



30th Scientific Meeting of the Spanish Environmental Mutagenesis and Genomics Society

PROGRAMME

Wednesday June 10th	
14:30-15:00	Registration
15:00-15:15	Opening and welcome
<p><b>Session 1 – Human biomonitoring in clinical, occupational and environmental settings</b></p> <p><b>Moderators:</b> Isabel Gaivão (UTAD) and Irene Barguilla (UAB)</p>	
15:15-16:00	Keynote speaker: <b>Dr. Joao Paulo Teixeira</b> National Institute of Health Dr. Ricardo Jorge, Portugal <i>Inside the fire: advancing human biomonitoring in firefighters</i>
16:00-16:15	The assessment of health-related biomarkers among different dietary patterns Marko Gerić, Institute for Medical Research and Occupational Health, Croatia
16:15-16:30	Lifestyle, environment, and major determinants of frailty: UK Biobank study Ali Hemadeh, University of A Coruña, Spain
16:30-16:45	Endocrine biomarkers for physical and cognitive frailty in older adults Carlota Lema-Arranz, University of A Coruña, Spain
16:45-17:00	Occupational exposure to cytostatic drugs: combined environmental and biological monitoring in a Spanish hospital Elena Lendoiro, University of Santiago de Compostela, Spain
17:00-17:30	Coffee break
<p><b>Session 2 – DNA repair and genome instability</b></p> <p><b>Session sponsored by Thermo Fisher Scientific</b></p> <p><b>Moderators:</b> Natalia Mallo (UDC) and Laura Rubio (UAB)</p> <div style="text-align: right; font-weight: bold; color: red;"> <b>ThermoFisher</b>            S C I E N T I F I C         </div>	
17:30-18:15	Keynote speaker: <b>Dr. María Teresa Roldán Arjona</b> University of Córdoba, Spain <i>Epigenetic and repair functions of DNA base excision</i>
18:15-18:30	Role of an AP Lyase pathway in the repair of AP sites generated by DNA methylating agents Rocío Santiago-Domínguez, University of Córdoba, Spain



18:30-18:45	DNA oxidation damage and expression of the DNA repair enzyme OGG1 in organ-cultured human conjunctival epithelial cells Yolanda Lorenzo, Oslo University Hospital, Norway
18:45-19:00	Assessment of cytotoxicity and genotoxicity in human glial cells exposed to platinum nanoparticles Maite Saavedra-Rodríguez, University of A Coruña, Spain
19:00-19:15	Living with higher air pollution: Does it affect genomic stability? Goran Gajski, Institute for Medical Research and Occupational Health, Croatia
19:15-20:00	<b>New Investigators Assembly</b>
<b>Thursday June 11th</b>	
<b>Session 3 – Environmental and health risk assessment of emerging pollutants (I)</b>	
<b>Moderators:</b> Amaya Azqueta (UNAV) and Natalia Fernández-Bertólez (UDC)	
09:30-10:15	Keynote speaker: <b>Dr. Mario Durán Prado</b> University of Castilla la Mancha, Spain <b><i>When wonder materials meet DNA: graphene's toxic and genotoxic footprint</i></b>
10:15-10:30	Genotoxic responses to nanomaterials and metal(loid)s co-exposure: insights from complementary DNA damage biomarkers Ana Teresa Reis, National Institute of Health Dr. Ricardo Jorge, Portugal
10:30-10:45	Comparative genotoxicity of <i>Alternaria</i> mycotoxins in HepG2 cells Rita Sofia Vilela, National Institute of Health Dr. Ricardo Jorge, Portugal
10:45-11:00	Assessment of genotoxic effects induced by true-to-life micro and nanoplastics derived from orthodontic thermoplastics Hannes Van Goethem, Autonomous University of Barcelona, Spain
11:00-11:15	Changes in the oral microbiota after six months of clear aligner orthodontic treatment: Assessment of micro- and nanoplastic exposure using MinION sequencing Kevin Barrios-Garay, Autonomous University of Barcelona, Spain
11:15-11:30	Genotoxic effects in workers of the plastic recycling industry exposed to micro- and nanoplastics Julia Catalán, Finnish Institute of Occupational Health, Finland
11:30-12:00	Coffee break



