



XLIV CONGRESO DE LA SOCIEDAD ESPAÑOLA DE GENÉTICA (SEG2025)

Programa detallado

Organiza:



Universidad
Politécnica
de Cartagena

Patrocina:



MARTES 8 JULIO

18:30-19:30 Registro participantes y acreditación.

18:30-19:30 **Bienvenida al congreso**

19:30-20:30 **Premio Nacional de Genética**

Presentan:

Isabel Durán - Directora de Programas de la Fundación Pryconsa

Maite Roldán - Presidenta Sociedad Española de Genética



20:30-21:00 **Evento Social**

MIÉRCOLES 9 JULIO

08:30- 09:00 Registro participantes y acreditación

09:00- 10:30 **Sesión Genómica**

Moderadores:

Aureliano Bombarely y Silvia Manrique

cnag

centre nacional d'anàlisi genòmica
centro nacional de análisis genómico

9:00-9:30 **Ponencia Invitada:**

José M. Jiménez-Gómez

Parallel evolution in Arabidopsis thaliana accessions from Cape Verde Islands

9:30-10:15 **Comunicaciones orales**

9:30-9:45 **Alberto Gila Navarro**

Cannabis sativa trichomes are enriched in protein trafficking genes

9:45-10:00 **Pablo Carrillo Marín**

A comparative analysis of candidates for DNA N6-methyladenine represses in Early-Diverging Fungi

10:00-10:15 **Victor Garcia-Carpintero Burgos**

Evaluation of the impact of transcript diversity on genome annotation

10:15-10:30 **Flash talks**

10:15-10:20 **María del Pilar Lazúen Moreno**

Genomic insights into climate change resilience of the snow vole (Chionomys nivalis) in Spanish mountain parks

10:20-10:25 **Julia Weiss**

PhGIGANTEA2 separates biomass production from floral transition in Petunia x hybrida

10:25-10:30 **Tamara Martín García**

Towards fast-track citrus breeding through characterization of an early-flowering orange mutant

MIÉRCOLES 9 JULIO

10:30- 11:00 **Pausa café + Posters**

11:00- 12:30 **Sesión Salidas profesionales de la genética**

Moderador:

Marcos Egea

Ponentes:

Isabel López Expósito - Directora del Centro de Bioquímica y Genética Clínica (CBGC)

Juan Manuel Herrero - Genetic Services Specialist Pig Improvement Company (PIC)

Belén de la Morena - Doctora en Medicina por la Universidad de Murcia | CEO LongSeq App

12:30- 14:00 **Sesión Mejora Genética Animal**

Moderadora:

Eva Armero



12:30-13:00 **Ponencia Invitada:**

Luis Varona Aguado

Variabilidad genética en el fardo de consanguinidad

13:00-13:45 **Comunicaciones orales**

13:00-13:15 **Agustín Blasco**

Metagenomic data are compositional. The problem of the zeros

13:15-13:30 **Eva Armero Ibáñez**

Estima de heredabilidades para caracteres de crecimiento en dorada (Sparus aurata)

13:30-13:45 **Sara Pérez-Redondo**

Harnessing landscape genomics to unravel adaptation to water stress in sheep from south-west Europe

13:45-14:00 **Flash talks**

13:45-13:50 **Aitor Guisasola Serrano**

Transcriptomic landscape of the ovine spleen following repetitive vaccination

13:50-13:55 **José Manuel Suárez Cárdenas**

Transcriptomic profiling at single cell resolution highlights intestinal immunometabolic changes in the porcine ileum during Salmonella infection

