

Poster Presentation at the EMBO | COB Workshop Plant tropisms

- P01 Two-step regulation of lateral root spacing in *Arabidopsis thaliana***
Shohei Oshiro (Nara Institute of Science and Technology, JP)
- P02 PKS proteins, regulation of pH and auxin signaling during phototropism**
Peter Sabol (University of Lausanne, CH)
- P03 The liverwort oil body is formed by redirection of the secretory pathway**
Takehiko Kanazawa (National Institute for Basic Biology, JP)
- P04 Light-modulated de novo meristem formation in *Marchantia polymorpha* sporelings**
Nikhil Job (Gregor Mendel Institute of Molecular Plant Biology (GMI), AT)
- P05 Coordination of shoot gravitropic setpoint angle by TILLER ANGLE CONTROL1 and LZ1**
Nozomi Kawamoto (National Institute for Basic Biology, JP)
- P06 The nuclear pore complex mediates EXECUTER-mediated retrograde signaling during photomorphogenesis**
Hanhong Liu (Chinese Academy of Sciences, CN)
- P07 Light signalling components regulate aluminium sensitivity in *Arabidopsis thaliana***
Debojyoti Kar (Indian Institute of Science Education and Research Bhopal (IISER Bhopal), IN)
- P08 The integration of PIN protein phosphoregulation and LAZY signalling in lateral root gravitropic setpoint angle control**
Stefan Kepinski (University of Leeds, UK)
*This poster is selected as a selected talk in the day 3 (July 11).
- P09 Exploring the evolutionary process of plant gravitropism by utilizing the basal land plant, *Physcomitrium patens***
Kanta Suemitsu (Hokkaido University, JP)
*This poster is selected as a selected talk in the day 3 (July 11).

- P10 Auxin biosynthesis, transport and response directly attenuate hydrotropic bending of roots in the latter stages in *Arabidopsis thaliana***
Kotaro Akita (Yamagata University, JP)
*This poster is selected as a selected talk in the day 2 (July 10).
- P11 Circadian clock regulates root hair elongation in *Arabidopsis***
Akane Kubota (Nara Institute of Science and Technology, JP)
*This poster is selected as a selected talk in the day 4 (July 12).
- P12 PINpointing the loop: Deciphering auxin transport regulation**
Sarah Koutnik-Abele (Technical University of Munich, GE)
- P13 The BRX domain of RLD exhibits diverse interaction modes with proteins**
Takeshi Nishimura (National Institute for Basic Biology, JP)
- P14 A study of novel movement pattern in streptophyte alga *Chara* and rapid auxin response**
Katarina Kurtovic (Charles University, CZ)
- P15 Characterization of blue light-induced paraheliotropic leaf movements in soy bean**
Shin-ichiro Inoue (Saitama University, JP)
*This poster is selected as a selected talk in the day 1 (July 9).
- P16 Twining plants capitalize on circumnutations to assess mechanical properties of candidate support, and initiate a thigmotropic twining response**
Amir Ohad (Tel Aviv University, IL)
*This poster is selected as a selected talk in the day 4 (July 12).
- P17 Leaf movement analysis in *Arabidopsis* using microfocus X-ray CT imaging**
Maika Hayashi (Nara Institute of Science and Technology, JP)
- P18 Analysis of PICALM2 in *Arabidopsis* pollen tubes**
Kazuo Ebine (National Institute for Basic Biology, JP)
- P19 The role of polar auxin transport in cell polarity establishment in lateral root primordium formation**
Sanae Kaneta (Osaka University, JP)
*This poster is selected as a selected talk in the day 3 (July 11).

- P20 Phototropin mediates daily cold priming to promote light responses in *Arabidopsis***
Minoru Noguchi (Utsunomiya University, JP)
- P21 General and local anesthetics attenuate the thigmotropism of plant roots**
Noriyasu Magari (Keio University, JP)
- P22 The molecular mechanism underlying rice root tolerance to ammonium toxicity**
Wei Xuan (Nanjing Agricultural University, CN)
*This poster is selected as a selected talk in the day 3 (July 11).
- P23 The clock gene *PRR7* is involved in the regulation of the photoreceptor phototropin signaling system**
Tomohiro Asami (Nara Institute of Science and Technology, JP)
- P24 Exploring the mechanisms of root bending response to gravity through quantitative analysis of cellular dynamics**
Tatsuaki Goh (Nara Institute of Science and Technology, JP)
*This poster is selected as a selected talk in the day 2 (July 10).
- P25 Engineering FRET biosensors for direct visualisation of endogenous auxin dynamics**
Max Josse (University of Cambridge, UK)
*This poster is selected as a selected talk in the day 2 (July 10).
- P26 The protein stability of *LZY3* is regulated by post-translational modifications**
Hiromasa Shikata (National Institute for Basic Biology, JP)
- P27 PHOTOREGULATORY PROTEIN KINASEs (PPKs) in hypocotyl phototropism**
Lucius Muthert (University of Lausanne, CH)
- P28 Integration of multiple stimuli in sunflower tropisms**
Roni Kempinski (Tel Aviv University, IL)
- P29 In-depth quantification of cell division and elongation dynamics at the tip of growing *Arabidopsis* roots revealed cell cluster-constrained fluctuation of root zonation boundaries**
Keiji Nakajima (Nara Institute of Science and Technology, JP)

