

Monday, 18 December 2023

11:00-12:00 POSTER SESSION I

Poster 1: Elena Parés Guillén. The ISPpu9 insertion sequence of *Pseudomonas putida* KT2440: relevance of the conserved flanking sequences. *PI: F Rojo de Castro*

Poster 2: Emma Díaz. Metabolic labelling of proteins with click chemistry in absence of sigma-R1. *PI: P Gastaminza*

Poster 3: Juan Manuel Martínez Romero. Structural analysis of the L-A double-stranded RNA virus of *Saccharomyces cerevisiae*. *PI: JR Castón*

Poster 4: Alba Murillo Sánchez. Genomic and environmental architecture of the natural variation for trichome patterning in *Cardamine hirsuta*. *PI: C Alonso Blanco*

Poster 5: Borja Pitarch Jiménez. Application of high fidelity structural models for the study of proteic function phenomenon and functional site predictions. *PI: F Pazos*

Poster 6: Margarita Ferriz Salcedo. Response of resident macrophages to peritoneal colorectal tumor metastasis. *PI: C Ardavin*

Tuesday, 19 December 2023

11:00-12:00 POSTER SESSION II

Poster 1: Jimena Muntaner Pérez-Urria. Bag1 has a key role in the Hsp70-assisted, proteasome-mediated degradation pathway. *PI: JM Valpuesta*

Poster 2: Ángel Ruiz Enamorado. Control of mutation rate by a nucS antisense RNA in *Mycobacterium tuberculosis*. *PI: J Blázquez Gómez*

Poster 3: Rafael García López. Cassava and Ugandan Cassava Brown Streak Virus, an attractive case of Plant-Pathogen co-evolution. *PI: A Valli*

Poster 4: Enara San Sebastian Casas. Ku heterodimer restricts episomal DNA virus gene expression. *PI: U Garaigorta de Dios*

Poster 5: Kateryna Matveyeva. Activation of innate immune system by endogenous production of double-stranded RNAs in DIDO3 mutants. *PI: KHM. van Wely*

Poster 6: Alicia Lou Gracia. Developmental underpinnings of *Caenorhabditis elegans* genotype-to-phenotype map. *PI: M Chagoyen & J Poyatos*

XXXI CNB SCIENTIFIC WORKSHOP

18-19 December 2023

CNB WORKSHOP



Photo courtesy of Pablo Pulido

Monday, 18 December 2023

09:30 Welcome by Mario Mellado, CNB director

Session 1. Chair: Julia Pastor Fernández

09:40 Sara Hernando-Amado. Approaches based on evolutionary robustness to tackle Pseudomonas aeruginosa infections.

10:00 Fernando Moreno-Herrero. Human HELB and its role in the processing of RPA-RAD51-ssDNA filaments in Homologous Recombination.

10:20 Yolanda R. Carrasco. Driving forces that adjust B lymphocyte behavior: the Btk/MyD88 axis.

10:40 Carlos Pedrós-Alió. The limits of life at extremely low water activity.

COFFEE BREAK AND POSTER SESSION I

Elena Parés Guillén
PI: F Rojo de Castro

Emma Díaz
PI: P Gastaminza

Juan Manuel Martínez Romero
PI: JR Castón

Alba Murillo Sánchez
PI: C Alonso Blanco

Borja Pitarch Jiménez
PI: F Pazos

Margarita Ferriz Salcedo
PI: C Ardavin

Session 2. Chair: Eva M^a García Cuesta

12:00 Jose Maria Carazo. Macromolecular flexibility (and dynamics?) by cryoEM.

12:20 Carmen Elena Gómez Rodríguez. Use of Attenuated Poxvirus Strains as a Vaccine Platform Against Infectious Diseases.

12:40 Juan F Poyatos. A regression to predict disease?.

13:00 Sandra Fonseca. Photomorphogenic repressors: many regulatory layers to control plant growth.

PhD researchers Session I. Chair: Gema Castillo García

15:00 Jorge Sastre Domínguez. Plasmid-encoded insertion sequences promote rapid adaptation in clinical enterobacteria. *PI: Á San Millán & A Santos López*

15:15 Sofia Gardeta Castillo. The complex dynamics of chemokine receptors influences their cellular function. *PI: M Mellado*

15:30 Juan Rivas-Santisteban. Quantifying microbial guilds. *PI: J Tamames*

Session 3. Chair: Daniel Rodríguez Martín

16:00 Antonio Leyva. Fight, flight or freeze.

16:20 Rafael Giraldo. Exploring the frontiers between functional and proteinopathic bacterial amyloids.

16:40 Sonia Zuñiga. Human coronaviruses-host interaction: RNA helicases and pathogenesis.

17:00 Rubén García. Developing tools to decipher new intercellular languages.

Tuesday, 19 December 2023

Session 4. Chair: Jose Luis Vilas Prieto

09:40 Mónica Chagoyen. Housekeeping and cell specific genes along development.

10:00 Fernando Corrales. Weighing peptides to understand biology. Mass spectrometry-based applications.

10:20 Marta Nieto. Exuberance underlies circuit diversity in the developing brain.

10:40 Thierry Fischer. You are what you eat. Really?.

COFFEE BREAK AND POSTER SESSION II

Jimena Muntaner Pérez-Urria
PI: JM Valpuesta

Ángel Ruiz Enamorado
PI: J Blázquez Gómez

Rafael García López
PI: A Valli

Kateryna Matveyeva
PI: KHM van Wely

Enara San Sebastian Casas
PI: U Garaigorta de Dios

Alicia Lou Gracia
PI: M Chagoyen & J Poyatos

Session 5. Chair: James Pelletier

12:00 Alvaro San Millan Cruz. Plasmid Biology and Evolution lab.

12:20 Mercedes Ricote. Mother's milk drives maturation of heart metabolism.

12:40 Jorge Vicente Conde. Role of the N-degron pathways in maintaining proteostasis during plant immune response

13:00 Mark van Raaij. Receptor-binding proteins of bacteriophages infecting Staphylococcus and Salmonella.

PhD researchers Session II. Chair: Sergio Pipaón Alcibar

15:00 David Herreros Calero. Advanced approaches to approximate continuous molecular states from CryoEM data. *PI: JM Carazo & CÓ Sánchez Sorzano*

15:15 Liping Tang. BRC1 interacting proteins in Arabidopsis thaliana. *PI: P Cubas & M Nicolas*

15:30 Jesús Hurtado Tamayo. Contribution of SARS-CoV-2 ORF8 to viral pathogenesis. *PI: I Solá Gurpegui*

Session 6. Chair: Beatriz Alvarez Gonzalez

16:00 Juan García-Arriaza. COVID-19 vaccine candidates based on the modified vaccinia virus Ankara vector induced potent immunogenicity and full efficacy in animal models.

16:20 David Juan Sopeña. Comparative primate genomics to understand evolution, health, and disease.

16:40 Alfonso Santos Lopez. Experimental evolution and antibiotic resistance.

17:00 Jose J. Sanchez Serrano. An evolutionary view on the transmission of wound signals in plants.