

# Joint Congress 2017

OCTOBER  
24-27 th

**GIJÓN**  
PALACIO DE CONGRESOS



8.30  
9.30

**REGISTRATION**

9.30  
11.30

**SATÉLITE STI. (SEG) CAMBIO CLIMÁTICO. ESTRATEGIAS GENÉTICAS PARA RETOS DEL FUTURO: ALIMENTACIÓN, MEDIO AMBIENTE Y CAMBIO CLIMÁTICO.**

**MODERADOR: J. PROHENS**

■ Daniel Ramón Vidal (Biópolis, S.L., Paterna, Valencia)

“Genética y alimentación”

■ Francisco García – Olmedo (Real Academia de Ingeniería y Colegio Libre de Eméritos, Madrid)

“Mejora molecular de las plantas frente al cambio climático”

■ Elías Fereres (Real Academia de Ingenieros)

“Agricultura y cambio climático: papel del agua y del suelo”

■ Jaume Prohens (Instituto de Conservación y Mejora de la Agrodiversidad Valenciana, Universitat Politècnica de València, Valencia)

“Utilización de especies silvestres para la mejora genética en la adaptación al cambio climático”

■ María Auxiliadora Prieto Jiménez (Centro de Investigaciones Biológicas, CSIC, Madrid)

“Convirtiendo la basura en bioplástico, una apuesta sostenible”

**MESA REDONDA. DISCUSIÓN GENERAL**

11.30  
13.00

**SATÉLITE STII (SEG). ESTRATEGIAS GENÉTICAS FRENTE A LAS ENFERMEDADES RARAS.**

**MODERADORA: GEMMA MARFANY**

■ Julio Montoya (Facultad de Veterinaria, Universidad de Zaragoza)

“Enfermedades debidas a mutaciones en genoma mitocondrial”

- **Alejandro Garanto (Radboud University Medical Center, Nijmegen)**  
"Terapia por oligonucleótidos antisentido en enfermedades raras causadas por mutaciones en splicing"
- **Dario Lupiáñez (Max Planck Institut for Molecular Genetics, Berlín)**  
"Enfermedades raras debidas a disrupción de dominios en la cromatina"
- **Susana Balcells (Universidad Central de Barcelona)**  
"Identificación de genes causantes de enfermedades raras mediante exomas"

9.30  
18.30

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## **SATÉLITE STIII (SEBC). CELL ADHESION, MIGRATION AND INVASION**

- **Miguel Ángel del Pozo (Centro Nacional de Investigaciones Cardiovasculares, Madrid, Spain)**  
"Cell Mechanoadaptation: Caveolae Mechanobiology and Tissue Biomechanics"  
*Check the complete programme on the 'Welcome STIII' online menu.*

15.30  
17.00

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## **JUNTA SEG**

17.00  
18.30

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## **REGISTRATION**

18.30  
19.00

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## **OPENING**

19.00  
20.00

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## **OPENING LECTURE**

### **CHAIR: MIGUEL TORRES**



- **ELLY TANAKA (Institute of Molecular Pathology, Vienna, Austria)**  
"A molecular genetic approach to axolotl limb regeneration"

20.00  
21.30

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## **RECEPTION**

9.30  
11.00

**S1 (SEBC) AUTOPHAGY, CELL STRESS AND CELL DEATH**

**CHAIR: ISABEL FABREGAT**

■ Patricia Boya (Centro de Investigaciones Biológicas, CSIC, Madrid)

“Autophagy, metabolism and cell fate”

■ José Antonio Enríquez (Centro Nacional de Investigaciones Cardiovasculares, Madrid, Spain)

“Mitochondria define organismal metabolism”

■ Seamus J. Martin (Trinity College, Dublin, Ireland)

“Inflammatory outcomes of 'death receptor' activation”

11.00  
11.30



**COFFEE BREAK**

11.30  
13.00

**S2 (SEG/SEBD) EVOLUTION**

**CHAIR: MIGUEL BURGOS / CO-CHAIR: MIGUEL MANZANARES**

■ Abderraham Khila (Institut de Génomique Fonctionnelle, Lyon, France)

“Development, selection, and species diversification”

■ Patrick S. Fitze (Museo Nacional de Ciencias Naturales, Madrid, Spain)

“Drivers of sexual selection and consequences for the maintenance of genetic polymorphisms”

■ David Posada (Universidad de Vigo, Pontevedra, Spain)

