal university)
SOS2 regulates root thermomorphogenesis by promoting cell division in root apical meristem in
- 14:40-14:45 **Kateřina Mácov** (CEITEC Masaryk University)
BOBBER proteins in plant development
- 14:45-14:50 **Zoe McFarlane** (University of Glasgow)
Molecular Adaptations to Climate Change: The Role of RVE2 in Plant Stress Responses
- 14:50-14:55 **Alanna McCutcheon** (University of Dundee)
Barley Surviving the Stress - Understanding Stress Induced Developmental Plasticity in Barley.

15:00-15:10 **Group photo**

15:10-15:50 **Coffee break**

Session: Heat stress & thermotolerance

- 15:50-16:10 **Eirini Kaiserli** (University of Glasgow)
Balancing thermomorphogenesis, thermotolerance and plant growth.
- 16:10-16:30 **Rituparna Goswami** (Sainsbury Laboratory Cambridge University)
Transcriptional noise in heat stress response

16:30-17:00 **General Discussion**

19:30-22:30 **Conference dinner**

Jute Caf Bar, Dundee Contemporary Arts (DCA), 152 Nethergate, Dundee DD1 4DY

Friday 28 August

Session: Signalling crosstalk

- 09:00-09:20 **Sreeramaiah N. Gangappa** (IISER Kolkata)
Light and temperature signaling cross-talk in plants
- 09:20-09:40 **Eirini Patitaki** (University of Glasgow)
The role of blue light signalling in thermomorphogenesis in *Arabidopsis thaliana*.
- 09:40-10:00 **Jelle Keijzer** (Utrecht University)
Natural variation of the EcoCore Arabidopsis panel under combined high temperature and drought
- 10:00-10:20 **Chandana Pandey** (Aarhus University & University of Copenhagen)
Root zone warming reveals an impact of rhizobacteria on thermomorphogenesis via growth-promoting signaling networks

10:20-11:00 Coffee break

Session: Phytohormones

- 11:00-11:20 **Petra Marhava** (King Abdullah University of Science and Technology)
Auxin Dynamics under Temperature Stress
- 11:20-11:40 **Hongyan Liu** (VIB-UGent)
ABA catabolism regulates hypocotyl elongation during thermomorphogenesis
- 11:40-12:00 **Halidev Krishna Botta** (BRIC-NIPGR, New Delhi)
Deciphering cytokinin signalling crosstalk in root and shoot thermomorphogenesis

Flash talks: Phytohormones; thermomorphogenesis beyond Arabidopsis

- 12:00-12:05 **Pravartika (Frankie) Prakash** (Nottingham University)
Role of ABA in organ specific thermomorphogenesis in *Arabidopsis thaliana*
- 12:05-12:10 **Cèlia Anton Sales** (Wageningen University and Research)
Understanding Temperature Sensitivity in Cauliflower
- 12:10-12:15 **Moritz Sexauer** (Julius-Maximilians-Universität Würzburg)
Fixing a challenge of climate change - Unraveling the impact of increased temperatures on nitrogen fixing symbiosis
- 12:15-12:20 **Heather Gulbrandsen** (University of Dundee)
Too Hot To Yield? Barley in a Warming Climate
- 12:20-12:25 **Saket Nikose** (IGZ Großbeeren)
Analysis of thermomorphogenic responses in *Capsella*

12:30-13:30 Lunch

Session: Thermomorphogenesis beyond Arabidopsis I

- 13:30-13:50 **Aneesh Lale** (University of Nottingham)
Rhizospheric pH mediated thermo-signalling coordinates root growth under heat stress
- 13:50-14:10 **Cristina Nieto** (Plant Genetic Resources Centre, INIA-CSIC)
Wheat adaptation to rising temperature
- 14:10-14:30 **Heng Lim (Hailey) Tan** (University of York)
Uncovering how Brassicas respond to seasonal fluctuating temperature across developmental time

14:30-14:50 **Pauline Gutsche** (IGZ Großbeeren)
A quest for temperature sensors: What can we learn from *Capsella* ?

14:50-15:30 **Coffee break**

Session: Thermomorphogenesis beyond Arabidopsis II

15:30-15:50 **Lieselotte Rauh** (Martin-Luther-Universität Halle-Wittenberg)
PIF4-regulating (b)HLH proteins as modulators of thermomorphogenesis in *Arabidopsis thaliana* and *Brassica rapa*

15:50-16:10 **Xuelel Lai** (National Key Laboratory of Crop Genetic Improvement)
Thermosensory flowering in rice

Keynote

16:10-16:40 **Marcel Quint** (Martin-Luther-Universität Halle-Wittenberg)
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16:40-17:00 **Closing remarks**