

●●● Programme · Meeting Of Plant Molecular Biology
XVI RBMP · 14th-16th September 2022 · Sevilla · Spain

12:00-14:00 · REGISTRATION

15:00-15:30 · WELCOME

15:30-16:30 · PLENARY 1

Diane Bassham. (Iowa State University (ISU), Iowa, USA).
"Function and regulation of autophagy in Arabidopsis"

16:30-18:00 · SESSION 1

SYSTEMS BIOLOGY

Chairs: Pilar Cubas and Fran Romero-Campero.

16:30-16:45

Ana B. Romero-Losada (IBVF, CSIC-University of Sevilla).
"Multiomics characterization of diurnal and seasonal cycles in the marine microalgae *Ostreococcus tauri*"

16:45-17:00

Iris Martínez-Hevia (CNB, CSIC, Madrid). "Natural variation of phosphate starvation responses in Arabidopsis: integration of transcriptomic, metabolomic and physiological data"

17:00-17:15

Sara Guerrero (Plant Physiology and University Institute of Biotechnology of Asturias (IUBA), University of Oviedo).
"Proteome analyses in *Marchantia polymorpha* revealed the molecular mechanisms underlying sex-biased responses to heat-drought stress in plants"

17:15-17:30

Luis Orduña (Instituto de Biología Integrativa de Sistemas (I2SysBio), UV-CSIC, Valencia). "Unveiling the potential of gene co-expression networks as a tool for discovering novel regulators of secondary metabolism in non-model species"

17:30-17:45

María Ángeles Castillejo (Department of Biochemistry and Molecular Biology, University of Córdoba). "*Quercus ilex* research across the central dogma and its translation to management and breeding programs"

17:45-18:00

Joaquín Grau (CNB, CSIC, Madrid). "TDTHub, a web server tool for the analysis of transcription factor binding sites in plants"

18:00-19:00

Coffee break / POSTERS

19:00-20:30 · SESSION 2

METABOLISM AND CELL SIGNALING

Chairs: Óscar Lorenzo and Olga del Pozo.

19:00-19:20

Igor Florez-Sarasa (CIRAG, CSIC-IRTA-UAB-UB Barcelona)
"Towards engineering of mitochondrial metabolism for improving vegetable crops productivity and fruit quality under climate change conditions"

19:20-19:40

José L. Crespo (IBVF, CSIC- University of Sevilla).
"Photosynthetic assimilation of CO₂ and phosphorous regulator activity in *Chlamydomonas reinhardtii*"

19:40-19:55

Yovanny Izquierdo (CNB, CSIC, Madrid). "Electrophilic oxylipins control mitochondrial stress responses"

19:55-20:10

Yolanda Ferradas (Instituto de la Vid, CSIC, Logroño)
"VviMybA1 and VviMybA2 independent mutations trigger white to red berry skin color reversion in *Vitis vinifera* cv Albariño and Verdejo"

20:10-20:25

Ángeles Aroca (IBVF, CSIC- University of Sevilla).
"Persulfidation: a new perspective of redox-regulation by sulfide under non-photorespiratory conditions in Arabidopsis"

21:00

Wellcome cocktail

Thursday 15 september

9:00-10:00 · PLENARY 2

Ana Caño-Delgado. (CRAG, CSIC-IRTA-UAB-UB Barcelona).
“Brassinosteroids receptors: twenty years of research to untap novel mechanisms for plant adaptation to abiotic stress”

10:00-11:30 · SESSION 3 DEVELOPMENT

Chairs: Mónica Pernas and Elena Monte.

