

Frontiers in E3
10th CE3C Annual Meeting

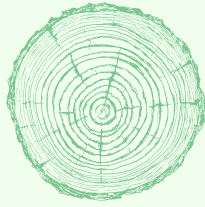
*10 years defying the
frontiers of knowledge*

**RINGS OF
EXPERIENCE:
GROWING
TOWARDS
TOMORROW**

**12-14
DECEMBER 2024**

**MONSANTO
INTERPRETATION CENTER**

LISBON'S GREEN LUNG



Welcome to the 10th Frontiers in E3 CE3C's Annual Meeting

This milestone edition, themed "Rings of experience: growing towards tomorrow," celebrates a decade of growth, resilience, and scientific discovery within our community. Over the years, our annual meetings have become a symbol of the collaborative spirit and dedication that drives CE3C, bringing together researchers, ideas, and ambitions from diverse fields of Ecology, Evolution, and Environmental Changes.

As we gather for this special 10th anniversary, we reflect on the knowledge and connections built over the years and look forward to the innovations and insights that will shape the next decade. Through this meeting, we celebrate our collective journey and embrace the future, building on the experiences that bind us and propel us forward.

Thank you for being part of this shared vision, and welcome to a memorable event!

The organising committee

Organising committee



Ana Santos



Andreia Anjos



Bernardo Rocha



Carla Alegria



Catarina Costa



Cristina Máguas



Gabriela Rodrigues



Inês Almaça



Inês Ferreira



Joana Jesus



Marta Antunes



Ricardo Costa



Rúben Oliveira



Rui Rebelo



Susana Martins

Scientific committee



Alisson Gontijo



Ana Rainho



António Onofre Soares



Carlos Fernandes



Cristina Antunes



Guilherme Oyarzabal da Silva



Leonor Rodrigues

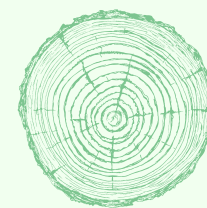


Mónica Cunha



Pedro Pinho





**Rings of experience:
growing towards tomorrow**

SHORT PROGRAMME

12

December

- 09H00 Check-in
- 09H30 Opening session
- 10H00 Spotlight Session
- 10H45 Short / Flash Talks
- 11H15 Coffee-break
- 11H45 Short Talks
- 12H30 Lunch
- 13H30 Short / Flash Talks
- 14H30 Parallel Activities
& Coffee-break
- 17H00 Return to CIÊNCIAS
- 20H00 Meeting's Dinner

13

December

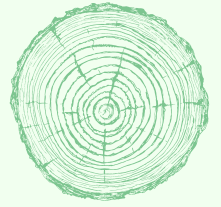
- 09H00 Spotlight session
- 09H45 Short / Flash Talks
- 10H45 Coffee-break
- 11H15 Short / Flash Talks
- 12H40 Lunch
- 13H30 Poster session
- 14H30 Participatory Budget
- 15H30 Awards
- 16H00 Coffee-break
- 16H30 Closing session
- 17H00 Return to CIÊNCIAS

14

December

- 09H00 Departure from CIÊNCIAS
- 10H00 Arrival at EVOA
- 12H30 Lunch
- 14H30 Return to CIÊNCIAS





**Rings of experience:
growing towards tomorrow**

PROGRAMME



All talks marked with a  are eligible for an award.
Please cast your vote by 15h00 on the 13th.

9h00

Check-in

9h30

Opening session

Rui Rebelo, CE3C Executive Committee
Pedro Miguel Martins, Director of the Monsanto Interpretation Centre
Gabriela Rodrigues, CE3C Executive Committee

10h00

Spotlight Session Chair: Rui Rebelo

SP1

A Tale of Two Canids: Diet Composition and Livestock Depredation Patterns of Wolves and Dogs

Sofia Lino, Conservation Ecology and Society
Ecology and Conservation Across Scales

SP2

What happens to the wild wood mouse when in captivity?

