

Organización ExpoBAC

Comunicaciones Orales

- Sesión 1: Miércoles 10 de julio (12:00 – 12:30)

Sala 1

- CO-01 (*Bioinformática y ómicas*) - Impact of expressing different CRISPR-Cas13 systems in a bacterial model - **Álvaro Martínez Martínez**
- CO – 02 (*Bioinformática y ómicas*) - Deep Mutational Scanning of the ALS SOD1 protein to comprehensively map the impact of mutations on protein stability – **Tomás Quiroga**
- CO-03 (*Bioinformática y ómicas*) - Automation in Molecular Dynamics: Advancing GROMACS Analysis through ASGARD - **Alejandro Rodríguez Martínez**

Sala 2

- CO-04 (*Biotecnología agroalimentaria*)- Unveiling mechanistic insights into the anti(neuro)-inflammatory potential of urolithins - **Beatriz Garay Mayol**
- CO-05 (*Biotecnología agroalimentaria*)- Obtaining safe fungal biofactories using CRISPR/Cas9 for the production of compounds of interest in the agri-food industry - **María Gómez Romero**
- CO-06 (*Biotecnología agroalimentaria*)- Improvement of extraction methodology white grape seed protein for white wine clarification - **María Dolores Sánchez Gómez**

Sala 3

- CO-07 (*Biotecnología médica y animal*) - Evaluation of the therapeutic potential of two histone deacetylase inhibitors in biomedical models of Parkinson's Disease - **Inmaculada Sanchis Martínez**
- CO-08 (*Biotecnología médica y animal*) – Impact of particulate matter pollution on an in vitro model of human macrophages - **Celia García-Mota Ballesteros**
- CO-09 (*Biotecnología médica y animal*) - Assessment of circadian system functioning and sleep in a blind population. A pilot study - **David Martínez Martínez**

Sala 4

- CO-10 (*Microbiología y virología*) - Understanding the molecular basis of *Sinorhizobium fredii* HH103- soybean compatibility conferred by bacterial secreted proteins - **Ana María Cutiño Gobeia**
- CO-11 (*Microbiología y virología*) - Analysis of methylation-regulated transcriptional responses in the basal fungus *Rhizopus microsporus* in response to environmental stimuli - **Natalia Nicolás Muñoz**
- CO-12 (*Microbiología y virología*) - A novel regulator that modulates the expression of genes of the nod regulon of *Sinorhizobium fredii* HH103 - **Sara Lozano Morillo**

- Sesión 2: Miércoles 10 de julio (16:00 – 16:30)

Sala 1

- CO-13 (*Biotecnología ambiental*) - Mulching with dry pruning residues improves the physical, chemical and microbiological properties of the soil in citrus x lemon crops - **Rafael Olmos Ruiz**
- CO-14 (*Bioinformática y ómicas*) - TOLEDO: Enhancing Tools for Extended Molecular Dynamics Simulations in Biomedical Research - **Miguel Carmena-Bargueño**
- CO-15 (*Biotecnología médica y animal*) - Role of telomerase RNA (TERC) in antitumoral response against glioblastoma - **Inmaculada Martínez Olmo**

Sala 2

- CO-16 (*Biotechnología agroalimentaria*) - Identifying differential germination properties of high- and low-salinity tolerant species - **Ángel Almagro López**
- CO-17 (*Biotechnología agroalimentaria*) - Search for molecular markers for melon stress resistance - **Gloria Bárzana**
- CO-18 (*Biotechnología agroalimentaria*) - Interaction of abiotic and biotic stimulants and their effect on tomato plants - **María Hurtado Navarro**

Sala 3

- CO-19 (*Biotechnología industrial*) - Metabolic engineering, optimization and scale-up of a serotonin overproducer *Saccharomyces cerevisiae* strain - **Andrés Planells Cárcel**
- CO-20 (*Biotechnología industrial*) - Development of Zero Waste Biogas Plants: A Case Study in Murcia - **Luis Bañón Sánchez**
- CO-21 (*Biotechnología industrial*) - Metabolic and Genetic engineering for the efficient production of industrially value chemicals - **Carlos Azogue Palma**

Sala 4

- CO-22 (*Microbiología y virología*) - Phage isolation of *Tenacibaculum* sp. - **Marina García Cervera**
- CO-23 (*Microbiología y virología*) - Isolation and Description of New Amelanogenic Strains of *Marinomonas mediterranea* - **Víctor Andrés González**
- CO-24 (*Microbiología y virología*) - A two-component system regulates different bacteriophage defense systems across *Marinomonas mediterranea* strains - **Christian Martínez Jiménez**

