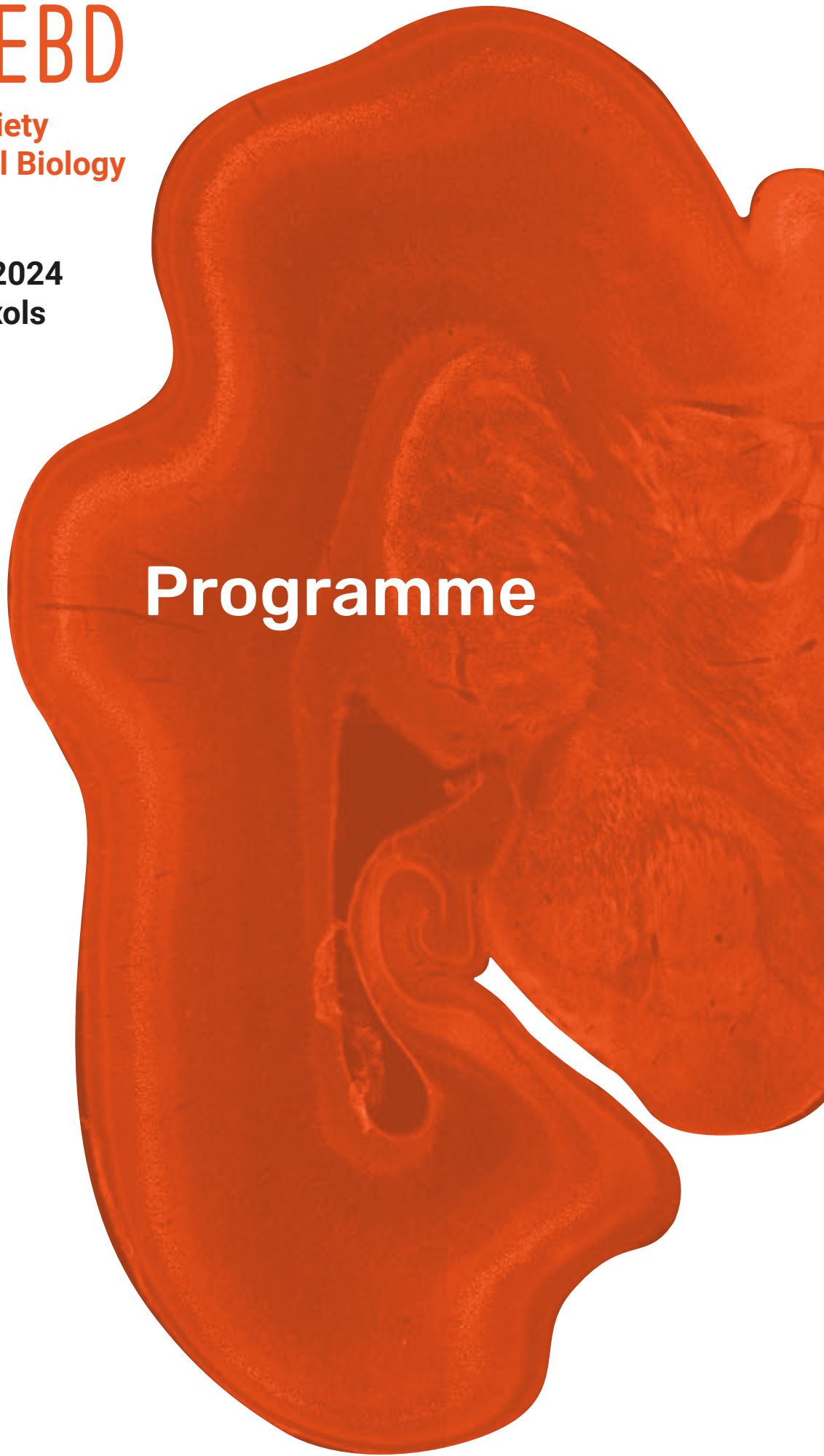




**18th Spanish Society
for Developmental Biology
Meeting**

16-18th October 2024
Sant Feliu de Guíxols
sebd2024.com

Programme



Day 1 | WEDNESDAY 16th October 2024

13.00 – 15.00 LUNCH

15.00 – 15.45

Opening Session

Developmental Dynamics session

Chair: Cristina Pujades, *MELIS-UPF*

Keynote 1 — Paul Trainor, *Stowers Institute, USA*

Global Processes Have Tissue Specific Effects in Development and Disease

15.45 – 17.15

Session 1 – Organogenesis

Chairs: Esteban Hoijman, *IBMB-CSIC* & Teresa Rayon, *Brabham Institute, UK*

- **15.45 h** Short Talk: Dorso-ventral Limb Polarity, deciphering *Lmx1b* Regulation.
Marian Ros, *IBBTEC, CSIC-SODERCAN-University of Cantabria), Spain*
- **16.00 h** **James Sharpe**, *EMBL, Spain*
Out on a limb – modelling organogenesis
- **16.30 h** **Marta Llimargas**, *IBMB-CSIC, Barcelona, Spain* Mechanisms underlying tubular organ morphogenesis
- **17.00 h** Short Talk: Tissue-tissue interactions and epithelial remodelling drive the expansion of the zebrafish nostril.
Clara Gordillo, *Sorbonne Université*

17.15 – 17.45

COFFEE BREAK

17.45 – 19.15

Session 2 – Stem and progenitor cells

Chairs: Vikas Trivedi, *EMBL* & Barbara Pernaute, *CABD-CSIC, Sevilla*

- **17.45 h** **Meritxell Rovira**, *IdiBell, Barcelona, Spain*
- **18.15 h** Short Talk: A stem cell activation state coupling spermatogenesis with social interactions in male animals
Salvador Herrera, *Centro Andaluz de Biología del Desarrollo (CABD), CSIC-UPO-JdA, Sevilla, Spain*
- **18.30 h** Short Talk: How do meiotic cells survive recombination double strand breaks? A role for Bruno.
Juan Garrido, *Andalusian Center for Developmental Biology (CABD), CSIC-Pablo de Olavide University, Seville, Spain*
- **18.45 h** **Miguel Manzanares**, *CBM, Madrid, Spain*
Fresh starts: embryos, genomes and how to make a difference

19.15 – 20.00

Developmental Dynamics Poster flash talks

- Joan Casamitjana, UB / Idibell — *“Mimicking the embryonic pancreatic stromal niche for beta cell (re)generation”*
- Jorge Corbacho Sánchez, Centro Andaluz de Biología del Desarrollo — *“Single-cell multiome analysis of germ layer precursors reveals differential response to mechanical stimulation during gastrulation in medaka embryos.”*
