

SESBE 2026 PROGRAMME

Wednesday, 21st January

8:30 – 9:30 **Registration**

9:30 – 10:30 **Welcome speech & Plenary Talk**

John J. Wiens (University of Arizona, U.S.A.)

KN1 Evolutionary biology in a world on fire.

10:30 – 13:30 **Session 1: Microbial Evolution**

Chair: Rosario Gil

10:30 – 11:00 **Invited speaker: Álvaro San Millán** (Centro Nacional de Biotecnología en Madrid)

S1.IS Evolution of plasmid-mediated antimicrobial resistance in bacteria.

11:00 – 11:45 **Coffee break**

11:45 – 12:00 **Daniel Tamarit** (Utrecht University)

S1.O1 The archaeal roots of eukaryotes and the complex history of Asgard archaeal tubulins.

12:00 – 12:15 **Saioa Manzano-Morales** (Barcelona Supercomputing Center)

S1.O2 Phylogenomics of Asgard archaea reveals a unique blend of prokaryotic-like horizontal transfer and eukaryotic-like gene duplication.

12:15 – 12:30 **Paula Ruiz Rodriguez** (I2SYSBIO)

S1.O3 Pangenomics reveals determinants of ecotype divergence in the Mycobacterium tuberculosis complex.

12:30 – 12:45 **Andrea Sánchez Serrano** (Fundación FISABIO)

S1.O4 Evolutionary analysis of mtr mosaic-carrying Neisseria gonorrhoeae lineages in the Valencian Region, Spain.

12:45 – 13:00 **Guifré Torruella** (Institut De Biologia Evolutiva)

S1.O5 Biodiversity of neglected flagellated protists in the tree of eukaryotes.

13:00 – 13:15 **Jaime Iranzo** (Centro de Astrobiología (CSIC - INTA))

S1.O6 Defense systems in mobile genetic elements: why there and who benefits from them?

13:15 – 13:30 **Miguel Morard** (IATA-CSIC)

S1.O7 Mitochondrial Heteroplasmy Underlies Phenotypic Variation in Homozygous Saccharomyces.

13:30 – 15:30 **Lunch**

15:30 – 17:30 Session 2: Evo-Devo

Chair: Isabel Almudí

15:30 – 16:00 Invited speaker: Christoph Liedtke (EBD-CSIC (Sevilla))

S2.IS Go Big, Go Dark or Get Out: The transcriptomic playbook for tadpole survival.

16:00 – 16:15 Ana Riesgo (Museo Nacional de Ciencias Naturales (CSIC), Madrid, Spain)

S2.O1 Diverse Sex Determination Systems and Ancient Origins of Reproductive Genes in Sponges.

16:15 – 16:30 Nuria Flames (IBV-CSIC, Spain)

S2.O2 Gene regulatory mechanisms underlying evolutionary adaptations of homologous neuronal cell types.

16:30 – 16:45 Israel Campo Bes (CRG (Centro de Regulacion Genomica), Spain)

S2.O3 Evolutionary landscapes of the maternal-to-zygotic transition across Metazoa.

16:45 – 17:00 Amaia Alcalde Anton (University of Bristol, UK)

*S2.O4 How to build a bigger brain? The cellular basis of expanded mushroom bodies in *Heliconius* butterflies.*

17:00 – 17:15 Manuel Fernández-Moreno (Universitat de Barcelona)

S2.O5 Settling down: acquisition of neural regulation by a co-opted retrotransposon.

17:15 – 17:30 Emilio Petrone-Mendoza (Department of Biology, University of Naples Federico II)

S2.O6 Are dumbbell-shaped stomata in grasses a true novelty? Insights from the sedge family (Cyperaceae).

17:30 – 19:30 Poster Session 1 with Drinks & Bites

19:30 – 21:30 Welcome Reception

Thursday, 22nd January

9:00 – 11:15 Session 3: Evolutionary Ecology & Ethology

Chair: Roberto García Roa

9:00 – 9:30 Invited Speaker: Joan García Porta (UCM, Madrid)

S3.IS Smart Moves: How Does Cognition Shape Evolution?