“Genomic evolution of intratumoral heterogeneity”

13.00  
15.30



**POSTERS + LUNCH (odd number)**

15.30  
17.00

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## **SS1. (SEG) GENOMICS OF ADAPTATION**

**CHAIR: JULIO ROZAS**

- **Dra. Juliette de Meaux (University of Cologne, Germany)**

“Genomics of adaptation in the Arabidopsis genus”

- **Dr. Antonio Barbadilla (Universidad Autónoma de Barcelona, Spain)**

“Genome adaptation during the life cycle of Drosophila melanogaster”

## **SS2. (SEBC) INTER – AND INTRA – CELLULAR TRAFFICKING**

**CHAIR: INÉS M. ANTÓN / CO-CHAIR: ISABEL FABREGAT**

- **Andrés Alcover (Institut Pasteur, Paris, France)**

“Interplay between intracellular traffic and cytoskeleton to control T cell activation”

- **María Mittelbrunn (Fundación de Investigación Hospital 12 de Octubre and Centro de Biología Molecular “Severo Ochoa”, Madrid, Spain)**

“Mitochondria – Lysosomal Crosstalk in the Immune System”

## **SS3. (SEBD) PATTERN FORMATION AND DIFFERENTIATION**

**CHAR: VICTOR BORRELL**

- **Wieland Huttner (MPI for Molecular, Cell Biology and Genetics, Dresden, Germany)**

“Neural stem and progenitor cells and neocortex expansion in development and evolution”

- **Carlos Estella (Centro de Biología Molecular “Severo Ochoa”, Madrid, Spain)**

“Molecular Logic of Appendage Formation”

17.00  
18.30

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## **SS4. (SEG) GENETIC BASIS OF PATHOGENICITY IN FUNGI**

**CHAIR: REYES RONCERO**

- **Eduardo Espeso (Centro de Investigaciones Biológicas (CIB-CSIC), Madrid)**

- **Michael Thon (University of Salamanca, Spain)**

“Horizontal gene transfer contributes to virulence in a plant pathogenic fungus”

- **Miriam Osés Ruiz (Universidad de Exeter, United Kingdom)**

## SS5. (SEBC) CELLULAR BASIS OF PATHOLOGY AND AGING

CHAIR: ROSA M. SAÍNZ

■ Lola Ledesma (Centro de Biología Molecular “Severo Ochoa”, Madrid, Spain)

“Sphingomyelin induced neuronal and microglia pathology in the lysosomal storage disorder Niemann Pick type A”

■ Mario Fraga (CINN – CSIC, IUOPA, Oviedo, Spain)

“Epigenetic alterations in aging and cancer: similar but not identical”

## SS6. (SEBD) DEVELOPMENTAL GENOMICS

CHAIR: MIGUEL MANZANARES

■ Eileen Furlong (EMBL, Heidelberg, Germany)

“Generating robustness and precision in development programs”

■ Jorge Ferrer (Imperial College London, UK)

“Noncoding genome function in pancreas development and diabetes”

18.30

19.00



COFFEE OR SOFT DRINKS

19.00

20.00

ISDB-MOD PLENARY LECTURE

CHAIR: MARÍA PAZ HERRÁEZ



■ Arturo Álvarez – Buylla (University of California, San Francisco, USA)

“Adult Neural Stem Cell Relay”

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9.30  
11.00

**S3 (SEBD) DEVELOPMENT BY DESIGN**

**CHAIR: JAMES SHARPE**

- **Matthias Lutolf (École Polytechnique Federal, Laussane, Swiss)**  
"Engineering stem cell self – organization"
- **Ron Weiss (Massachusetts Institute of Technology, Cambridge, USA)**  
"Mammalian synthetic biology and programmable organoids"
- **Eduard Batlle (Institute for Research in Biomedicine, Barcelona, Spain)**  
"Organoid-based approaches to study colorectal cancer"

11.00  
11.30



**COFFEE BREAK**

11.30  
13.00

**S4 (SEG) CHROMOSOME MECHANICS**

**CHAIR: ANDRÉS AGUILERA**

- **Ana Losada (CNIO, Madrid, Spain)**  
"Distinct contribution of cohesion variants to 3D chromosome organization"
- **Antonio J Giráldez (Yale University, New Haven, USA)**  
"Deciphering the gene regulatory code during the maternal to zygotic transition"
- **Mónica Bettencourt – Dias (Instituto Gulbenkian, Oeiras, Portugal)**  
"Centrosome regulation in development"  
"The EMBO Keynote Lecture"