Mailis Carrilho, Ecophysiology of Small Mammals
Towards Sustainable and Resilient Ecosystems

10h45

Short / Flash Talks Chair: Mónica Cunha

 ST1

Mouse and human models to test LAMA2-MD therapeutic approaches
Diogo Fernandes, Molecular Mechanisms of Disease

 ST2

Age- and sex-specific control of locomotor behavior by neuronal Arhgef10 in Drosophila
Mafalda Gualdino, Integrative Biomedicine

FT1

Why is our heart on the left side?
Susana S. Lopes, Cilia in Development and Disease

11h15

Coffee-break

11h45

Short Talks

Chair: Carlos Fernandes

 ST3

**Hybridization shaping speciation?
The case of the Iberian chubs (Genus Squalius)**
Estêvão Faustino, Evolutionary Genomics and Bioinformatics

 ST4

**Ecological differentiation influences the evolution
of pre-zygotic isolation in spider-mite species**
Salomé Barreto, Adaptation to Complex Environments

 ST5

**A genetic trade-off between intrinsic growth and sensitivity to
competition, but not with reproductive interference, in spider mites**
Miguel Cruz, Evolution of Host-Parasite Interactions

ST6

Experimental coevolution of plant-herbivore interactions
Erik van Bergen, Adaptation to Complex Environments

12h30

Lunch

13h30

Short / Flash Talks

Chair: Alice Nunes

 ST7

Resilient Mediterranean Landscapes
Miguel Silva Rodrigues, Plant Functional Ecology

ST8

**Drivers of urban freshwater invertebrate
communities along a climate gradient**
Vladimira Dekanova, Urban Ecology

 ST9

**Assessing bias in conservation translocations in the Iberian Peninsula:
taxonomic, conservation status, and functional diversity insights**
Sara Carona, Urban Ecology

 FT2

**When Evolution shows a taste switch:
terpene synthase binding preference in Menthinae, Lamiaceae**
Joel Laia, Plant Functional Ecology

FT3

**Integrating Permaculture in business and management education to
foster sustainable business practices: first steps of the PermaLABs project**
Florian Ulm, Plant Functional Ecology

FT4

From the world to the Mediterranean - a Miyawaki method review
Florian Ulm, Plant Functional Ecology
(representing António Alexandre, Plant-Soil Ecology)

FT5

**Lusoturf - Mycelium-based Composites and Production
Methods for Sustainable Synthetic Turf Applications**
Inês Ferreira, Plant-Soil Ecology

14h30

Parallel activities & coffee-break

Guided visits
to LIFEPLAN
project plots at
Biodiversity Space

Group dynamics
organised by the
Associate Members

Poster
session

17h00

Return to CIÊNCIAS

20h00

Dinner at 39 Degraus

Cinemateca,
R. Barata Salgueiro 39,
1269-059 Lisboa





All talks marked with a  are eligible for an award.
Please cast your vote by 15h00 on the 13th.

9h00

Spotlight Session

Chair: Gabriela Rodrigues

SP3

Diversification and selection patterns in European sardine: insights from mitogenomes

Filipe Sousa, Computational Biology and Population Genomics
Evolutionary Perspectives in a Changing World

SP4

A conserved gene regulation program defines cancer cell dormancy across mammalian species and tissues

Alisson Gontijo, Integrative Biomedicine
Environment and Health Interactions

09h45

Short / Flash Talks

Chair: Guilherme Oyarzabal da Silva

ST10

Conservation, monitoring and restoration assessment of the world-class cave biodiversity hotspot in Portugal

Ana Sofia Reboleira, Subterranean Ecology



ST11

Do island spiders descend from trees? – Colonization and niche expansion according to vertical microhabitat

Ricardo Pires da Costa, Island Biodiversity, Biogeography & Conservation



ST12

Feathers and fangs: Metabarcoding trophic niches of birds and bats in West African lowland rice fields

Tiago Morais Gonçalves, Tropical and Mediterranean Biodiversity



ST13

Landscape to Microhabitat: Uncovering the Multiscale Complexity of Azorean Forests

Sébastien Lhoumeau, Island Biodiversity, Biogeography & Conservation



ST14

Scree slopes of Portugal: habitat distribution and biodiversity

Rita Eusébio, Subterranean Ecology

FT6

Plant-pollinator interactions and pollinator diversity across a disturbance gradient in an oceanic island (Terceira, Azores)