9:30 – 9:45 María Dolores Barón Rodríguez (Estación Experimental de Zonas Áridas (EEZA-CSIC))

S3.O1 Phylosymbiosis in birds: the case of hoopoes, woodhoopoes and hornbills.

9:45 – 10:00 Grabiella Cruz (Universidad Autónoma de Madrid, Spain)

S3.O2 Contrasting eco-evolutionary patterns of host immunity and bacterial virulence in zoonotic networks.

10:00 – 10:15 Ana Marquez Rosado (University of Liverpool)

S3.O3 Sexually selected sperm ornamentation signals survival and sterility after heatwaves.

10:15 – 10:30 Ramón Vigo (Centro de Investigación Mariña - Universidade de Vigo, Spain)

S3.O4 Nature the Painter: eco-evolutionary processes in a shell color cline.

10:30 – 10:45 Riccardo Ton (University of Valencia, Spain)

S3.O5 Evolutionary constraints on metabolic sensitivity among songbirds' eggs in a warming planet. Who will pay the price?

10:45 – 11:00 Javier Abalos (University of Valencia, Spain)

S3.O6 Repeated evolution of a sexually selected syndrome in wall lizards?

11:00 – 11:15 Rafael Rico-Millan (Doñana Biological Station – CSIC, Spain)

*S3.O7 Evolutionary divergence in developmental rate across *Pelobates cultripes* populations.*

11:15 – 11:45 Coffee Break

11:45 – 14:00 Session 4: Palaeontology & Palaeoanthropology

Chair: Francisco J. Serrano

11:45 – 12:15 Invited Speaker: Juan Cantalapiedra (National Museum of Natural Sciences (MNCN-CSIC))

S4.IS What fossil mammals teach us about evolution.

12:15 – 12:30 Humberto Ferrón (University of Valencia, Spain)

S4.O1 Unoccupied adaptive peaks challenge constraint-based models of early vertebrate evolution.

- 12:30 – 12:45 **Borja Figueirido** (University of Málaga, Spain)
S4.02 Vertebral column evolution in Sirenia (Mammalia, Afrotheria).
- 12:45 – 13:00 **Eduard Ocaña-Pallarès** (Fundació per a la Universitat Oberta de Catalunya, Spain)
S4.03 Novel insights on the origin of Fungi and fungi-plant interactions from a timetree dated with fossils and horizontal gene transfers.
- 13:00 – 13:15 **Guillermo Rodríguez-Gómez** (Complutense University of Madrid, Spain)
S4.04 Ecological conditions during Marine Isotope Stage 3 (MIS 3) and human settlement in Europe.
- 13:15 – 13:30 **Jaime López Galán** (University of Valencia, Spain)
S4.05 Phylogenetic Contingency vs Adaptive Directionality: the Evolution of Giant Pelagic Filter-Feeding Vertebrates.
- 13:30 – 13:45 **Iris Menéndez** (National Museum of Natural Sciences (MNCN-CSIC))
S4.06 Macroevolutionary dynamics of North American squirrels driven by grassland expansion.
- 13:45 – 14:00 **Javier Castro Terol** (Universidad de Málaga, Facultad de Ciencias, Dpto. Ecología y Geología)
S4.07 Tracing bird humeral disparity through deep time.
- 14:00 – 15:30 **Lunch**
- 15:30 – 16:30 **Session 5: Pere Alberch**
- 15:30 – 16:00 **Laia Marin-Gual** (Departament de Biologia Cel·lular, Fisiologia i Immunologia, Universitat Autònoma de Barcelona, Cerdanyola del Vallès, Spain)
S5.1S Looping through evolution: divergent 3D genome architecture of male germ cells across vertebrates.
- 16:00 – 16:15 **Adrián Talavera** (Institute of Evolutionary Biology (CSIC-Universitat Pompeu Fabra), Spain.)
S5.01 Genomic applications to the study of Western Mediterranean amphibians and reptiles.
- 16:15 – 16:30 **Lucía Álvarez-González** (Departament de Biologia Cel·lular, Fisiologia i Immunologia, Universitat Autònoma de Barcelona, Spain).
S5.02 From bricks to towers: A tale of mammalian genomes 3D architecture.
- 16:30 – 17:00 **Homenaje 20º aniversario SESBE**
- 17:00 – 18:30 **Poster Session 2 with Drinks & Bites**
- 18:30 – 20:00 **Social Activity: Visit to Valencia Centre**

Friday, 23rd January

9:00 – 12:00 Session 6: Evolutionary Genetics & Omics

Chair: Jaume Pellicer

9:00 – 9:30 Invited Speaker: Aida Verdes (National Museum of Natural Sciences (MNCN-CSIC))

S6.IS Novelty and conservation in the evolution of animal venoms.

