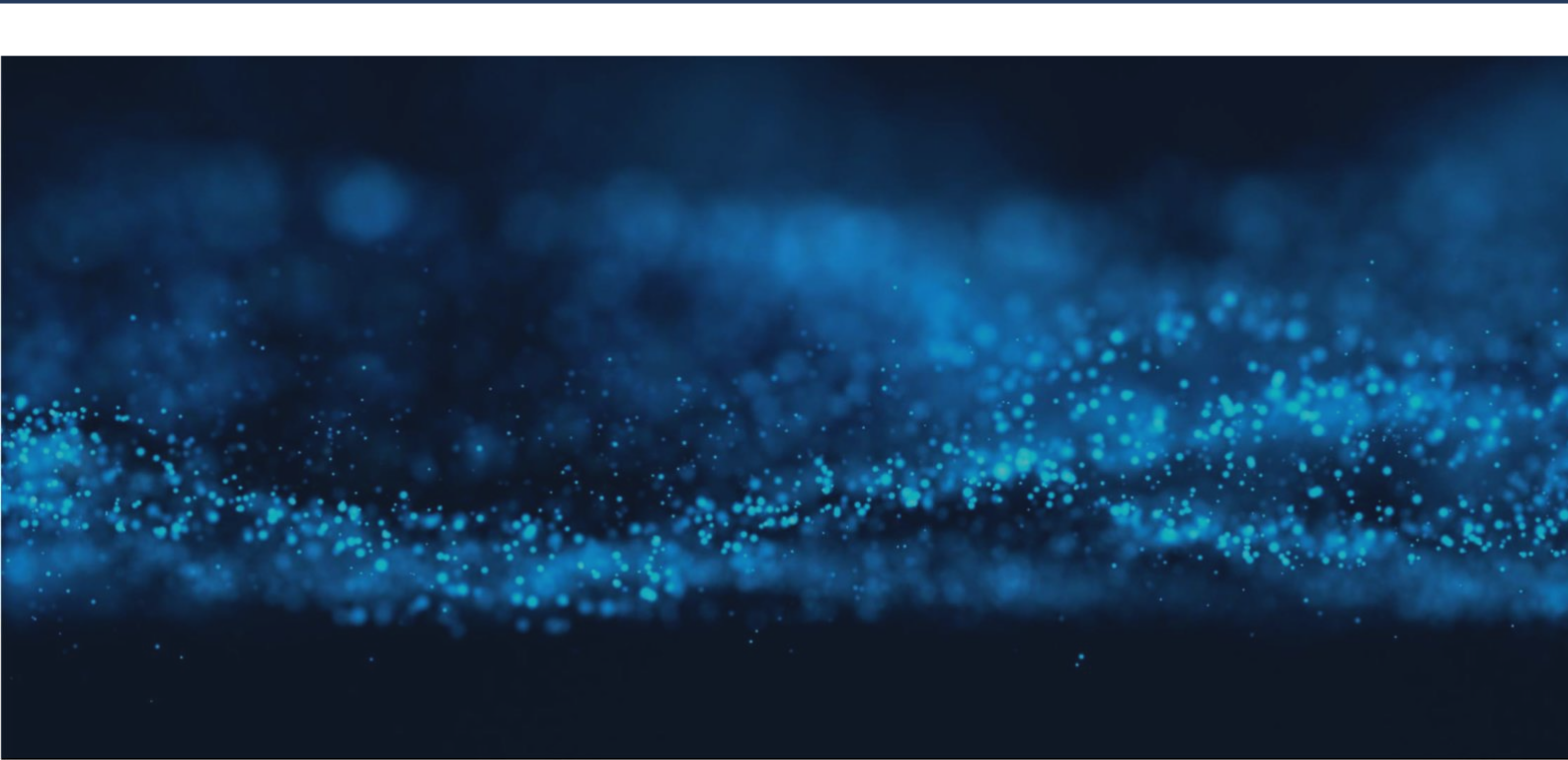




# PROGRAMA

XLII Congreso de la Sociedad Española de Genética

SEG2021, del 14 al 18 junio



## 14 de junio

### Sesión satélite: Escuela de Divulgadores de la Genética

Moderador: José Pío Beltrán

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|----------------------|--|
| <b>15:00 - 15:10</b> | Presentación de los conferenciantes                                    |
| <b>15:10 - 15:35</b> | Isabel López Calderón – Confidencias de una divulgadora compulsiva     |
| <b>15:35 - 16:00</b> | Gemma Marfany - ¿Sirvo para divulgar?                                  |
| <b>16:00 - 16:25</b> | José Miguel Mulet – Cómo divulgar de temas impopulares                 |
| <b>16:40 - 17:05</b> | Lluís Montoliu – Diferentes maneras de divulgar la Genética            |
| <b>17:05 - 17:30</b> | Miguel Pita - ¿Por qué divulgo?  |
| <b>17:30 - 17:55</b> | Enrique Viguera – Encuentros con la Ciencia: laboratorio a la sociedad |
| <b>18:00 - 19:00</b> | Mesa redonda   |

## 15 de junio

**14:00 - 14:50** Sesión de pósteres: Dinámica de Cromosomas y Expresión Génica y Epigenética

### Bienvenida

**14:50 - 14:55** Rosario Linacero, Presidenta del Comité Organizador

**14:55 - 15:00** José Luis Micol, Presidente de la SEG

## Sesión 1: Dinámica de Cromosomas

### Moderadora: Aurora Ruiz-Herrera

**15:00 - 15:30** Conferencia invitada: Ana Losada - Specialized functions of cohesin variant complexes carrying STAG1 or STAG2 in chromosome dynamics.

**15:30 - 16:00** Conferencia invitada: Darío G. Lupiáñez – Reorganization of 3D regulatory landscapes in disease and evolution.

**16:00 - 16:15** Comunicación oral: Marina Martínez García – GRAS-1 is a conserved novel regulator of early chromosome dynamics during meiosis in *C. elegans*.

**16:15 - 16:30** Comunicación oral: Ángeles Cuadrado Bermejo – Advances in understanding the behavior of the nucleosome-less chromosomes of dinoflagellates.

**16:30 - 16:45** “Flash Talks”

Lucía Álvarez González - The impact of chromosomal fusions on 3D genome folding in the germ line.