#### Session 4 – Epigenomics and epitranscriptomics, and emerging pollutants (II)

**Moderators:** Susana Pastor (UAB) and Adriana Rodríguez-Garraus (UNAV)

12:00-12:45	Keynote speaker: <b>Dr. Diana Guallar Artal</b> University of Santiago de Compostela, Spain <b><i>Time written in RNA: The epitranscriptomic code of ageing</i></b>
12:45-13:00	H3K27 acetylation as a key regulator of onco-lncRNA expression in lung cancer Carmen Ayala-Roldán, University of Córdoba, Spain
13:00-13:15	Chronic exposure to nanoplastics alters stem cell type-specific mechanisms, promoting cancer development Irene Barguilla, Autonomous University of Barcelona, Spain
13:15-13:30	Genotoxic and functional endothelial responses to nanoplastics: the role of physicochemical properties Alba García-Rodríguez, Autonomous University of Barcelona, Spain
13:30-13:45	An innovative biomarker-based blood assay for monitoring micro- and nanoplastic exposure in occupational and environmental settings Jéssica Arribas Arranz, Autonomous University of Barcelona, Spain
13:45-14:00	Multi-omic analysis of the biological impacts of exposure to PTFE micro- and nanoplastics in <i>Drosophila melanogaster</i> Raquel Egea, Autonomous University of Barcelona, Spain
14:00-15:30	Lunch

#### Session 5 – Animal models in toxicity testing and human disease research

**Moderators:** Sara Maisanaba (UPO) and Alba García-Rodríguez (UAB)

15:30-16:15	Keynote speaker: <b>Dr. Laura Sánchez Piñón</b> University of Santiago de Compostela (campus Lugo), Spain <b><i>Zebrafish as an animal model for biomedicine research</i></b>
16:15-16:30	<i>In vivo</i> evaluation of three differently charged gold nanoparticles using the zebrafish embryo model Lucía Ramos-Pan, University of A Coruña, Spain
16:30-16:45	Toxicity assessment of platinum nanoparticles in <i>Drosophila melanogaster</i> : acute and chronic exposure effects Assia Touzani, University of A Coruña, Spain
16:45-17:00	Morphological and behavioural alterations in <i>Drosophila melanogaster</i> offspring and adults after developmental exposure to gold nanoparticles Diego López-Aragón, University of A Coruña, Spain



17:00-17:15	Hazard impacts of polytetrafluoroethylene micro-nanoplastics: in vivo study Mohamed Alaraby, Autonomous University of Barcelona, Spain
17:15-17:30	Natural flavonoids induce dose-dependent cytotoxicity in marine ciliated protozoa parasites through putative mitochondrial mechanisms Mario Cabaleiro, University of A Coruña, Spain
17:30:20:00	<b>Social event</b>
20:00	<b>Conference Dinner</b>
<b>Friday June 12th</b>	
<b>Session 6 – New Approach Methodologies in toxicity/safety assessment</b>	
<b>Moderators:</b> Alba Hernández (UAB) and Ana Teresa Reis (INSA)	
09:00-09:45	Keynote speaker: <b>Dr. Verónica Bolón Canedo</b> University of A Coruña, Spain <b><i>AI for nanotoxicology: in-silico tools to reduce experimental testing</i></b>
09:45-10:00	Evaluation of New Approach Methodologies (NAMs) for the detection of compounds classified as non-genotoxic carcinogens (NGTxCs) Myriam Benito-Fuertes, University of Navarra, Spain
10:00-10:15	Model matters: Comparative toxicity of BPA and BPS-MAE in 2D and 3D HepG2 models Carolina Ramos, National Institute of Health Doutor Ricardo Jorge, Portugal
10:15-10:30	Use of the nematode <i>Caenorhabditis elegans</i> as a biomodel to investigate the toxic effects of the plasticizer bisphenol A and their chemical analogues Sara Maisanaba, University Pablo de Olavide, Spain
10:30-10:45	Micro- and nanoplastic interference in THP-1 immune response in an inflammatory context Javier Guitiérrez-García, Autonomous University of Barcelona, Spain
10:45-11:00	Unraveling the effects of real-life micro- and nanoplastics on the lung barrier using an ALI co-culture model Laura Rubio, Autonomous University of Barcelona, Spain
11:00-11:30	Coffee break
11:30-12:15	<b>PhD Thesis contest</b>
12:15-13:00	<b>SEMA Annual Assembly</b>
13:00-13:30	<b>Awards and closing ceremony</b>