- P30 Auxin signaling repressor IAA8 promotes seed germination by down regulation of *ABI3* gene in response to environmental stresses in *Arabidopsis***
Jeong Woo Lee (Gyeongsang National University, KR)
- P31 Verification of the biphasic model of phototropic response in maize coleoptiles**
Kosumi Yamada (University of Tsukuba, JP)
- P32 Molecular mechanisms involved in light-dependent transcription start site selection in *Arabidopsis thaliana***
Yoshiro Murakami (Kyoto University, JP)
- P33 A novel *Arabidopsis thaliana* protein, POT1, plays an important role in elongation of pollen tubes**
Natalia Julia Rzepecka (Ochanomizu University, JP)
- P34 Investigation of tropic responses in *Arabidopsis thaliana* with an autonomous bioluminescent auxin sensor**
Mike Karampelias (Czech Academy of Sciences, CZ)
- P35 SHOOT GRAVITROPISM 5 mediates the stomatal response to darkness in *Arabidopsis***
Moeca Arai (National Institute of Advanced Industrial Science and Technology, JP)
- P36 Regulations of pluripotency acquisition in callus by WOX transcription factors and IAA biosynthesis**
Kaisei Maruyama (Nara Institute of Science and Technology, JP)
- P37 Development of transgenic rice with PHYA and PHYB phosphomutant genes for crop improvement**
Tamanna Bachhawat (Presidency University, IN)
- P38 Playing around with the LBDs: Insights into root/shoot differentiation and lateral root induction upon mechanical impedance**
Akihito Mamiya (Kobe University, JP)
- P39 Dynamics of the VAMP72 group in pollen tube elongation**
Anna Tode (Ochanomizu University, JP)

- P40 Molecular mechanism of apical hook development**
Pawan Kumar Jewaria (National Institute of Plant Genome Research Aruna Asaf Ali Marg, IN)
*This poster is selected as a selected talk in the day 4 (July 12).
- P41 HY5 inhibits lateral root development by up-regulating auxin signaling repressor in Arabidopsis**
Minh Le Anh Pham (Gyeongsang National University, KR)
- P42 Phosducin PhLP2 coordinates directionality of primary root growth in Arabidopsis**
Denisa Oulehlova (Charles University, CZ)
- P43 NEK6 provides tissue-specific growth anisotropy through its actin-dependent polar localization in *Arabidopsis thaliana***
Hiroyasu Motose (Okayama University, JP)
*This poster is selected as a selected talk in the day 1 (July 9).
- P44 A U-box E3 ubiquitin ligase modulates photomorphogenesis via ubiquitination of Phytochrome B in Arabidopsis**
Huilun Sun (Chinese Academy of Sciences, CN)
- P45 Emergence of polar auxin transport regulatory machinery before divergence of land plants**
Satoshi Naramoto (Hokkaido University, JP)
*This poster is selected as a selected talk in the day 2 (July 10).
- P46 The clock genes, PRRs, regulate phototropin-mediated blue-light responses in Arabidopsis**
Gian Carlo Feliciano Maliwat (Nara Institute of Science and Technology, JP)
*This poster is selected as a selected talk in the day 4 (July 12).
- P47 Functional analysis of RLF, a cytochrome b₅-like heme binding protein, in plant organ development**
Kentaro Iwata (Kobe university, JP)

- P48 Heat stress causes defective flower development by perturbing the expression of *bZIP* and *MYB* genes through MPK-mediated phosphorylation of Aux/IAA**
Woo Sik Chung (Gyeongsang National University, KR)

Online sharing Poster (via Google Drive)

- P49 Actin filaments reorganization in response to auto straightening**
Kinza Khan (University of Clermont Auvergne, FR)
*This poster is selected as a selected talk in the day 1 (July 9).
- P50 Transport properties of canonical PIN-FORMED proteins and the role of the loop domain in auxin transport and tropisms**
Ulrich Z. Hammes (Technical University of Munich, GE)
*This poster is selected as a selected talk in the day 2 (July 10).
- P51 AI-assisted decoding of condensate assembly in the plant phototropic response**
Prabha Manishankar (The Center for Plant Molecular Biology (ZMBP), GE)
*This poster is selected as a selected talk in the day 2 (July 10).
- P52 Analysis of the repeated and conserved TPRXS motifs in canonical PIN-FORMED auxin transporters during tropic responses**
Namuk Kim (Technical University of Munich, GE)
- P53 KIPK AGC1 kinases suppress overbending during negative hypocotyl gravitropism**
Yao Xiao (Guangzhou University, CN)
*This poster is selected as a selected talk in the day 1 (July 9).
- P54 How roots find nutrients in low-nitrogen environments:
From N systemic signaling to ecosystems**
Lu Yang (Centre for Plant Biotechnology and Genomics (CBGP), Technical University of Madrid, ES)
- P55 A role for osmoregulation of amyloplasts in gravitropism**
Atsushi Togaki (Setsunan University, JP)

P56 Systems approaches reveal that ABCB and PIN proteins mediate co-dependent auxin efflux

Leah R. Band (University of Nottingham, UK)

*This poster is selected as a selected talk in the day 2 (July 10).

P57 Exploring the role of the NGR1 protein in the plant root gravitropic response

Anastasia Teplova (Institute of Science and Technology Austria (ISTA), AT)

P58 Lysine 526 of Arabidopsis PHOTOTROPIN1 functions to enhance phototropism

Tong-Seung Tseng (National Chiayi University, TW)