14:00-15:30 **Comida**

MIÉRCOLES 9 JULIO

- 15:30- 17:00 **Sesión Citogenómica y dinámica de cromosomas**
Moderadora:
Aurora Ruiz
- 15:30-16:00 **Ponencia Invitada:**
Nuria Ferrandiz
Endomembranes in cell division: Insights into organelle segregation and genomic stability
- 16:00-16:45 Comunicaciones orales
- 16:00-16:15 **Ángeles Cuadrado Bermejo**
Chromosome dynamics during dinomitosis
- 16:15-16:30 **Marina Jordano Raya**
Unveiling evolutionary divergence in AP endonucleases: key residues dictate substrate specificity across species
- 16:30-16:45 **Pilar Prieto**
Análisis citogenómico de los telómeros y subtelómeros de trigo en el contexto de las asociaciones cromosómicas durante la meiosis con fines de mejora genética
- 16:45-17:00 Flash talks
- 16:45-16:50 **Joaquín Martínez Espino**
Identificación de nuevos componentes del cinetocoro en Mucorales
- 16:50-16:55 **Sonia Jimeno González**
A role of R-loops in the genetic instability phenotype associated to Aicardi-Goutières Syndrome
- 16:55-17:00 **Sara Jover-Gil**
Meiotic characterization of two Arabidopsis thaliana mutants
- 17:00- 18:30 **Sesión Expresión génica y epigenética**
Moderador:
Darío Lupiáñez
- 17:00-17:30 **Ponencia Invitada:**
Biola Javierre Martínez
The 3D epigenome roadmap of human B cell differentiation sheds light on the mechanistic foundations of humoral immunity and B cell cancer susceptibility



MIÉRCOLES 9 JULIO

- 17:30-18:15 Comunicaciones orales
- 17:30-17:45 **Alicia Hurtado Madrid**
Gene regulatory network analyses reveal a redundant function for Meis genes in the specification of sexual identity
- 17:45-18:00 **Francisca Alcaraz Pérez**
Novel regulatory function of telomerase RNA in Myelopoiesis and therapeutic strategies for Dyskeratosis Congenita
- 18:00-18:15 **Silvia Jimeno González**
Regulation of N6-Adenosine mRNA Methylation by DNA Topoisomerase II
- 18:15-18:30 Flash talks
- 18:15-18:20 **Irene del Rey Navalón**
PexR, a novel regulator of the bacterial peroxide stress response
- 18:20-18:25 **Natalia Nicolás Muñoz**
Epigenetic regulation of transcriptionally active regions in Rhizopus microsporus
- 18:25-18:30 **Rafael Domínguez Acemel**
The evolution of vertebrate sex determination systems
- 18:30- 19:30 **Conferencia Inaugural**
Toni Gabaldón
Crossroads to virulence and drug resistance in emerging yeast pathogens
- 19:30-21:00 **Pósters y Tapas**

JUEVES 10 DE JULIO

- 9:00-10:30 **Sesión Genética de microorganismos**
Moderadoras:
Tanja Dapa y Montserrat Elias
- 9:00-9:30 **Ponencia Invitada:**
Diego Romero
TasA — A structural protein with a regulatory soul



JUEVES 10 DE JULIO

9:30-10:15 Comunicaciones orales

9:30-9:45 **Alfonso López Rojo**

An antiviral defense island regulated by a sigma-antisigma pair in Myxococcus xanthus and its role against attack by myxophages

9:45-10:00 **Antonio Romero Guillén**

Decoding tissue-specific virulence mechanisms of Salmonella Typhimurium in porcine hosts

10:00-10:15 **María José Ruiz López**

Phylogeography and environmental drivers of West Nile Virus spread in Spain and Europe

10:15-10:30 Flash talks

10:15-10:20 **Gabriel Navarro del Saz**

Identification of two regulatory proteins involved in Dimorphism in Mucor lusitanicus

10:20-10:25 **Gonzalo Porres Pérez**

Effects of exposition to kasugamycin in sensitive and resistant cells of Escherichia coli

10:25-10:30 **Mónica González Sánchez**

Intestinal Health: Effects of sulfonated additives on the gut microbiota

10:30- 11:00 **Pausa café + Posters**

11:00- 12:30 **Sesión Mejora genética vegetal y biotecnología**

Moderadora:

Iraida Amaya

11:00-11:30 **Ponencia Invitada:**

Jaime Prohens

Harnessing the potential of genetic resources in plant breeding through introgression lines and MAGIC populations

11:30-12:15 Comunicaciones orales

11:30-11:45 **Benito José Pineda**

Role of the SIRbohG gene as a key regulator of salt stress response: an H₂O₂-mediated pathway for maintaining sodium homeostasis in tomato (Solanum lycopersicum)