Mário Boeiro, Island Biodiversity, Biogeography & Conservation

10h45

Coffee-break

11h15

Short / Flash Talks

Chair: Ana Rainho



ST15

Nonlinear responses structure lichen diversity response to global change drivers across European cities

Bernardo Reis Rocha, Urban Ecology



ST16

Habitat connectivity in urban context under global change: an analysis using a multitaxon approach

Ana Isabel Beça, Urban Ecology

ST17

Assessing Threats and Conservation Strategies for Endemic Terrestrial Arthropods in the Azores

Guilherme Oyarzabal da Silva, Island Biodiversity, Biogeography & Conservation



ST18

Mammalian response to FSC forest certification in production plantations

Gonçalo Matias, Conservation Ecology & Society



FT7

Ecology and conservation of subterranean fauna from the Greater Lisbon area, Portugal

Rafael Silva, Subterranean Ecology



FT8

The effects of climate change on meso and small carnivores: a review and meta-analysis

Vasco Valdez, Conservation Ecology & Society

12h40

Lunch

13h30

Poster session

14h30

CE3C Participatory Budget 2023

Chair: Ricardo Costa

PB1

Thermal evolution: candidate genes for adaptation to global warming

Marta Antunes, Local Adaptation in Drosophila

PB2

Genomic signatures of selection in hybridising ants: how does temperature affect viability selection during early development?

Beatriz Portinha, Evolutionary Genomics and Bioinformatics

PB3

The winner takes it all: when successful invasion is powered by symbiosis

Joana Jesus, Plant Functional Ecology

CE3C Participatory Budget 2024

Chair: Ricardo Costa

PB4

Modeling Ecological Succession and Time of Surface Exposure in Extreme Environments

Mariana Ramos, System Ecology

PB5

Sowing the Seeds of Resilience: Transforming the White Crowberry into a Thriving Crop

João Jacinto, Plant Functional Ecology

PB6

Origin of polymorphism – chemotypes in the Portuguese plant *Thymus caespititus*

Joel Laia, Plant Functional Ecology

15h30

Ana Neto and Meeting Awards

Chair: Gabriela Rodrigues

16h00

Coffee-break

16h30

Closing session



Cristina Máguas, CE3C Coordinator

Luís Carriço, Dean CIÊNCIAS ULisboa


POSTERS

All posters marked with a  are eligible for an award.
Please cast your vote by 15h00 on the 13th.





TL1 Ecology and Conservation Across Scales

- P1 ForCe - Forest Certification as a tool to preserve vertebrates' biodiversity in exotic forestry plantations**
Luís Miguel Rosalino, Conservation Ecology & Society
-  **P2 Businesses and Biodiversity: How much do corporate actions influence species resilience?**
Afonso Barrocal, Conservation Ecology & Society
-  **P3 Contribution of Green Roofs to the Biodiversity of Lisboa**
Margarida Rei, Tropical and Mediterranean Biodiversity
-  **P4 The role of FSC-forest certification in the conservation of bird communities**
Beatriz Monteiro, Tropical and Mediterranean Biodiversity
-  **P5 Ecological role of terrestrial cave-adapted isopods in bioturbation and nutrient redistribution in subterranean sediments**
Leonor Silva, Subterranean Ecology
-  **P6 Impacts of wildfires in groundwater ecosystems: adapted aquatic organisms are more vulnerable due to the incapacity to trigger anaerobic energy production**
Maria Isabel Dias, Subterranean Ecology
-  **P7 Decomposition of organic matter in caves and its forensic implications**
Rita Moreira, Subterranean Ecology
-  **P8 Non-invasive genetic monitoring and population size estimation of Iberian wolf *Canis lupus signatus* in northwest Portugal**
Margarida Almeida, Conservation Ecology & Society