9:30 – 9:45 Álvaro Pita Ramírez (Laboratori de Ictiologia Genética, Universitat de Girona)

*S6.O1 Genomic insights into the evolutionary structure of Iberian brown trout (*Salmo trutta*) lineages.*

9:45 – 10:00 Juan Esteban Uribe (Università degli Studi di Milano Statale, Italy)

*S6.O2 Population genomics of *Ixodes ricinus* (Ixodidae), the main vector of Lyme borreliosis agents in Europe.*

10:00 – 10:15 Rosario Gil (University of Valencia, Spain)

*S6.O3 Symbiotic Regulation through Extracellular Vesicles: Insights from the *Blattella*–*Blattabacterium* Model.*

10:15 – 10:30 Mar Llaberia-Robledillo (Cavanilles Institute of Biodiversity and Evolutionary Biology, University of Valencia, Spain)

S6.O4 Co-Genomic Insights into Host–Parasite Coevolution Across Postglacial Lake Systems.

10:30 – 10:45 Francisco Perfeccti (University of Granada, Spain)

*S6.O5 Local temperature alone produces a phenotypic change and modulates the transcriptomic landscape of floral phenotypic plasticity in *Moricandia arvensis*.*

10:45 – 11:30 Coffee Break

11:30 – 11:45 Sergi Taboada (National Museum of Natural Sciences (MNCN-CSIC))

*S6.O6 Whole Genome Sequencing reveals population structure and adaptation of the deep-sea sponge *Phakellia ventilabrum* in the Northeast Atlantic and Mediterranean Sea.*

11:45 – 12:00 Moisès Bernabeu (Barcelona Supercomputing Center)

S6.O7 Diverse origins of the ancestral eukaryotic genome reveal multiple interactions during eukaryogenesis.

12:00 – 13:30 SESBE Assembly Meeting & Next Conference

13:30 – 15:30 Lunch

15:30 – 17:30 Session 7: Macroevolution & Speciation

Chair: Juan Cantalapiedra

- 15:30 – 16:00 **Invited Speaker: Anne-Claire Fabre** (NMBE (Bern, Switzerland))
S7.IS The Metamorphic Blueprint: How life cycle type shapes salamander diversity.
- 16:00 – 16:15 **Cristian Cañestro** (Universitat de Barcelona, Spain)
*S7.O1 Scrambled genomes, stable morphologies: The paradox of *Oikopleura dioica* cryptospecies decoupling genome architecture reorganization from macroevolutionary change.*
- 16:15 – 16:30 **Héctor Tejero Cicuéndez** (Museum für Naturkunde)
S7.O2 The role of aridity in shaping niche breadth and phylogenetic clustering in tetrapods.
- 16:30 – 16:45 **David Peris Navarro** (IATA-CSIC & UiO)
*S7.O3 Can we define microbial species? Insights from the *Saccharomyces* genus.*
- 16:45 – 17:00 **Elizabeth Steell** (Girton College, University of Cambridge)
S7.O4 Revealing patterns of homoplasy in discrete phylogenetic datasets with a new cross-comparable index.
- 17:00 – 17:15 **Sergio Martínez Nebreda** (Johns Hopkins University)
S7.O5 A fruitful constraint in deep time: the diversification of amniote skull.
- 17:15 – 17:30 **Guillermo Navalón** (Universidad de Alcalá)
S7.O6 Transformation of the labyrinth and occiput during the bird origins.
- 17:30 – 18:00 **Coffee break**
- 18:00 – 19:00 **Clausure Keynote: Joana Meier** (Wellcome Sanger Institute, UK)
KN2 The roles of hybridisation and chromosomal rearrangements in rapid speciation.
- 21:30 **Conference Dinner**