



Programa

XIV Reunión de Biología Molecular de Plantas

Miércoles 4 Julio

9 – 10:30 h: Recepción y recogida de material.

10:30 – 11 h: Acto de apertura. Auditorio, Hospedería Fonseca.

11 – 11:45 h: Conferencia Inaugural - Arp Schnittger (University of Hamburg, Germany). “Control of progression through meiosis in Arabidopsis.”

Moderador: José Jarillo (CBGP, UPM-INIA, Madrid)

Sesión I – Biología de Sistemas

Moderadoras: Ana Caño (CRAG, CSIC-IRTA-UAB-UB, Barcelona), Pilar Cubas (CNB-CSIC, Madrid)

11:45 – 12:05 h: Ponencia 1- Fidel Lozano-Elena (CRAG, CSIC-IRTA-UAB-UB, Barcelona). “Vascular brassinosteroid receptors confer drought resistance without penalizing plant growth.”

12:05 – 12:25 h: Ponencia 2- Carlos Tarancón (CNB-CSIC, Madrid). “Axillary bud development is arrested by BRC1 through several genetic networks in Arabidopsis.”

12:25 – 12:40 h: Comunicación oral 1- Miguel A. Moreno-Risueño (CBGP, UPM-INIA, Madrid). “A high-resolution spatiotemporal map of root postembryonic organogenesis reveals new stem cell types and a regulatory network of identity transitions.”

12:40 – 12:55 h: Comunicación oral 2- Pedro de los Reyes (IBVF-CSIC, Universidad de Sevilla, Sevilla). “Interplay between the circadian clock, the photoperiodic signal and the flowering transition in *Arabidopsis thaliana*.”

12:55 – 13:10 h: Comunicación oral 3- María-Dolores Rey (Universidad de Córdoba, Córdoba). “The use of -omics technologies to progress in the *Quercus ilex* biology.”

13:10 – 13:25 h: Comunicación oral 4- Ignacio Rubio (CRAG, CSIC-IRTA-UAB-UB, Barcelona). “A systems biology approach unravels new regulatory connections between unrelated miRNA-TF pairs.”

13:30 – 15 h: Comida.

Sesión II – Biotecnología Vegetal Aplicada

Moderadores: Javier Pozueta (IdAB, CSIC/UPNA/Gobierno de Navarra, Pamplona), Antonio Granell (IBMCP, CSIC-UPV, Valencia)

15 - 15:20 h: Ponencia 1- José Luis Rambla (IBMCP, CSIC-UPV, Valencia). “Breeding and engineering the volatile network in tomato: not just for taste.”

15:20 – 15:40 h: Ponencia 2- Javier Pozueta (Instituto de Agrobiotecnología IdAB, CSIC/UPNA/Gobierno de Navarra, Navarra). “*The bad little fragrant critters, beneficial workers* concept: a story of serendipity and dirty dishes with important biotechnological implications.”

15:40 – 15:55 h: Comunicación oral 1- M^a Belén Pascual (Universidad de Málaga, Málaga). “Biotechnological approaches to increase biomass production in trees.”

15:55 – 16:10 h: Comunicación oral 2- Raquel Jiménez-Muñoz (Universidad de Granada, Granada). “Use of *Zucchini yellow mosaic virus* to express cold resistance genes in *Cucurbita pepo*.”

16:10 – 16:25 h: Comunicación oral 3.- Cristina Castillejo (IFAPA, Centro de Churriana, Málaga). “Multiple origins of white strawberries through independent mutations in a single transcriptional regulator: FvMYB10.”

16:30 – 17:30 h: Pausa café | Pósteres.

Sesión III – BIOVEGEN. Colaboración Ciencia-Empresa y Financiación I+D+i

Moderadores: Antonio Molina (CBGP, UPM-INIA, Madrid), David Lapuente (BIOVEGEN)

17:30 – 18 h: Conferencia - Manuel Talón (Director Centro de Genómica del IVIA, Valencia). “Origen y domesticación de los cítricos a la luz de la genómica.”

18 – 18:10 h: Ponencia 1- Jesús Agüero (Director I+D+i. ABIOPEP, Murcia). “ABIOPEP: experiencia de spin-off en Biotecnología Vegetal.”

