EMBO Workshop

Latin American Developmental Biology Conference

17 – 20 March 2024 | Valparaiso, Chile

Organizers

Miguel Concha Universidad de Chile, CL

Sylvain Marcellini Universidad de Concepción, CL

Veronica Palma Universidad de Chile, CL

Marcela Torrejon Universidad de Concepción, CL

Co-organizers (Scientific Committee)

Marianne Bronner California Institute of Technology, US

Karen Crow University of California Santa Cruz, US

Alfonso Martinez-Arias Universitat Pompeu Fabra, ES

Roberto Mayor University College London, UK

Irene Yan Universidade de São Paulo, BR

Speakers

Laure Bally-Cuif Institut Pasteur, FR Elvan Boke

Centre for Genomic Regulation, ES Marianne Bronner California Institute of Technology, US

Federico Brown Universidade de São Paulo, BR

Miguel Concha Universidad de Chile, CL

Cassandra Extavour Harvard University, US

Veronica Hinman Carnegie Mellon University, US Ricardo Mallarino

Princeton University, US

Yanlan Mao University College London, UK

Alfonso Martinez Arias Universitat Pompeu Fabra, ES Roberto Mayor University College London, UK Kara McKinley Harvard University, US

Luis Morelli IBioBA-MPSP, AR

Guillermo Oliver Northwestern University, US

Natalia Pabon-Mora Universidad de Antioquia, CO

Nicoletta Petridou EMBL Heidelberg, DE

Verena Ruprecht Centre for Genomic Regulation, ES

Marcos Simoes-Costa Harvard University, US

Ben Steventon University of Cambridge, UK

Pavel Tomancak MPI-CBG, DE

Alexander Vargas Universidad de Chile, CL Registration

Abstract submission deadline 30 November 2023

Childcare 、Grants 、

Undergraduate student 130 USD Graduate student (non-member/member) 200/150 USD Postdoc (non-member/member) 250/200 USD Academic (non-member/member) 450/350 USD Industry 780 USD

Contact

Miguel Concha mconcha@uchile.cl

#EMBOdevBio

meetings.embo.org/event/24-dev-bio





The Company of Biologists





LATIN AMERICAN DEVELOPMENTAL BIOLOGY CONFERENCE

17-20 March 2024 | Valparaíso, Chile

PROGRAMME OUTLINE

DAY 1: Sunday March 17th

09.00-13.00 Registration

11.00-12.00

Open Lecture (EMBO Global Lecture) <u>Chair</u>: Verónica Palma *El embrión humano: entre el mito y la realidad* Alfonso Martínez-Arias

13.40-14.10

Welcome by Conference Organisers and Presidents of Organising Societies

14.10-15.00

SBDCh Luis Izquierdo Memorial Lecture (EMBO Global Lecture) <u>Chair</u>: Miguel Concha (SBDCh President) *Developmental and evolutionary insights from gastruloids* Alfonso Martínez-Arias

Session 1: Self-organisation and patterning

Chairs: Liz Robertson, Pablo Wappner

15.00-15.30

- *Multi-scale control of pattern regulation during body axis elongation* Ben Steventon
- 15.30-15.45

The transcription factor Oct6 regulates the dissolution of the naive pluripotent state by inhibiting Nanog and inducing differentiation-associated transcription factors (short talk) Ariel Waisman

15.45-16.00

Mixed clonal/aggregative multicellularity is impacted by extreme salinity fluctuations in an animal closerelative (short talk) Josean Reyes Rivera

16.00-16.30 Coffee Break

16.30-17.00

Critical points in embryonic tissue organisation (online talk)

Nicoleta Petridou

17.00-17:15

Cell Recruitment, a Developmental Mechanism for Robust Patterning (short talk) Marycruz Flores-Flores

17.15-17.45

Collective rhythms and patterning in vertebrate embryonic segmentation

Luis Morelli

17.45-18:00

Flash talks (1 - 7) Arthur Roque, Joaquin Smucler, Ignacio Casanova-Maldonado, Marcos Wappner, Natalia Sánchez, Felipe Maurelia, Santiago Bosch

