

**SWM 2022**  
**Friday October 21st**

08:30 – 9:00 Registration and poster placement

9:00 – 9:30 Welcome, meeting opening

**Session 1 (Gene Expression and Development).** Chaired by Peter Askjaer.

**9:30– 10:15 La Rioja talk 1. Andrew Fire.**  
Opportunistic RNAs and Acquisitive Genomes.

**10:15 – 11:30 Short talks** (10 min. talk + 5 min. questions).

**1.1.- Deviations from temporal scaling support a stage-specific regulation for *C. elegans* postembryonic development.**

Alejandro Mata-Cabana, Francisco Javier Romero-Expósito, Mirjam Geibel, Francine Amaral Piubeli, Martha Merrow and María Olmedo.

**1.2.- GLD-1 and APC/C FZR-1 are involved in the somatic conversion of germ cells.**

David Puerta, Sara Rivera-Martin, Adrián Fragoso and José Pérez-Martín.

**1.3.- APC/C FZR-1 is controlled at several levels in the germline.**

David Puerta, Sara Rivera-Martin, Adrián Fragoso and José Pérez-Martín.

**1.4.- Integrator complex links DNA damage and gene expression response.**

Cristina Romero Aranda, Eva Gómez Orte, Victor Escrich, Begoña Ezcurra, Juan Cabello.

**1.5.- The use of *C. elegans* in circular economy a step toward the industrialization of an animal Model.**

Carlos López-Viso, Hodaifa-Meri Gassan and Manuel J Muñoz.

11:30 – 12:00 coffee break

**Session 2 (Neuro-session I).** Chaired by Tatiana García-Muse.

**12:00 – 12:45 La Rioja talk 2. Nuria Flames.**  
Mechanisms of Neuronal diversification and evolution.

**12:45 – 14:00 Short talks** (10 min. talk + 5 min. questions).

**2.1.- Role of mef-2 transcription factor in neurodegeneration of dopaminergic neurons in *C.elegans*.**

Erick Sousa, Nuria Flames.

**2.2.- PDF-1 modulation of aversion and reward during associative learning.**

Laura Molina-García, Susana Colinas-Fischer, Blanca García-Minaur-Ortiz, Sergio Benavides-La Concha, Emma Clark, Lucy Lin, Rosie Truman, Arantza Barrios.

**2.3.- Forkhead transcription factor FKH-8 regulates sensory cilia gene expression in *C. elegans*.**

Rebeca Brocal-Ruiz, Ainara Esteve Serrano, Carlos Mora-Martínez, Juan J. Tena, Peter Swoboda, Nuria Flames.

**2.4.- Sexually dimorphic regulation of quiescent neural progenitor asymmetric divisions**

Carla Lloret-Fernández, Michele Sammut, Sophie PG Gilbert, Milou HM van der Lans, David J Elliott, RJ Poole.

**2.5.- Molecular mechanisms underlying neuron evolution in *Caenorhabditis* species.**

Adrián Tarazona Sánchez, Antonio Jordan, Nuria Flames Bonilla

14:00 – 15:30 Lunch

## Session 3 (Neuro II and Metabolism). Chaired by Rafael Vázquez-Manrique.

### 15:30 – 16:15 La Rioja talk 3. **María Olmedo.**

Non-canonical DAF-2/IR signalling regulates transient larval arrest in *C.elegans*.

16:15 – 17:30 Short talks (10 min. talk + 5 min. questions).

#### 3.1.- Scent of a worm.

Romain Bulteau, Marcos Perez, Mehrnaz Shamalnasab, Marie-Alice Minassian, Ben Lehner, [Mirko Francesconi](#).

#### 3.2.- Basic translational machinery controls neuronal terminal differentiation.

[Andrea Millán-Trejo](#), Pilar Casanova and Nuria Flames.

#### 3.3.- The Effect of a High-Glucose Exposure in *C. elegans* is Counteracted by a Synbiotic Combination of *Pediococcus acidilactici* CECT9879 (pA1c), Chromium Picolinate and Oat Beta-Glucans by Affecting the Insulin Signaling Pathway (IIS).

[Deyan Yavorov-Dayliev](#); Fermín I. Milagro; Josune Ayo; María Oneca; Paula Aranaz.

#### 3.4.- Lipoteichoic acid from *Bifidobacterium animalis* subsp.lactis BPL1: a novel postbiotic that reduces fat deposition via IGF-1 pathway.