18:10 – 18:20 h: Ponencia 2.- Antonio Molina (Director. CBGP, UPM-INIA, Madrid). “Colaboración Ciencia-Empresa: el caso de PLANT RESPONSE BIOTECH.”

18:20 – 18:30 h: Ponencia 3- Pedro Prado (Jefe de área de Agrosostenibilidad. Agencia Estatal Investigación-MEIC). “Agencia Estatal de Investigación: visión de la colaboración Ciencia-Empresa.”

18:30 – 18:40 h: Ponencia 4- David Lapuente (Técnico de proyectos. BIOVEGEN). “BIOVEGEN: herramientas y evolución colaboración Ciencia-Empresa.”

18:40 – 19:15 h: Coloquio y preguntas. “Colaboración público-privada”. Situación y perspectivas. Todos los ponentes.

Sesión III – Herramientas Tecnológicas. Sala Menor, Hospedería Fonseca.

Moderadora: Pilar Testillano (CIB-CSIC, Madrid)

17:30 – 17:45 h: Comunicación oral 1- Sara Selma (IBMCP, CSIC-UPV, Valencia). “Combinatorial design of modular and programmable transcriptional regulators in plants.”

17:45 – 18 h: Comunicación oral 2- Samuel Daniel Lup (Instituto de Bioingeniería, Universidad Miguel Hernández, Elche). “Easymap: a user friendly analysis tool for mapping-by-sequencing of large insertions and point mutations.”

18 – 18:15 h: Comunicación oral 3- Alberto Carbonell (IBMCP, CSIC-UPV, Valencia). “Fine-tune regulation of artificial small-RNA mediated gene silencing in plants.”

18:15 – 18:30 h: Comunicación oral 4- Adrian A. Valli (CNB-CSIC, Madrid). “The viral-derived HAM1 pyrophosphatase is required for the ipomovirus *Ugandan cassava brown streak virus* to infect its natural host but not a model plant.”

18:30 – 18:45 h: Comunicación oral 5- Pilar S. Testillano (CIB-CSIC, Madrid). “Autophagy and cathepsin-like proteases are activated and play a role in stress-induced cell death during microspore embryogenesis in barley.”

18:45 – 19 h: Comunicación oral 6- Isabel Betegón-Putze (CRAG, CSIC-IRTA-UAB-UB, Barcelona). “MyROOT: A novel method and software for the semi-automatic measurement of plant root length.”

19:30 h: Cocktail de bienvenida. Visita nocturna de la ciudad.

Jueves 5 Julio

Sesión IV – Desarrollo

Moderadores: Cristina Ferrándiz (IBMCP, CSIC-UPV, Valencia), David Posé (IHSM-UMA-CSIC, Málaga)

9 – 9:20 h: Ponencia 1- David Posé (IHSM-UMA-CSIC, Málaga). “Study of transcriptional regulatory network controlling strawberry fruit ripening and quality.”

9:20 – 9:40: Ponencia 2- Vicente Balanzà (IBMCP, CSIC-UPV, Valencia). “Life span in monocarpic plants: unraveling the basis of Global Proliferative Arrest.”

9:40 – 9:55 h: Comunicación oral 1- Jorge Fung-Uceda (CRAG, CSIC-IRTA-UAB-UB, Barcelona). “The circadian clock sets the time of DNA replication licensing to regulate growth in *Arabidopsis*.”

9:55 – 10:10 h: Comunicación oral 2- Mary Paz González-García (CNB-CSIC, Madrid). “A transcriptional reprogramming module for stem cell differentiation.”

10:10 – 10:25 h: Comunicación oral 3- Jordi Moreno-Romero (CRAG, CSIC-IRTA-UAB-UB, Barcelona y Uppsala BioCenter, Sweden). “The effect of parental-specific epigenetic marks in *Arabidopsis* endosperm development.”

10:25 – 10:40 h: Comunicación oral 4- Raquel Iglesias-Fernández (CBGP, UPM-INIA, Madrid). “Regulation of the asparagine synthetase encoding gene *HvASN1* in barley seeds by transcription factors HvbZIP53 and HvBLZ1.”