13.00  
15.30



**POSTERS + LUNCH (even number)**



15.30  
17.00

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## SS7. (SEG) REGULATION OF GENE EXPRESSION

CHAIR: MONTSERRAT ELÍAS ARNAZ

- Juan Carlos del Pozo (Centro de Biotecnología y Genómica de Plantas, UPM – INIA, Madrid, Spain)

“From transcriptomics to metabolites: coordination of cell division and differentiation in the root meristem by flavonols”

- Raúl Méndez (Institute of Research in Biomedicine, Barcelona, Spain)

“The CPEB – family of RNA – binding proteins, new somatic functions in stress – response and cancer”

## SS8. (SEBC). CYTOSKELETON AND CELL ARCHITECTURE.

CHAIR: PAZ HERRÁEZ / CO-CHAIR: CARMEN MARÍN

- Nathalie Spassky (Institute de Biologie de L'Ecole Normale Supérieure de Paris (IBENS CNRS), Paris, France)

“Mechanisms of multiciliated ependymal cell development”

- Alexis Gautreau (Université de Paris – Saclay, Palaiseau Cedex, France)

“Branched actin networks in cell migration and cancer progression”

## SS9. (SEBD). ON GROWTH AND FORM

CHAIR: FERNANDO CASARES

- Arkhat Abzhanov (Imperial College / Natural History Museum, London, UK)

“Evolution of the Animal Face: from morphology to development mechanisms”

- Dagmar Iber (Computational Biology, ETH, Basel, Swiss)

“How to shape an organ? – Computational Models of Organogenesis”

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Upcomming special edition of the journal **"On Growth and Form – 100 years on"**

17.00  
18.30

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## SS10. GENOME INSTABILITY

CHAIR: OSCAR FERNÁNDEZ – CAPETILLO

- Óscar Fernández – Capetillo (Centro Nacional de Investigación Oncológicas, Madrid, Spain)

“Exploring the role of replication stress in cancer and ageing”



- Andrés Joaquín López – Contreras (Panum Institute, University of Copenhagen, Denmark)

“Defining novel therapeutic targets in the DNA damage response pathway”

- Ignacio Pérez de Castro (Instituto de Salud Carlos III, Madrid, Spain)

“Search for chromosome instability biomarker with prognostic value in cancer”

## SS11. (SEBC) CELL SIGNALING

CHAIR: MANUEL REINA

- Roger Gomis (Institute for Research in Biomedicine of Barcelona, Barcelona, Spain)

“Mechanism of tissue specific metastasis”

- Ana Cuenda (Centro Nacional de Biotecnología, Madrid, Spain)

“Novel signaling pathways in inflammation and cancer”

## SS12. (SEBD) TISSUE HOMEOSTASIS AND REGENERATION

CHAIR: ISABEL FARIÑAS

- Irene Miguel – Aliaga (Imperial College London, UK)

“Sex differences in adult organ size and plasticity”

- Cedric Banplain (Université Libre de Bruxelles, Belgium)

“Epithelial stem cells during homeostasis and repair”

18.30

19.00



COFFEE OR SOFT DRINKS

19.00

20.00

**BUSINESS SEG**  
**BUSINESS SEBC**  
**BUSINESS SEBD**

20.00

21.30



GALA DINNER

9.30  
11.00

**S5 (SEG/SEBD/SEBC) PLANT BIOLOGY**

CHAIR: PILAR S. TESTILLANO / CO-CHAIR: REYES RONCERO

■ Antonio di Pietro (Universidad de Córdoba, Spain)

“Learning to live with the host: molecular adaptation in plant pathogens”

■ Enrico Coen (John Innes Centre, Norwich, UK)

“Resolving conflicts: Genetic control of tissue morphogenesis”

■ Salomé Prat (Centro Nacional de Biotecnología, Madrid, Spain)

“Br levels plays a pivotal role in thermomorphogenic growth”

11.00  
11.30



**COFFEE BREAK**

11.30  
13.00

**CLOSING LECTURE**

CHAIR: ALBERTO FERRÚS



■ Ginés Morata (Center for Molecular Biology “S. Ochoa”). CSIC-UAM. Madrid.

“Cell competition”

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**AWARD SESSION**