- **Sesión 3: Jueves 11 de julio (12:00 – 12:30)**

Sala 1

- CO-25 (*Nano(bio)tecnología*) - Fluorescent N-Acetyl-L-Cysteine gold nanoclusters for the detection of sympathomimetic drugs - **Helena Sanz Andrés**
- CO-26 (*Nano(bio)tecnología*) - Broccoli Aquaporin Proteoliposomes: A Nanocarrier for Resveratrol Delivery - **Lucía Yepes Molina**
- CO-27 (*Nano(bio)tecnología*) - Exploring the efficiency of nanoencapsulated Brassicaceae sprouts extracts against *Helicobacter pylori* - **Paula García Ibáñez**

Sala 2

- CO-28 (*Biotechnología agroalimentaria*) - Effect of AgNPs on defense-related genes expression of *in vitro* apricot plants - **Marina Martín de Valmaseda Sánchez**
- CO-29 (*Biotechnología agroalimentaria*) - Foliar Application of Flavonoids as Tomato Plants Biostimulators by enhancing Growth and modification of Gene Expression - **Alberto Martínez Alonso**
- CO-30 (*Biotechnología agroalimentaria*) - Exploring plant by-product extracts as priming agents - **Lorena Albaladejo Maricó**

Sala 3

- CO-31 (*Biotechnología médica y animal*) - Characterisation of Variants in the C3 Component of Complement Associated with Pathology - **Marta Martínez López**
- CO-32 (*Biotechnología médica y animal*) - Characterization of zebrafish models of the NEDAMSS rare disease - **Celia Muñoz Menzinger**

- CO-33 (*Biotecnología médica y animal*) - Hypoxia-induced Bhlhe40 is a key regulator of proliferation and angiogenesis in mouse embryoid bodies - **Ana Isabel Gil Acero**

Sala 4

- CO-34 (*Microbiología y virología*) - Searching for novel antimicrobials through functional metagenomics - **Luis Andreo Andreu**
- CO-35 (*Microbiología y virología*) - Antimicrobial resistance study of bacterial isolates in Turkana County (Kenya) - **Pablo Fiel Berbejal**
- CO-36 (*Microbiología y virología*) - Characterising the *Sinorhizobium fredii* USDA257 Type VI Secretion System - **Pedro José Reyes Pérez**
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Sesiones de Póster

- P-01 (*Biotecnología médica y animal*) – Anti-EPO antibodies as a cause of pure acquired red series aplasia - **Eulalia Campos Baños**
- P-02 (*Biotecnología médica y animal*) – Antitumor activity of novel tryptophan-derived betaxanthins in *Caenorhabditis elegans* - **Paula Henarejos Escudero**
- P-03 (*Biotecnología médica y animal*) – An iPSC model to study the role of MHC-I and MHC-II in neurodegeneration and regeneration of ALS - **Alba Tomas Sitjes**
- P-04 (*Biotecnología médica y animal*) – Studying the role of ketonic bodies in the induction of innate immune memory - **Iria López Estrada**
- P-05 (*Biotecnología médica y animal*) – Hydroxytyrosol alpha- and gamma-linolenate: optimization of the synthesis by enzymatic route - **Lucía Domínguez Gámbez**
- P-06 (*Biotecnología médica y animal*) – Development of a zebrafish model of Huppke-Brendel síndrome - **Antonio Aranega Conesa**
- P-07 (*Biotecnología médica y animal*) – MAPK and leukaemia: a mystery - **Juan José Garzón Bravo**
- P-08 (*Biotecnología médica y animal*) – Screening of peptide phage display libraries for the identification of high-affinity binding candidates against herpes simplex virus 1 - **Alejandro Martín Almendros**
- P-09 (*Biotecnología médica y animal*) – Early Recognition Events in Hybrid Amyloid Assembly Spotted at Atomic Resolution - **Sara Andrés Campos**
- P-10 (*Biotecnología médica y animal*) – Fighting frontotemporal dementia: uncovering the potential of cb 2 receptor antagonists - **Ignacio Silva Llanes**
- P-11 (*Biotecnología médica y animal*) – The role of p38 γ and p38 δ in epithelial cells in ulcerative colitis - **Marta Meireles da Silva Gil**
- P-12 (*Biotecnología médica y animal*) – Developing colorectal cancer co-culture models for the assessment of lymphocytic infiltration - **Carlos Mateos Sánchez**
- P-13 (*Biotecnología médica y animal*) – Multi-omics evaluation of the activity of encapsulated olive leaf extracts in obesity management - **Marta Fernández Oliver**
- P-14 (*Biotecnología médica y animal*) – Intestinal permeability study of two dietary polyphenols with anorexigenic effects through GLP-1 modulation in Caco-2 cell monolayers - **Marta Fernández Oliver**
- P-15 (*Biotecnología médica y animal*) – Optimization of the obtention of antimicrobial extracts from Galician mussels (*Mytilus galloprovincialis*) for applications in aquaculture - **Raúl Bonet García**
- P-16 (*Biotecnología médica y animal*) – Study of the molecular mechanisms underlying the antiviral activity of natural extracts with potential application in aquaculture - **Raúl Bonet García**
- P-17 (*Biotecnología agroalimentaria*) – Optimization of lemon nanovesicles extraction for advanced applications - **María Gómez Molina**