10:40 – 10:55 h: Comunicación oral 5- Riad Nadi (Universidad Miguel Hernández, Elche, Alicante). “*Arabidopsis* INCURVATA11 and CUPULIFORMIS2 are new components of the epigenetic machinery.”

11 – 12h: Pausa café | Pósteres.

Sesión V – Regulación Ambiental del Desarrollo

Moderadores: Miguel A. Blázquez (IBMCP, CSIC-UPV, Valencia), Myriam Calonje (IBVF-CSIC, Universidad de Sevilla)

12 – 12:20 h: Ponencia 1- Ángeles Gómez-Zambrano (IBVF, CSIC-Universidad de Sevilla, Sevilla). “PRC1-mediated H2A.Z monoubiquitination is crucial to regulate developmental and environmental responses in Arabidopsis.”

12:20 – 12:40 h: Ponencia 2- Eugenio G. Minguet (IBMCP, CSIC-UPV, Valencia). “The COP1/SPA complex relays light and temperature information on DELLA proteins in Arabidopsis.”

12:40 – 12:55 h: Comunicación oral 1- Sandra Fonseca (CNB-CSIC, Madrid). “DET1 complexes control photomorphogenesis by acting at the interface between light signaling and epigenome dynamics.”

12:55 – 13:10 h: Comunicación oral 2- Mariano Perales (CBGP, UPM-INIA, Madrid). “A night hour counter mechanism underlies poplar seasonal growth.”

13:10 – 13:25 h: Comunicación oral 3- Charlotte Gommers (CSIC-IRTA-UAB-UB, Barcelona). “*Blinded by the light*- Retrograde signals suppress photomorphogenesis via *GLK1* during high light.”

13:30 – 15 h: Comida.

Sesión VI – Señalización

Moderadores: Andrea Chini (CNB-CSIC, Madrid), Salomé Prat (CNB-CSIC, Madrid)

15 – 15:20 h: Ponencia 1-Andrea Chini (CNB-CSIC, Madrid). “When Chemistry meets Biology: identification of a novel OPR3-independent pathway for JA biosynthesis.”

15:20 – 15:40 h: Ponencia 2- Cristina Martínez (CNB-CSIC, Madrid). “PIF4-induced BR-synthesis is critical to diurnal and thermomorphogenic growth.”

15:40 – 15:55 h: Comunicación oral 1- Tamara Lechón (CIALE-USAL, Salamanca). “Nitric oxide regulates maintenance of the root apical meristem by confining WOX5 expression to the quiescent center.”

15:55 – 16:10 h: Comunicación oral 2- Jorge Hernández-García (IBMCP, CSIC-UPV, Valencia). “Origin of the gibberellin-dependent transcriptional regulation by molecular exploitation of a transactivation motif in DELLA proteins.”

16:10 – 16:25 h: Comunicación oral 3- Irene García (IBVF, CSIC-Universidad de Sevilla, Sevilla). “Is S-Cyanylation a novel protein post-translational modification?”

16:30 – 17:30 h: Pausa café | Pósteres.

Sesión VII -Estrés abiótico

Moderadores: Rafael Catalá (CIB-CSIC, Madrid), Juan Carlos del Pozo (CBGP, UPM-INIA, Madrid)

17:30 – 17:50 h: Ponencia 1- Rafael Catalá (CIB-CSIC, Madrid). “New insights on the determination of spliceosome specificity.”

17:50 – 18:10 h: Ponencia 2- Ángela Saez (CBGP, UPM-INIA, Madrid). “Root responses to phosphate starvation: novel functions of cisZeatin and BiAux.”

18:10 – 18:25 h: Comunicación oral 1- José Julián (IBMCP, CSIC-UPV, Valencia). “BPM3 and BPM5 subunits of Cullin3-RING E3 ubiquitin ligases target clade A PP2Cs for degradation.”

18:25 – 18:40 h: Comunicación oral 2- Noemí Ruiz-López (UMA-IHSM, CSIC, Málaga). “Arabidopsis Synaptotagmins 1 and 3 are involved in lipid homeostasis at ER-PM contact sites under cold stress.”

18:40 – 18:55 h: Comunicación oral 3- Alejandro Navarro (CNB-CSIC, Madrid). “Uncoupling growth repressive and abiotic-stress tolerance effects of DELLAs.”