TL2 Evolutionary Perspectives in a Changing World

-  **P9 Using cell culture of endemic freshwater fish to study the effects of temperature on plasticity**
Catarina Santos, Evolutionary Genomics and Bioinformatics
-  **P10 Evolving tensions: The role of stressful environments in shaping sexual conflict in a haplodiploid species**
Sofia G. Costa, Evolutionary Agroecology
-  **P11 Adapt, adjust or move: can the spider mites *Tetranychus cinnabarinus* do it all in response to heat?**
Raquel Gaspar, Evolutionary Agroecology
-  **P12 Building a recombination map of Iberian chubs: challenges in the experimental design**
Catarina M. Bernardo, Evolutionary Genomics and Bioinformatics








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P13 Inducible tomato defences persist in detached leaves, but are differentially affected by plant integrity and genotype
 Mariya Kozak, Adaptation to Complex Environments
- 
P14 The Subway's hidden inhabitants - A study of Lisbon's metro microbiome
 Beatriz Machado, Computational Biology and Population Genomics
- 
P15 Tipping the scale: investigating the feedback between evolution and stability in a predator-prey system
 Tamara Wonner, Adaptation to Complex Environments
- 
P16 Estimating trait heritability and variation in predator-prey dynamics
 Raquel Tomé, Adaptation to Complex Environments

TL3 Environment and Health Interactions

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P17 LAMA2-deficiency impacts DNA damage in melanoma
 Vanessa Ribeiro, Molecular Mechanisms of Disease
- 
P18 Laminin- α 2 chain deficiency in skeletal muscle causes dysregulation of multiple cellular mechanisms
 Susana Martins, Molecular Mechanisms of Disease
- 
P19 Analysis of the effect of hydrodynamism on the regulation of sea urchin adhesion: a molecular and biomechanical approach
 Inês Caldeira, Molecular Mechanisms of Disease
- P20 Crosstalk between the relaxin and insulin signaling pathways during neurodevelopment in *Drosophila***
 Rebeca Zanini, Integrative Biomedicine
- 
P21 Analyzing AKT in skeletal muscle in development and disease
 Ana M. Alves, Molecular Mechanisms of Disease
- 
P22 Towards the Full Picture of LAMA2-CMD: Bridging the Gap to Human Pathophysiology Through Patient-Derived Myoblasts
 Pedro Gameiro dos Santos, Extracellular Matrix in Development and Disease
- 
P23 Environmentally-sensitive neuroregulation of wing expansion behavior by eclosion hormone
 Lara Lage, Integrative Biomedicine

TL4 Towards Sustainable and Resilient Ecosystems

- P24 Plantar Arroz – Exploring Circular Economy in Rice production**
 Inês Ferreira, Plant-Soil Ecology
- P25 Soil Characteristics Along the Land to Mangrove Gradient in Coastal Areas of Guinea-Bissau**
 Juliana Melo, Plant-Soil Ecology
- 
P26 DryBound: a synthetic microbial consortium co-designed by drought and tomato plants
 Ana Margarida Santos, Plant-Soil Ecology
- 
P27 Bioprospecting and Physiological Characterization of Glyphosate-Tolerant Bacteria Isolated from an Arabica Coffee Plantation in Guarapari-ES Brazil
 Brena Souza, Plant-Soil Ecology

-  **P28 Understanding the Aggressive Invasion by *Gunnera tinctoria* (Molina) Mirbel and *Hedychium gardnerianum* Sheph. ex Ker Gawl. in the Azorean Ecosystem – Allelopathy as a Weapon of Choice**
Wilson Rodrigues Tavares, Natural Products and Applications
-  **P29 A metagenomic study of the gut microbiota of three populations of *Rana temporaria* across a latitudinal gradient dependent on temperature and dietary shifts**
Daniela Deodato, Freshwater and Invasion Biology
-  **P30 Increased survival of *Parageobacillus thermoglucosidasius*, a thermophilic soil bacterium, in a rhizosphere milieu**
Ana Paula Rosa, Plant-Soil Ecology
-  **P31 Soil health, functionality and pollution mitigation in urban permaculture sites along a spatiotemporal gradient**
Annika Haag, Plant-Soil Ecology
-  **P32 A Comparative Analysis of Island vs. Mainland Arthropod Communities in Coastal Grasslands Belonging to Two Distinct Regions: São Miguel Island (Azores) and Mainland Portugal**
Hugo Calado, Agroforestry Ecology