Nadia Fernández Jiménez - The plant-specific nucleoporin NUP136 is essential to ensure the obligatory crossover in Arabidopsis meiosis.

Lucía Gómez Gil - Contribution of chromosome rearrangements to the genomic plasticity of the fungal pathogen *Fusarium oxysporum*.

Alberto Jiménez Martín - The metazoan-like kinetochore assembly and disassembly cycle is conserved in yeast mitosis but masked by the *rabl* configuration.

J. Alberto Marchal Ortega - Increased mitotic cell death in MCPH1 depleted cells upon catalytic inhibition of TOPO II.

María Martín Peciña - B chromosomes of *Eupreococcus plorans* contain active protein-coding genes involved in cell division.

## Sesión 2: Expresión Génica y Epigenética

Moderador: Crisanto Gutiérrez

- 17:00 – 17:30** Conferencia invitada: María Gómez – Functional organization of the genome: intertwined links between DNA replication and transcription.
- 17:30 – 18:00** Conferencia invitada: Myriam Calonje - Unveiling the role of PcG-mediated histone modifications in regulating gene expression in Arabidopsis.
- 18:00 – 18:15** Comunicación oral: José Manuel Pérez Pérez - Dynamic hormone gradients and metabolic reprogramming link cell cycle regulation to wound-induced organ formation in plants.
- 18:15 – 18:30** Comunicación oral: Sara Fontalvia Ostio - Human prefoldin complex modulates co-transcriptional pre-mRNA splicing.
- 18:30 – 18:45** “Flash Talks”
- Laura Contreras - Translation modulates the response to Sorafenib in hepatocellular carcinoma.
- Irene Delgado Román - Early-stage replicative age contributes to proliferative heterogeneity in *Saccharomyces cerevisiae*
- Blanca Navarrete Ruiz de Clavijo - Elucidating the role of sirtuins in the control of virulence in *Ustilago maydis*.
- Ana Ramos Sáenz - Role of yeast pol5 in ribosome biogenesis.
- Ana Isabel Garrido-Godino - Rpb4 and Puf3 imprint and post-transcriptionally control the stability of a common set of mRNAs in yeast.
- Adelaida Hernaiz Martorrel - Detection of genome-wide methylation changes in the central nervous system of sheep naturally infected with scrapie.