[Ferran Balaguer](#), María Enrique, Silvia Llopis, Marta Barrena, Verónica Navarro, Beatriz Álvarez, Empar Chenoll, Daniel Ramón, Marta Tortajada and Patricia Martorell.

#### 3.5.- Role of BRC-1 and BRD-1 phosphorylation after DNA damage.

[Nuria Fernández-Fernández](#), Lola P. Camino, Mariola Chacón, Tatiana García-Muse.

17:30 – 19:00 coffee break and poster session

19:00 - 19:15 Cellrad Benchtop X-Ray Irradiator demo. Jesús García (Technasa).

## Session 4 (Metabolism II). Chaired by Manuel Muñoz.

### 19:15– 20:00 La Rioja talk 4. **Antonio Miranda-Vizueté.**

Cystine reduction and transsulfuration pathways suppress the embryonic lethal phenotype of *C.elegans* glutathione reductase *gsr-1* mutants.

20:00 Bus transfer to Bodegas Franco Españolas.  
Guided tour - Gala dinner.

Saturday October 22nd

**Session 5 (Metabolism III and tools).** Chaired by Julián Cerón.

**10:00 – 10:45 La Rioja talk 5. Christian Froekjaer-Jensen.**  
Tools for engineering the *C. elegans* genome.

**10:45 – 12:00 Short talks** (10 min. talk + 5 min. questions).

**5.1.- Heterochromatin Protein 1 controls gene expression and longevity upon prohibitin depletion.**

Patricia De La Cruz Ruiz, Hayat Heluani Gahete, María de los Ángeles Ortega De La Torre, María Jesús Rodríguez Palero, Cristina Ayuso García, Shinya Ohta, Peter Askjaer and Marta Artal-Sanz.

**5.2.- ssu-1 in aging and sulfated steroid hormone levels.**

MM Pérez-Jiménez, R Alba-López, MJ Muñoz-Ruiz.

**5.3.- Effect of modulation of calcium homeostasis in several Alzheimer's disease models in *C.elegans*.**

Elena Caldero-Escudero, Pilar Álvarez-Illera, Silvia Romero-Sanz, Jaime Santo-Domingo, Rosalba I Fonteriz, Mayte Montero and Javier Álvarez

**5.4.- A method to obtain transcription factor binding profiles in a cell-type-specific manner.**

Rafael Alis and Nuria Flames.

**5.5.- *C. elegans* as an invivo arrhythmia model - Evaluation of Polypyrrole nanoparticles.**

Sumithra Yaraswini Srinivasan, Nuria Benseny Cases, Dmytro Kukhtar, Julián Cerón, Anna

12:00 – 12:30 coffee break

**Session 6 (Disease Models).** Chaired by Marta Artal.

**12:30 – 13:45 Short talks** (10 min. talk + 5 min. questions).

**6.1.- A calreticulin mutant *C. elegans* model naturally lacking JAK2 and MPL orthologs mimics some of the molecular features of Ph-negative myeloproliferative neoplasms and reveals unknown non-canonical effects of the mutant protein.**

A Guijarro-Hernández, L Eder-Azanza, C Hurtado, D Navarro-Herrera, B Ezcurra, FJ Novo, J Cabello, JL Vizmanos.

**6.2.- Effects of SERCA inhibition in a chemical model of Parkinson's disease in *C. elegans*.**

Silvia Romero-Sanz, Elena Caldero-Escudero, Pilar Álvarez-Illera, Jaime Santo-Domingo, Rosalba I Fonteriz, Mayte Montero, and Javier Álvarez.

**6.3.- *Caenorhabditis elegans* as a Nestor-Guillermo Progeria Syndrome Model.**

Raquel Romero Bueno, Marta Rojas, Cristina Ayuso, Christian Riedel, Jordan D Ward and Peter Askjaer.

**6.4.- A model for type III galactosemia and possible treatment.**

P Lucas-Rodríguez, AM Brokate-Llanos, MJ Muñoz.

**6.5.- Potential of epicatechin to reduce Alzheimer's disease progression based on its capacity to ameliorate amyloid  $\beta$  peptide (A $\beta$ ) and neurofibrillary tangles production.**

Lidia Garzón-García, Begoña Ayuda-Durán, Celestino Santos-Buelga, Ana M. González-Paramás and Susana González-Manzano.

**13:45 – 14:30 Meeting closure** (sandwich and drink to go)