18:55 – 19:10 h: Comunicación oral 4- Laura Lamelas (Universidad de Oviedo, Oviedo). “Epigenetic regulation of heat stress response is revealed through subcellular proteomics analysis in *Pinus radiata*.”

19:10 – 19:25 h: Comunicación oral 5- Reyes Ródenas (CEBAS, CSIC, Murcia). “Essential regions involved in function and regulation of the Arabidopsis high-affinity K⁺ transporter AtHAK5.”

19:30 – 20:30 h: Asamblea ordinaria SEFV. Sala Menor, Hospedería Fonseca.

21 h: Cena del Congreso. Hotel Alameda Palace.

Viernes 6 Julio

Sesión VIII – Metabolismo

Moderadores: Manuel Rodríguez Concepción (CRAG, CSIC-IRTA-UAB-UB, Barcelona), Francisco J. Cejudo (IBVF-CSIC, Universidad de Sevilla)

9 – 9:20 h: Ponencia 1- Juan Manuel Pérez Ruiz (IBVF-CSIC, Universidad de Sevilla, Sevilla). “The role of 2-Cys peroxiredoxins in the oxidation of chloroplast redox-regulated enzymes in the dark.”

9:20 – 9:40 h: Ponencia 2- M. Victoria Barja (CRAG, CSIC-IRTA-UAB- UB, Barcelona). “Finding the enzymes that feed the carotenoid pathway in different plant tissues.”

9:40 – 9:55 h: Comunicación oral 1- Alma Burciaga-Monge (CRAG, CSIC-IRTA-UAB-UB, Barcelona). “Esteryl ester biosynthesis in tomato.”

9:55 – 10:10 h: Comunicación oral 2- Inmaculada Coletto (Universidad del País Vasco UPV/EHU, Bilbao). “*MYB28* and *MYB29* genes participate in the regulation of Arabidopsis response to ammonium stress.”

10:10 – 10:25 h: Comunicación oral 3- M. Luisa Hernández (Instituto de la Grasa, CSIC, Sevilla). “Insights into the members of the microsomal oleate desaturase (*FAD2*) gene family involved in linoleic acid synthesis in olive (*Olea europaea*).”

10:30 – 11:30 h: Pausa café | Pósteres.

Sesión IX – Interacción planta otros organismos

Moderadoras: Isabel Díaz (CBGP, UPM-INIA Madrid), Ainhoa Martínez-Medina (iDiv Halle-Jena-Leipzig, Alemania)

11:30 – 11:50 h: Ponencia 1- Ainhoa Martinez-Medina (iDiv, Friedrich Schiller University, Germany). “Root mutualistic symbionts: plant allies in a multitrophic context.”

11:50 – 12:10 h: Ponencia 2- Ana Arnaiz (CBGP, UPM-INIA, Madrid). “ROS homeostasis essential in plant defence responses to pests.”

12:10 – 12:25 h: Comunicación oral 1- Andrea Sanchez-Vallet (ETH-Zurich, Switzerland). “Partial resistance in wheat is triggered upon recognition of an avirulence gene.”

12:25 – 12:40 h: Comunicación oral 2- Javier Cabrera (Universidad de Castilla-La Mancha, Toledo). “Key genes for root development are also relevant for gall formation by root- knot nematodes.”

12:40 – 12:55 h: Comunicación oral 3- M. Luisa Domingo-Calap (CRAG, CSIC-IRTA-UAB-UB, Barcelona). “Unexpected negative effect of *Watermelon Mosaic Virus* (WMV) P1 gene product on the silencing suppressor activity of *Cucurbit Yellow Stunting Disorder Virus* (CYSDV) P25.”

12:55 – 13:10 h: Comunicación oral 4- Pepe Cana-Quijada (IHSM-UMA-CSIC, Universidad de Málaga, Málaga). “NAHG increases transient transformation of *Arabidopsis* leaves by *Agrobacterium*.”

13:15 – 14:15 h: Conferencia Clausura- José Alonso (North Carolina State University, USA). “Plant signal integration: lesson from ethylene and auxin.”

14:15: Comida y despedida.