- Núria Corbella Rius, University of Barcelona — *“Effects of rRNA processing proteins Kkz and Clw in drosophila tracheal morphogenesis”*
- Roberto de la Fuente Pita, Institute of Genetics and Animal Biotechnology of the Polish Academy of Sciences — *“The expression dynamics of the RUNT-related transcription factor RUNX1 in extraembryonic lineages suggests a potential role in ensuring lineage specification in the mouse blastocyst”*
- Teresa De Los Reyes Corrales, Instituto de Salud Carlos III ISCIII — *“The impact of parental environmental experiences on offspring brain susceptibility to glioblastoma progression”*
- Sofía Zaballa, University of Barcelona — *“Increased neurogenesis and behavior performance by in vivo reprogramming”*
- Luis Hernández Huertas, Andalusian Centre for Developmental Biology (CABD-UPO-CSIC) — *“CRISPR-RfxCas13d screening uncovers Bckdk as a post-translational regulator of the maternal-to-zygotic transition in teleosts”*
- Ines Kelleher Lopez, Centro de Biología Molecular — *“Cross-talk between macrophages and tumour cells during tissue homeostasis in Drosophila melanogaster”*
- Maria Jose Lopez Fernandez, Universidad de Barcelona / Centro Andaluz De Biología Del Desarrollo (Csic-Upo) — *“First-time cis-regulatory interactions between mammal- and plant-specific TFs and the zebrafish genome”*
- Sergio Menchero Fernandez, The Francis Crick Institute — *“Understanding temporal diversity in mammalian developmental programmes using marsupial single-cell transcriptomics”*
- Gonzalo Ortiz Álvarez, Universitat Pompeu Fabra — *“4D-Study of Neuronal Cell Lineages and the Generation of Neuronal Diversity in the Zebrafish Hindbrain”*
- Diego Sainz de la Maza Redondo, University College London — *“Somatic cells support germ cell survival by providing glycolytic metabolites”*
- Miquel Sendra, CNIC — *“Epigenetic priming of cardiac endothelium in the mammalian epiblast”*
- Cristina Vila Torondel, Universitat de Barcelona — *“Indirect pathway lineage-specific alterations during early development in Huntington’s Disease”*