10:00-10:15

Carlos Sánchez-Gómez (Instituto de Hortofruticultura Subtropical y Mediterránea (IHMS) La Mayora, UMA-CSIC, Málaga). “Characterization of ripe fruit epidermis-specific transcription factors in strawberry”

10:15-10:30

Laura Arribas-Hernández (Department of Biology, University of Copenhagen, Denmark). “Cell proliferation during plant organogenesis is controlled by an *m6a-ythdf* axis”

10:30-10:45

Paz Merelo (IBMCP, CSIC, Valencia). “An analysis of meristem dynamics at the end of flowering points to cytokinin and auxin as key regulators of proliferative arrest”

10:45-11:00

Laura Bouza-Morcillo (CBGP, UPM - INIA/CSIC, Madrid). “The enhancer of polycomb-like (*ep1*) NuA4-specific subunits regulate chloroplast biogenesis in *Arabidopsis*”

11:00-11:15

Ignacio Cota (CRAG, CSIC-IRTA-UAB-UB, Barcelona).
“Unexpected NGATHA genes in gymnosperms”

11:15-11:30

Concha Gómez-Mena (IBMCP, CSIC, Valencia). “Role of the tapetum in the control of redox homeostasis during microgametogenesis in tomato”

11:30-12:30

Coffee break / POSTERS

12:30-14:00 · SESSION 4 ENVIRONMENTAL REGULATION OF DEVELOPMENT

Chairs: Myriam Calonge and Jaume Martínez.

12:30-12:45

José Antonio Abelenda (CBGP, UPM - INIA/CSIC, Madrid).
“Unveiling a methylation histone reader that links flowering and heat stress”

12:45-13:00

Esther Cañibano (CNB, CSIC, Madrid). “DET1 regulation of COP1 and HY5 activity controls plant responses to light”

13:00-13:15

Fátima Pollo-Rodríguez (Instituto de Investigación en Agrobiotecnología (CIALE), University of Salamanca). “Delay of germination 1 (*dog1*) regulates the onset of seed dormancy and germination in different maternal environments and nitric oxide backgrounds”

13:15-13:30

Águila Ruiz-Sola (CRAG, CSIC-IRTA-UAB-UB, Barcelona).
“Light and retrograde signaling regulate chloroplast biogenesis in *Chlamydomonas*”

13:30-13:45

Antonio Serrano-Mislata (IBMCP, UPV-CSIC, Valencia). “Della-mediated growth inhibition is a defence strategy to maintain genome integrity”

13:45-14:00

Federico Valverde (IBVF, CSIC-University of Sevilla). “Constans alters the circadian clock in *Arabidopsis thaliana*”

14:00-15:30

Lunch / POSTERS

Thursday 15 september

15:30-17:00 · SESSION 5 PLANT-MICROBE INTERACTIONS

Chairs: Andrea Chini and Carolina Escobar.

15:30-15:50

Ignacio Rubio-Somoza (CRAG, CSIC-IRTA-UAB-UB, Barcelona). "Concerted action of miRNA targets enables defense reprogramming upon pathogen-induced RNA silencing"

15:50-16:10

Marina Martín-Dacal (CBGP, UPM - INIA/CSIC, Madrid). "A group of Arabidopsis LRR-malectin receptor kinases trigger immune responses mediated by mixed-linked glucans and cellulose-derived oligosaccharides"

16:10-16:25

Eduardo R Bejarano (IHMS La Mayora, UMA-CSIC, Málaga) "Impairment of SUMO Conjugation of PCNA by geminiviruses could be responsible for the high level of recombinant viruses"

16:25-16:40

Laura Vilanova (Postharvest Programme, Institute of Agrifood Research and Technology (IRTA), Lleida). "High-throughput screening of effectors in several plants using a binary TRV-expression vector"

16:40-16:55

Vicente Mariscal (IBVF, CSIC-University of Sevilla). "Symbiosis between cyanobacteria and plants: from molecular studies to agronomic applicability"

17:00-17:30

Coffee break / POSTERS

17:30-19:00 · PARALLEL SESSION 6 COLABORACIÓN PÚBLICO-PRIVADA Y FINANCIACIÓN DE LA I+D+i

Moderator: David Lapuente. BIOVEGEN

17:30-17:40

Introducción y objetivos de la sesión.