18.00-18.30 Coffee Break

LASDB Award Lecture Series

Chair: Juan Riesgo (LASDB President)

18.30-19.10

LASDB Young Investigator Award Lecture

Unveiling neural crest-placode condensation during Trigeminal Ganglion Formation: The Crucial Role of microRNAs and extracellular vesicles Pablo Strobl-Mazzulla

19.10-20.00

LASDB Lifetime Achievement Award Lecture Morphogen gradients in Xenopus development Eddy de Robertis

20.00-21.30

Opening reception

22:00- (Board meeting LASDB @ IBIS)

DAY 2: Monday March 18th

09.00-09.50

ISD Jean Brachet Memorial Lecture (EMBO Global Lecture) <u>Chair</u>: Richard Behringer (ISD President) *Unravelling the Wonders of Neural Crest Migration* Roberto Mayor

Session 2: Morphogenesis and tissue mechanics

Chairs: Loydie Jerome-Majewska, Daniel Ríos

09.50-10.20

Morphogenetic origin of asymmetry in the embryonic zebrafish brain Miguel Concha

10.20-10.35

3D cellular morphodynamics reveals divergent mechanisms of gastrulation in insects (short talk) Margherita Battistara

10.35-10.50

The role of the Integrin complex in the coordination of tracheal and epidermal remodeling during Drosophila embryogenesis (short talk) Luis Eduardo Sánchez-Cisneros

10.50-11.20 Coffee Break

11.20-11.50

Evolution of Morphogenesis (EMBO Global Lecture) Pavel Tomancak

11.50-12.05

Effect of muscle activity in the development of the morphology of the chicken humerus (short talk) José Antonio Palma Liberona

12.05-12.35

Coping with Mechanical Stress: Tissue dynamics during development, homeostasis and repair (EMBO Young Investigator Lecture)

Yanlan Mao

12.35-12.50

Flash talks (8 - 13) Federico Rovner, Daniela Zurita-Paredes, Manuela Franco, Silvia Toloza, Elisabeth Rodriguez-Salazar, Japhet Rojas

12.50-13.50 Lunch Boxes and Social Networking ("meet the unexpected")

13.50-15.50

Poster session (even numbers)

Session 3: Genomic regulation of development

Chairs: Pamela Hoodless, Flavio Zolessi

15.50-16.20

How to build a gliding mammal

Ricardo Mallarino

16.20-16.35

Cross-validation of conserved osteoblast-specific enhancers illuminates bone diseases and early skeletal evolution (short talk)

Héctor Castillo

16.35-16.50

Understanding the function of PTPRD in cortical brain development and its implications for neurodevelopmental disorders (short talk) Gonzalo Cancino

16.50-17.20

A plant living inside a plant: the evolution and development of holoparasitism in the Apodanthaceae Natalia Pabón-Mora

17.20-17.50 Coffee Break

17.50-18.05

The evolving BMP and Toll signaling network in insect dorsal-ventral patterning (short talk) Helena Araujo

18.05-18.35

Spatial control of the epigenome during avian gastrulation Marcos Simoes-Costa

18.35-18:50

Flash talks (14 - 19)

Ana Tellez, Fermín Evangelisti, Valentina Muñoz, Maria Candelaria Díaz, Maryori González, Benjamín Pérez 18.50-19.40

ISD Anne McLaren Lecture

<u>Chair</u>: Sally Dunwoodie (ISD President-Elect) *Evading ageing: mitochondrial and proteostatic adaptations in oocytes* (EMBO Young Investigator Lecture) <u>Elvan Böke</u>

19.40-20.00

Plenary meeting of LASDB (@Sala de Lectura, Parque Cultural)

20.00-

(Board meeting ISD @IBIS) (Board meeting SBDCh)

DAY 3: Tuesday March 19th

09.00-09.50

ISDB Cells & Development Lecture Chair: Roberto Mayor (ISDB Secretary)

Differential neural crest gene regulatory subcircuits along the body axis Marianne Bronner

Session 4: Organ and system development

Chairs: Helena Araujo, James Briscoe

09.50-10.20

Characterization of the role of cardiac lymphatics in heart development and repair Guillermo Oliver