20.00 – 21.30

DINNER

21.30 – 23.00

Poster session with beers

Day 2 | THURSDAY 17th October 2024

9.00 – 9.45

Development Session

Chair: Elisa Martí, *IBMB-CSIC*

Keynote 2 — Isabel Fariñas, Universidad de Valencia, Spain

A physical niche for stem cell quiescence in the brain

9.45 – 11.00

Session 3 – Morphogenesis I

Chairs: José Pastor, *INC-Alicante* & Maria Almuedo, *CABD-CSIC*

- **9.45 h** **Fernando Casares, CABD, Sevilla, Spain**
Regeneration in mayflies: old and new mechanisms
- **10.15 h** Short Talk: Elastic Contractile Stress in the Basement Membrane Generates Basal Tension in Epithelia.
Karla Yanin Guerra, *Cluster of Excellence Physics of Life, Technische Universität Dresden, Dresden, Germany*
- **10.30 h** Short Talk: Early signaling events governing epithelial regeneration.
José Esteban, *University of Barcelona/ Institut de Biomedicina de la Universitat de Barcelona*
- **10.45 h** Short Talk: Membrane potential controls periodicity of somite formation and its growth.
Manohara Mahadeva, *Institute of Animal Reproduction and Food Research Polish Academy of Sciences*

11.00 – 12.00

COFFEE BREAK

11.30 – 12.00

30 year Anniversary Session

12.00 – 13.30

Session 3 – Morphogenesis II

Chairs: Luisma Escudero, *IBiS Sevilla* & Beatriz Estrada, *IbiS, Univ. Sevilla*

- **12.00 h** **Miguel Torres, CNIC, Madrid, Spain**
The specification and differentiation of cardiovascular lineages in the mouse embryo
- **12.30 h** Short Talk: Dynamics and molecular regulation of three-dimensional packing of epithelia
María Jesús Gomez-Lamarca, *Instituto de Biomedicina de Sevilla (IBiS), Hospital Universitario Virgen del Rocío/CSIC/Universidad de Sevilla and Departamento de Biología Celular, Universidad de Sevilla, Spain*
- **12.45 h** Short Talk: Reshaping morphogenesis: Modular control of kinematic Attractors and Repellers in avian gastrulation
Guillermo Serrano, *University of Cambridge*
- **13.00 h** **Jerome Solon, CSIC – Ikerbasque, Leioa, Spain**

Closing the gap: Mechanosensing and control of tissue mechanics for epithelial sealing and tissue repair

13.30 – 15.00

LUNCH + Group photo

15.00 – 15.45

ISDB Session

Chair: Sofia Araújo, *Genetica UB – IBUB*

Keynote 3 — Nadia Mercader, University of Bern, Switzerland
Mechanisms of heart regeneration in the zebrafish

15.45 – 18.45

Session 4 – eLife session : Neurodevelopment I

Chairs: Sandra Acosta, *Idibell – UB* & Sergio Casas, *ISCIII*

- **15.45 h** **Víctor Borrell, IN, Alicante, Spain**
Cellular and genetic mechanisms of cerebral cortex development and folding
- **16.15 h** Short Talk: Neuronal subtype specification of spinal projection and motor neurons by a common temporal sequence
Laia Caudet, *Institut für Biochemie, FAU Erlangen-Nürnberg, Erlangen, Germany*
- **16.30 h** Short Talk: Mechanisms regulating interneuron identity in the postnatal brain
Diego Garcia González, *Instituto de Biomedicina de Sevilla, Spain*
- **16.45 h** Short Talk: Early cortical GABAergic interneurons determine the interhemispheric connectivity of L2/3 and L4 excitatory neurons
Alfonso Aguilera, *National Centre for Biotechnology*
- **17.00 h** elife editor

17.15 – 17.45

COFFEE BREAK

17.45 – 19.00

Session 4 – eLife session : Neurodevelopment II

Chairs: Murielle Saade, *IBMB-CSIC* & Victor Borrell, *IN-CSIC*

- **17.45 h** **Berta Alsina, UPF, Barcelona, Spain**
Regulation of the statoacoustic ganglion shape and wiring in 3D
- **18.15 h** Short Talk: A ribo-tag based screen identifies novel translational regulation-dependent mechanisms involved in axon guidance
Verónica Murcia, *Instituto de Neurociencias*
- **18.30 h** Short Talk: Rebuilding the Mechanisms of Apical Constriction: Exploring the Role of Rootletin in Neuronal Delamination
Axelle Wilmerding, *IBMB*
- **18.45 h** Short Talk: A 3D multimodal take on neurodevelopmental dynamics
Matthias Blanc, *UPF, Spain*