- P-18 (*Biología agroalimentaria*) - Optimization of *in vitro* culture protocols for *Vigna radiata* L. as model cells to safener studies using melatonin - **Manuela Giraldo Acosta**
- P-19 (*Biología agroalimentaria*) - Different doses of spent mushroom substrate for new production cycles - **Wagner Gonçalves Vieira Junior**
- P-20 (*Biología agroalimentaria*) - Recovered collagen hydrolyzed with plant protease to produce peptides with ACE inhibitory activity - **Laura María Isabel López**
- P-21 (*Biología agroalimentaria*) - Study of introgression lines in melon to find resistance to *Macrophomina phaseolina* - **Miguel Ángel Moreno Martínez**
- P-22 (*Biología agroalimentaria*) - Production of antifungal proteins using filamentous fungi as biofactories - **María Gómez Romero**
- P-23 (*Biología agroalimentaria*) - Process for selection and characterization of different *Lactiplantibacillus plantarum* strains as malolactic fermentation starter culture - **Celia Barreiro Obregón**
- P-24 (*Biología agroalimentaria*) - Characterization of genes involved in development and response to abiotic factors in *Capsicum annum* - **Stephany Mares Ledesma**
- P-25 (*Biología agroalimentaria*) - Antioxidant Power of Edible Substrates Fermented with Lignocellulolytic Fungal Mycelia - **Mónica López González**
- P-26 (*Biología agroalimentaria*) - Production of bioactive compounds in *Daucus carota* (L.) cell cultures under elicitation conditions - **José Manuel Correa Sabater**
- P-27 (*Biología agroalimentaria*) - Influence of Aquaporins on the availability of water from substrates for growing cannabis, as well as their impact on the CBD performance - **Nidia Edith Ortiz Delvasto**
- P-28 (*Biología agroalimentaria*) - From Darkness to Light: Molecular Mechanisms of Broccoli Blindness - **Juan Nicolás Espinosa**
- P-29 (*Biología agroalimentaria*) - Enhancing tomato crop under water stress by phenolic compounds and beneficial microorganisms - **María Hurtado Navarro**
- P-30 (*Biología agroalimentaria*) - Effects of salinity on the growth of 4 broccoli cultivars - **Ángel Almagro López**
- P-31 (*Biología agroalimentaria*) - Role of the transcription factor Slcia2 in plant development and hormone signalling in tomato cv. Micro-Tom - **Inmaculada Román García**
- P-32 (*Biología agroalimentaria*) - Pilot-scale production of bio-based fertilizers through Black soldier fly bioconversion process - **María José González Fernández**
- P-33 (*Biología agroalimentaria*) - TOMAGROUP: Development of sustainable biostimulants for circular fertilisation of tomato crops - **María José González Fernández**
- P-34 (*Biología agroalimentaria*) - Tools for functional analysis of *Botrytis cinerea* natural mutants altered in pathogenicity and development - **Vlad Paul Mihaila Novac**
- P-35 (*Biología agroalimentaria*) - Modulating broccoli metabolism gene expression through plant extract application - **Lorena Albaladejo Maricó**
- P-36 (*Biología agroalimentaria*) - Improvement of the physicochemical limitations of rhapontigenin - **Antonio Sánchez Belmonte**
- P-37 (*Biología industrial*) - Understanding the enzymatic synthesis of a new branched ester: 1,10-decyl di-2-methylpentanoate - **M^a Dolores Murcia Almagro**
- P-38 (*Biología industrial*) - Optimization and kinetics of the biosynthesis of 2-butyloctyl laurate - **M^a Dolores Murcia Almagro**
- P-39 (*Biología ambiental*) - Construction and evaluation of TadA-T7RNAPol system as an *in vivo* directed evolution tool - **Alejandro Serrano Sánchez**
- P-40 (*Biología ambiental*) - Study and selection of endophytic bacteria isolated from different plant species from the salt pans of the Bay of Cadiz Natural Park - **Nieves Rodríguez Sanchez de Molina**