JUEVES 10 DE JULIO

- 11:45-12:00 **Fuensanta Verdú Navarro**
A genetic framework of genes involved in callus growth
- 12:00-12:15 **Julián Cerón Madrigal**
Novel Cas9 nucleases from the deep ocean to expand the CRISPR toolbox
- 12:15-12:30 Flash talks
- 12:15-12:20 **Carlos Polanco de la Puente**
Variabilidad de SNPs en una colección de lenteja y estudios de asociación genómica
- 12:20-12:25 **Teresa Barragán-Lozano**
SIAGO7: A Low-Expressed Gene with a Crucial Role in Tomato Development
- 12:25-12:30 **Rocío Fonseca Rodríguez**
The tomato TGSO gene may act as a linking factor between embryonic epidermis and shoot apical meristem development.
- 12:30- 14:00 **Sesión Genética poblaciones**
Moderadores:
Armando Caballero y José Godoy
- 12:30-13:00 **Ponencia Invitada:**
David Diez del Molino
Origin, genomic adaptation, and extinction of the woolly mammoth
- 13:00-13:45 Comunicaciones orales
- 13:00-13:15 **José Antonio Godoy**
Seguimiento y gestión genética del lince ibérico
- 13:15-13:30 **Julio Rozas**
Genomic Basis of Convergent Dietary Specialization in the Adaptive Radiation of Canary Island Dysdera Spiders
- 13:30-13:45 **Sonia Cebrián-Camisón**
Cryptic Genetic Structure Revealed by Genomic Inversion in Culex pipiens

JUEVES 10 DE JULIO

13:45-14:00 Flash talks

13:45-13:50 **Noemi Pasini**
Genomic diversity and connectivity of the Octopus vulgaris population in the Balearic Islands

13:50-13:55 **Beatriz Beroiz Remírez**
Who's Who in Bombus terrestris: Unravelling subspecies in Spain

13:55-14:00 **Isabel García García**
Fate of the fallen: modelling past and future demography of silver fir forests affected by dieback through genomic and dendroecological timelines

14:00- 15:30 **Comida**

15:30- 17:00 **Sesión Genética Humana**
Moderadora:
Encarna Guillén

Novogene

15:30-16:00 **Ponencia Invitada:**
Pablo Lapunzina
Mosaicismos. presente y futuro

16:00-16:45 Comunicaciones orales

16:00-16:15 **Belén Pérez**
Estrategia de genómica funcional para la mejora del diagnóstico de enfermedades raras

16:15-16:30 **Belén de la Morena Barrio**
Retrotransposon insertions: a challenging detection and characterization solved by long-read nanopore sequencing - Relevance in genetic diagnosis

16:30-16:45 **Jesús José Ferre Fernández**
Disruption of gpacth3 gene in zebrafish results in ocular and craniofacial phenotypes with incomplete penetrance

16:45-17:00 Flash talks

16:45-16:50 **Alessio Coppola**
Molecular basis of TFAP2B variants identified in patients diagnosed with Char syndrome

16:50-16:55 **Carlos Bravo-Pérez**
Prognostic impact of the combination of common prothrombotic polymorphisms with antithrombin deficiency: a new perspective to the Budapest 3 variant

16:55-17:30	Jose Daniel Aroca-Aguilar <i>Establishment and functional characterization of a Zebrafish knock-in model to investigate the role of the MYOC gene in glaucoma</i>
17:00-18:30	Asamblea SEG
18:30-20:30	Actividad social: Visita Teatro Romano
21:00	Cena Congreso

VIERNES 11 DE JULIO

9:00-10:30	Sesión Divulgación y docencia Moderadora: Charo Linacero y Enrique Viguera Ponentes: Encarna Guillén y Belén Pérez: “La genética se hace clínica, ¿y en la universidad?” Enrique Viguera: “Ciencia en entredicho: desafíos ante la desinformación” Lluís Montoliu: “Ser científico”
10:30-11:00	Pausa Café
11:00-11:15	Entrega de premios socios distinguidos y mejores comunicaciones SEG2025
11:15-11:45	Conferencia de Clausura: Pablo Huertas <i>To repair or not to repair, that is the question</i>