19.00 – 19.45

Developmental Dynamics Poster Flash talks

- Alberto Cañibano Hernández, Andalusian Center for Developmental Biology (CABD) – “*Maternal CRISPR-Cas13d Screening Sheds Light on Ubiquitination Regulation during Maternal to Zygotic Transition in zebrafish*”
- Katarina Coolens, Vrije Universiteit Brussel – “*ΔNp63 defines bipotent precursors in murine pancreas development*”
- Jesús Crespo Cuadrado, Andalusian Centre for Developmental Biology (CABD) – “*The role of Wapl during the maternal-to-zygotic transition*”
- Carlos Garcia Padilla, University of Jaen – “*miRNAs during embryonic myogenesis: implications in satellite stem cell development*”
- Adrián Holguín Horcajo, UB, IDIBELL – “*Are Peribiliary Glands (PBG) and Pancreatic Ductal Glands (PDG) the same entity?*”
- Palmira Llorens Giralt, Universitat de Barcelona – “*Synergy of regeneration-specific and developmental enhancers in liver regeneration*”
- Javier Macho Rendón, Centro Andaluz de Biología del Desarrollo – “*A single-cell multi-omics approach identifies active key nodes and cis-regulatory elements within the regulatory networks specifying tissue domains in the developing zebrafish optic cup*”
- Daniel Moreno Blas, University of Barcelona – “*Activation of cellular senescence during planarian regeneration*”
- Oscar H. Ocaña Terraza, Universidad de Jaén – “*Cellular state transitions during second heart field morphogenesis*”
- María Olmedo López, University of Sevilla – “*Transient arrest allows resynchronization between developmental timers in C. elegans*”
- Claudia Peregrina Cabredo, Universidad de Barcelona – “*LRRRTMs controls cortical migration by repulsive mechanisms*”
- Lourdes Rincón Ortega, Centro Andaluz de Biología del Desarrollo (CSIC-JA-UPO) – “*The role of integrins in the maintenance of epithelial architecture*”
- Joan Roncero Carol, IBMB-CSIC/IDIBELL – “*Autonomous defense of the early embryo*”
- Alonso Sánchez Cruz, Centro Nacional de Biotecnología – “*Study of the role of visual activity and interneurons in the formation of cortical visual-auditory crossmodal connections*”
- José María Santos Pereira, Universidad de Sevilla – “*A compendium of transcription factor binding sites during zebrafish development*”

20.00 – 21.30

DINNER

21.30 – 23.00

Poster session with beers and Party

Day 3 | FRIDAY 18th October 2024

9.00 – 9.45

C&D Session

Chair: Marian Ros, *IBBTEC, CSIC-SODERCAN*

Keynote 4 – Roberto Mayor, *University College, London, UK*

How morphogenesis drives developmental signalling

9.45 – 11.15

Session 5 – EVO DEVO and Genomics

Chairs: Cristian Cañestro, *Genetica UB – IRBIO* & Jordi Solana, *Oxford Brookes University, UK*

- **9.45 h** **Ozren Bogdanovic**, *CABD, Sevilla, Spain*
- **10.15 h** Short Talk: Species-specific rhythmic yolk contractions and their role in teleost gastrulation
Cielo Centola, *Centro Andaluz de Biología del Desarrollo (CABD), Spain*
- **10.30 h** Champi (Juan Pascual- Anaya), *Universidad de Málaga, Spain*
- **11.00 h** Short Talk: Decoding cnidarian cell type gene regulation
Marta Iglesias, *CRG, Spain*

11.15 – 12.15

COFFEE BREAK

Asamblea SEBD

12.15 – 12.50

SEBD award lectures

José Luis Gómez Skarmeta award for Scientific Excellence in Developmental Biology 2024

Best thesis prize (2021, 2022, 2023 editions) 3 talks

13.15

SciComm award talk

13.30

SEBD2024 awards

Developmental Dynamics prizes to the best poster and to the best talk

13.45

Closing remarks

14.00

DEPARTURE