10.20-10.35

Pleiotropic and cell type-specific roles of fibronectin in cardiovascular development (short talk) Cecilia Arriagada

10.35-10.50

Morphogenesis and connectivity in developing zebrafish eyes: the role of mab21/2 (short talk) Camila Weiss-Garrido

10.50-11.20 Coffee Break

Plenary meeting SBDCh (@Sala de Lectura, Parque Cultural)

11.20-11.50

Single-cell and population mechanisms controlling adult neural stem cell maintenance Laure Bally-Cuif

11.50-12.05

The role of Notch and Wnt signalling interaction in patterning of early inner ear (short talk) Neelanjana Ray

12.05-12.20

Flash talks (20 - 24) Carla Campetella, Bárbara Casas, Paulo Casagrande, Ariel Arévalo, Emilia Failache

12.20-13.20

Lunch Boxes and Workshops

Workshop 1: "Are we changing paradigms in developmental biology?" (Place: Sala de Lectura) Workshop 2: "Getting funded and published in Developmental Biology: challenges and strategies" (Place: Sala de Proyección) Workshop 3: "Women representativity and diversity in developmental biology" (Place: Sala de Estudio)

Workshop 4: "Ethics and integrity in developmental biology" (Place: Sala de Estudio)

13.20-15.20

Poster session (odd numbers)

15.20-16.20

Power Hour <u>Chair:</u> Alfonso Martínez Arias *Future directions and challenges of Developmental Biology*

Session 5: Regeneration, homeostasis and ageing

Chairs: Kathleen Whitlock, Peter Lwigale

16.20-16.50

Regeneration in the uterus Kara McKinley

16.50-17.05

Autophagy regulates Notch during Drosophila blood cell differentiation (short talk)

Pablo Wappner

17.05-17.20

Maternal genetics of the oocyte-to-embryo transition (short talk) Ricardo Fuentes

17.20-17.50

MEETING PHOTO Coffee Break

17.50-18.20

Mechanical forces and cell adhesion in embryonic tissue clearance (online talk)

Verena Ruprecht

18.20-18.35

Unveiling the Role of dTrmO: A tRNA Methyltransferase Shaping Translation and Development in Drosophila (short talk)

Deborah Cuper

18.35-18.50

Mitochondrial function during Xenopus laevis spinal cord regeneration (short talk) Paula Slater

18.50-19.05

The exocyst complex controls multiple events in the pathway of regulated exocytosis (short talk) Mariana Melani

19.05-19.25

The art of optically sectioning biological samples (Zeiss)

Jacques Paysan

19.25-19.40

News from Development and The Company of Biologists Alex Eve

19.40-20.00

Ceremony of Travel Awards

20.45-23.00

Farewell Reception "Museo Baburizza/Paseo Yugoslavo" (sponsored by Zeiss)

DAY 4: Wednesday March 20th

09.00-09.50

PASEDB Keynote Lecture

<u>Chair</u>: Patricia Schneider (PASEDB board) Be fruitful and multiply: how reproductive capacity evolves (online talk) Cassandra Extavour

Session 6: Evo-Devo

Chairs: Karen Crow, Sylvain Marcellini

09.50-10.20

More than fossils: The role of Developmental data in the puzzle of Dinosaur-Bird evolution Alexander Vargas

10.20-10.35

Hox genes control homocercal caudal fin development and evolution (short talk) Nicolás Cumplido

10.35-10.50

Investigating the roles of pioneer transcription factors during arthropod evolution, development and regeneration (short talk) Rodrigo Nunes-da-Fonseca

10.50-11.20 Coffee Break

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11.20-11.50

The evolution of gene regulatory networks for novel traits in Echinoderms Verónica Hinman

11.50-12.05

Dark embryos or pale embryos: a study of the pel polymorphic allele that exclusively affects oocyte-derived pigmentation in a glass frog (short talk)

Andrés Romero-Carvajal

12.05-12.35

The small eyes of cave planarians: Repression of eye specific neoblasts as a mechanism for organ-size reduction Federico Brown

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12.35-13.05

Poster and short-talk prizes. Closing remarks.