- P-41 (*Biotecnología ambiental*) – Optimising the enzymatic synthesis of solvent-free bis(2-ethylhexyl) adipate: a sustainable alternative for lubricants, cosmetics and biodiesel - **Ángel Magdaleno Molina**
- P-42 (*Biotecnología ambiental*) – Degradation of lipid regulators by the fungus *Penicillium oxalicum* XD3.1 - **Maya Sánchez Martínez**
- P-43 (*Biotecnología ambiental*) – Unravelling the connection between glutathione reductase (GR) and the circadian clock signalling network and its interaction with saline stress in *Arabidopsis thaliana* - **Desiré Cano Yelo**
- P-44 (*Biotecnología ambiental*) – Metabarcoding applications in the analysis of fish diet and trophic ecology - **Idelfonso Palencia Álvarez**
- P-45 (*Biotecnología ambiental*) – Redox regulation of plant autophagy and ABA signalling by thioredoxin o1 through modulation of ATG4 and PYR1 - **Sabrina Analía De Brasi Velasco**
- P-46 (*Biotecnología ambiental*) – Role of thioredoxin o1 in autophagy and stomatal aperture in *Arabidopsis thaliana* plants under salinity - **Raquel López Martínez**
- P-47 (*Biotecnología ambiental*) – Innovative strategies to improve control of invasive species: spray- induced gene silencing (SIGS) - **Juan Pedro Martínez-García**
- P-48 (*Nano(bio)tecnología*) - Giant Unilamellar Vesicles responsive to physical stimuli - **Pablo José Alarcón Meseguer**
- P-49 (*Nano(bio)tecnología*) - Membrane vesicles from Broccoli as Potential Nanocarriers for Bioactive Compounds - **Lucía Yepes Molina**
- P-50 (*Nano(bio)tecnología*) - Bionanoencapsulation of Bimi® extracts increases biodisponibility for a low-grade inflammation hepatocyte model - **Paula García Ibáñez**
- P-51 (*Bioinformática y ómicas*) - T-Cell Receptor Diversity in knee Osteoarthritis patients - **María Marco Salvador**
- P-52 (*Microbiología y virología*) – Autophagy inducers and the role of the cAMP-PKA signalling pathway in the dimorphic yeast *Schizosaccharomyces japonicus* - **Miriam Sánchez Giménez**
- P-53 (*Microbiología y virología*) - Role of the cAMP-PKA pathway during regulation of actin cytoskeleton integrity and cytokinesis in *Schizosaccharomyces pombe* - **Antonio Marín Castillo**
- P-54 (*Microbiología y virología*) - Phenotypic analysis of the synthetic alteration of cyclic diguanylate levels in various strains of rhizobia - **Juan Aranda Pérez**
- P-55 (*Microbiología y virología*) - Activity of Meropenem-Vaborbactam against multidrug-resistant clinical isolates of *Pseudomonas aeruginosa* - **Alejandro Virués Morales**
- P-56 (*Microbiología y virología*) - Engineering *E. coli* for targeted tumor cell invasion and toxin delivery - **Ana Ferrández Múrtula**
- P-57 (*Microbiología y virología*) - CRISPR-Cas regulatory mechanisms: Significance of σ /anti- σ DdvS/DdvA pairing in the bacterium *Myxococcus xanthus* - **Ana María Crevillén Caracena**
- P-58 (*Microbiología y virología*) - Exploring the potential role of a *Rhizobium tropici* CIAT 899 glycosyl-hydrolase protein in rhizobium-legume symbiosis through extracellular membrane vesicles - **Alexia Elisenda López Borrás**
- P-59 (*Microbiología y virología*) - Testing of repositioned drugs in the *in vivo* model *Galleria mellonella* larvae infected with *Staphylococcus aureus* - **Helena Álvarez Ferrero**
- P-60 (*Microbiología y virología*) - Importance of mapping and zoning in the environmental microbiological plan, for control of *Listeria monocytogenes*, in frozen vegetable industry - **Irene García Panadero**
- P-61 (*Microbiología y virología*) - Identifying new last-resource antibiotic resistance mechanisms through functional metagenomics - **Luis Andreo Andreu**