17:40-18:30

Empresas de innovación vegetal (5 charlas de 10 min)

Empresas de innovación vegetal

- AGROINTEC. Ana García.
- VALGENETICS. Juan José Rodríguez.
- ALGAENERGY/proyecto MICROCLIMATT.
- Unidad Mixta CBGP-TRADECORP. Patricia Fernandez.
- AGROQUIVIR. Ana Sierra

18:30-18:50

Apoyo a la innovación en agricultura

- Agencia Estatal Investigación. María Angeles Ferre
- CDTI. Carlos Franco.

18:50-19:00

Preguntas y coloquio

19:00

Conclusiones y clausura

* Idioma sesión: castellano

17:30-18:30 · PARALLEL SESSION 7 INSPIRING GIRLS

Round table between female plant molecular biologists and teenage girls.

19:00-20:00

Convention of the Spanish Society of Plant Biology (SEBP)

21:00

Conference Dinner (Cocktail at La Raza Puerto Restaurant)

Friday 16 september

9:00-10:30 · SESSION 8

ABIOTIC STRESS

Chairs: Chema Colmenero and Rafael Catalá.

9:00-9:20

Rocío Nunez-Vazquez (CBMSO, Madrid) "Histone H3 variants: new players of the abiotic stress response"

9:20-9:40

Iván Herrero (CRAG, Barcelona) "Deciphering the mechanism for brassinosteroid receptor kinase protein BRL3 in plant adaptation to drought stress"

9:40-9:55

Cecilia Oliver (CIALE, Salamanca) "The role of nitric oxide on DNA repair in *Arabidopsis thaliana*"

9:55-10:10

Lara García (Department of Organisms and Systems Biology and IUBA, University of Oviedo) "Campa Chloroplast sensor kinase promotes UV-B tolerance independently of the UVR8 pathway"

10:10-10:25

Manuel Nieves-Cordones (Centro de Edafología y Biología Aplicada del Segura (CEBAS), CSIC, Murcia) "Use of specific inhibitors to identify candidate Na⁺ uptake systems in tomato plants"

10:30-12:00 · SESSION 9

BIOTECHNOLOGY AND TECHNOLOGICAL TOOLS

Chairs: Iraida Amaya and Diego Orzáez.

10:30-10:35

Presentation of the Spanish Society of Biotechnology. Mar Castellano (CBGP, UPM - INIA/CSIC, Madrid)

10:35-10:50

Alberto Carbonell (IBMCP, CSIC, Valencia). "Effective gene silencing in plants by artificial microRNAs derived from minimal precursors"

10:50-11:05

José Vallarino (Max Planck, Potsdam-Golm, Germany). "Leaf specific overexpression of mitochondrially-targeted glutamine synthetase in tomato increased assimilated export resulting in earlier fruiting and elevated yield"

11:05-11:20

María Lobato-Gómez (IBMCP, CSIC, Valencia). "Improving tomato fruit as a platform for saffron apocarotenoids production"

11:20-11:35

Jose A. Aznar-Moreno (IHSM La Mayora, Málaga). "Analysis of nitrogenase Fe protein activity in transplastomic tobacco"

11:35-11:50

Luis Valledor (IUBA, University of Oviedo). "The discovery of the metabolic strategies for coping with Bisphenol A in *Chlamydomonas* provide new targets for improving microalgal-based bioremediation of plastics"

11:50-12:05

Pilar Muñoz del Río (IFAPA, Málaga). "QTL mapping for ascorbic acid content in strawberry fruit reveal a complex genetic architecture and association with allelic variation and differential expression of GDP-L-galactose phosphorylase"

12:05-12:30

Coffee break / POSTERS

12:30-13:30 · PLENARY 3

Wolf B. Frommer (Heinrich Heine University, Düsseldorf, Germany and Institute for transformative Biomolecules (ITbM), Nagoya University, Japan). "Feeding pathogens by hijacking host sugar transporter"

13:30

Closure