## Conferencia inaugural

Moderadora: Monsterrat Elías-Arnanz. Vicepresidenta de la SEG

- 19:00- 19:05** Presentación del conferenciante
- 19:05- 20:00** Andrés Moya - Simbiosis: el encuentro entre procariotas y eucariotas

## 16 de junio

**14:00 - 15:00** Sesión de pósteres: Genética de Microorganismos y Mejora Genética

### Sesión 3: Genética de Microorganismos

Moderadora: Montserrat Elías-Arnanz

- 15:00 - 15:30** Conferencia invitada: Iñigo Lasa – Noncontiguous operons: a new strategy for coordinating gene expression
- 15:30 – 16:00** Conferencia invitada: Fernando Monje-Casas - Aging from the poles: asymmetric distribution of spindle microtubule organizing centers.
- 16:00 – 16:15** Comunicación oral: Silvia Salas Pino - Reversible protein aggregation as cytoprotective mechanism against heat stress in Fission Yeast.
- 16:15 – 16:30** Comunicación oral: José Tomás Cánovas Márquez - R3B2: The exclusive RNase III of Mucorales that has evolved to cut single-stranded RNA.
- 16:30 – 16:45** “Flash Talks”
- Andrea Bullones Bolaños - *Salmonella* modifies the host ubiquitinome.
- Emilio Garrote Sánchez - From endosymbiont to chassis in synthetic biology: genomic engineering of *Bartonella quintana* by deleting non-essential regions.
- Antonio Joaquín Monera Girona - Unmasking the identity of plasmalethanolamine desaturase and the role of plasmalogens in photooxidative stress signaling.
- M<sup>a</sup> Dolores Pejenaute Ochoa - DOG9, a novel fungal protein involved in effectors secretion during plant infection.
- Chantal Renau Mínguez - Exploring the genome of *Mycobacterium brumae*, a species of bacterium with therapeutic potential.
- Manuel Sánchez López-Berges - Relevance of copper homeostasis in *Fusarium oxysporum* pathogenicity.

## Sesión 4: Mejora Genética

Moderador: Rafael Lozano

- 17:00 - 17:30** Conferencia invitada: Miguel Pérez Enciso – Aprendizaje automático y predicción genómica
- 17:30 – 18:00** Conferencia invitada: Fernando Yuste-Lisbona - ¿Cómo mejorar la productividad a través de la regulación genética de la función meristemática?
- 18:00 – 18:15** Comunicación oral: Cristina Menéndez Menéndez - Development of new grape cultivars better adapted to climate change.
- 18:15 – 18:30** Comunicación oral: Miguel Ángel Toro Ibáñez - Genetic improvement programs in aquaculture.
- 18:30 – 18:45** “Flash Talks”
- Andrea Arrones Olmo - GWAS analysis in the first eggplant magic population identifies strong associations for anthocyanin pigmentation.
- José A. Campoy - Haplotype-resolved, chromosome-level, reference-free assembly enabled by high throughput single-cell sequencing of gamete genomes.
- Matilde López Fernández - Exploring the genomic diversity of wheat landraces for new breeding challenges.
- Clara Pons Puig - Atlas of phenotypic, genotypic and geographical diversity underlying variability of the traditional European tomato.
- M<sup>a</sup> Dolores Requena Ramírez - A GDSL esterase/lipase mediates lutein esterification in tritordeum being a strong candidate for the improvement of carotenoid stability in related cereals.
- Marta Isabel Terry - Identification of genes involved in volatile synthesis in the Melon genome.

## Sesión abierta: Genética y COVID

Moderador: José Luis Micol

- 19:00 - 19:05** Presentación de los conferenciantes
- 19:05 – 19:45** Conferencia invitada: Fernando González-Candelas - La genética poblacional y evolutiva del SARS-CoV-2.
- 19:45 – 20:25** Conferencia invitada: Ángel Carracedo - El consorcio SCOURGE.

## 17 de junio

**14:00 - 15:00**

Sesión de pósteres: Genética de Poblaciones y Evolución y Genética Humana

### Sesión 5: Genética de Poblaciones y Evolución

Moderadora: Amparo Latorre

**15:00 - 15:30**

Conferencia invitada: Josefa González - The genetic and molecular basis of environmental adaptation: a transposable element perspective.

**15:30 - 16:00**

Conferencia invitada: Daniel Tamarit - Novel prokaryotic lineages fuel the quest for eukaryotic ancestry.

**16:00 - 16:15**

Comunicación oral: Marta Álvarez-Presas - A new genomic approach to shed light on the mystery of the evolution of Bilateria.

**16:15 - 16:30**

Comunicación oral: Cristina López Díaz - Experimental evolution reveals mechanisms of adaptation in the fungal pathogen *Fusarium oxysporum*.

**16:30 - 16:45**

“Flash Talks”

Paula Escuer - The chromosome-scale assembly of *Dysdera silvatica* (Arachnida, Araneae) provides insight into the origin and evolution of chemoreceptor gene families in spiders.

José Luis Horreo - Global climatic changes explain long-term demography of the most-widely distributed terrestrial reptile (*Zootoca vivipara*).

Eugenio López Cortegano - Evolution of mutational properties in phylogenetically closely related species.

Sonia Olaechea Lázaro - Initial population structure and selection results on a new Cameroonian whole-exome sequencing dataset.

Sergio Ortega Del Campo - Twenty years of evolution and diversification of digitaria streak virus in *Digitaria setigera*.

Beatriz Sabater Muñoz - Fitness and mutational rate is affected by loss of groel-mutational buffering in highly bottlenecked *E. coli* populations.

## Conferencia de clausura

Moderador: José Luis Micol

- 17:00 – 17:05**      Presentación de la conferenciante
- 17:05 – 18:00**      María Blasco -Papel de los telómeros en el origen de las enfermedades

## Sesión 6: Genética Humana

Moderadora: Gemma Marfany

- 18:00 - 18:30**      Conferencia invitada: Noèlia Fernández-Castillo - Bringing light to autism, from rare mutations to spiking neurons.
- 18:30 – 19:00**      Conferencia invitada: Pablo Huertas - Defective DNA double strand break repair in Aicardi-Goutieres syndrome.
- 19:00 – 19:15**      Comunicación oral: Sara Veiga-Rúa - Validation of new ASD-associated genomic variations using hiPSCs and zebrafish models.
- 19:15 – 19:30**      Comunicación oral: Julián Cerón Madrigal - Mimicking human mutations in *Caenorhabditis elegans*.
- 19:30 – 19:45**      “Flash Talks”
- Almudena Fernández López - Ratones editados genéticamente para investigar diversos tipos de albinismo.
- Unai Illarregi Insausti - Detection of fusion genes by RNA-seq in pediatric acute lymphoblastic leukemia.
- Núria Martínez-Gil - Regulation of WNT16 in bone involves upstream enhancers within CPED1.
- Juan Antonio Navarro Langa - Erastin-induced ferroptosis enhances loss-of frataxin phenotypes in a Drosophila model of Friedreich Ataxia.
- Mercedes M. Pérez Jiménez - A *Caenorhabditis elegans* model to study the role of sulfated steroid hormones in aging and aging-related diseases.
- Susana Ruiz Ruiz - Microbiota across life in a healthy cohort.



## 18 de junio

### Sesión 7: Docencia de la Genética

Moderadora: Rosario Linacero

**15:00 – 16:00** Mesa Redonda

### Entrega de Premios

Moderadores: José Luis Micol y Rosario Linacero

**16:00 – 17:00** Entrega de los Premios Nacionales de Genética

**16:00 – 16:15** Intervención de Isabel Durán, en nombre de la Fundación Pryconsa

**16:15 – 16:20** Entrega de los premios

**16:20 – 17:00** Intervenciones de los premiados

**17:00 – 17:15** Entrega de los Premios a los Socios Distinguidos de la SEG

**17:15 – 17:30** Entrega de los premios a los mejores pósteres, comunicaciones orales y flash talks del Congreso

### Clausura del Congreso

**17:30 – 17:35** Clausura del Congreso

### Asamblea de la SEG

**17:35 – 18:30** Asamblea de la SEG