

# Frontiers in E3 | 8th Annual Meeting

# From islands to the world: interconnecting science

08-09 September 2022

Universidade dos Açores, Angra do Heroísmo

## Detailed Program

## September, 8<sup>th</sup> Program

9h00 Participants reception *Campus Hall*

9h45 Opening Session *Auditorium*

**Gabriela Rodrigues** cE3c Scientific Council & **Paulo A.V. Borges** Azorean Biodiversity Group (cE3c) Director & **Luís Furtado** Pro-Rector of the Campus of Angra do Heroísmo of the University of Azores, in representation of the Rector of the University of the Azores

### Sustainable Environment: Biodiversity/Evolution & Climate Change

Chair: **João Pedro Barreiros**

#### Plenary Session *Auditorium*

10h00 **Rúben Heleno** Centre for Functional Ecology (CFE, University of Coimbra) “Run, Forest, Run!”

11h00 Coffee-break *Campus bar* ☕ 🎧

#### Parallel Sessions

##### *Auditorium*

Chair: **João Pedro Barreiros**

11h30 **Joana Jesus** ESFE *Acacia longifolia* nodules' histology and rhizobia diversity throughout ecosystems 🏆

11h40 **Andreia Anjos** ESFE Phenological variability among *Eucalyptus globulus* clonal and seedling-based trees 🏆

11h50 **Filipe de Sousa** CoBig2 Diversity and structure in cork oak (*Q. suber* L.) revealed by nuclear microsatellite markers and cpDNA

12h00 **Wilson Tavares** IERS *Hedychium gardnerianum* and its potential as biopesticide against *Ceratitis capitata* 🏆

12h10 **Fernando Ascensão** eChanges Human Footprint as basal information for detecting connectivity corridors

12h20 **Raul Pereira** EE Trophic allometry in predators that carry corpses of their prey

12h23 **João Bernardo Barreiros** IBBC Mutilations and malformations in cetaceans - a discussion of recent cases

12h26 Discussion

##### *Room C-025*

Chair: **Sara Magalhães**

**Marta Antunes** EE Gene expression of *Drosophila subobscura* evolving in a Global Warming scenario 🏆

**Beatriz Portinha** EG Effect of temperature on the reproductive output and early development of hybrid mound building wood ants: a pilot study 🏆

**Sophie Wallon** IBBC Impact of a short-term simulated climate change on arthropod communities associated with pastures in Terceira (Azores, Portugal) 🏆

**Carla Alegria** ESFE Living a colourful life: a photoselective-net approach in apple orchards

**Afonso Grandela** EE The impact of thermal selection on the mating behavior of the monandrous fruit fly *Drosophila subobscura* 🏆

**Sofia Costa** EE Multiple mating rescues offspring sex ratio but not number in a haplodiploid exposed to heat stress 🏆

12h30 **Firdaus Halim** IERS Nature-based solutions and their socio-economic effectiveness for climate change adaptation in marine and coastal ecosystems

12h33 Discussion

13h00 Lunch *Campus canteen* 🍴 🍷

September, 8<sup>th</sup> Program

Poster Session *Room C-023*

14h30 Please see the poster list at the end of the program

Sustainable Environment: Biodiversity/Evolution & Climate Change

Parallel Sessions

*Auditorium*

Chair: **Rosalina Gabriel**

15h30 **Gabor Pozsgai** IBBC The influence of biotic and abiotic drivers on arthropod co-occurrence network topology in native forest remnants in the Azores

15h40 **Ricardo Costa** IBBC Vertical distribution of spider families in Macaronesia native forests according to their colonization status 

15h50 **Paulo A.V. Borges** IBBC The application of the Index of Biotic Integrity (IBI) for monitoring purposes

16h00 **Mário Boeiro** IBBC The Argentine ant in Portugal: major ecological impacts by a small invader

16h10 Discussion


16h30 Coffee-break *Campus bar*  

*Room C-025*

Chair: **Tiago Lourenço**

**Inês Fragata** EE Adaptation to cadmium shapes coexistence patterns in herbivore species

**Diogo Godinho** EE Herbivores adapt to metal-accumulating plants but lose their non-linear response at low metal doses

**Miguel Cruz** EE Eco-evolutionary consequences of costly sexual interactions in hybridizing spider mites 

**Antonio Cordero** DEM The phenotypic consequences of microclimatic change in a developing reptile

*Auditorium*

Chair: **Rui Elias**

17h00 **Celia Cañizares** IBBC LIFE INVASAQUA: project outcomes and materials to raise awareness and prevent aquatic invasive alien species in the Iberian Peninsula

17h10 **Luís Barcelos** IBBC Diversity in deep-sea foraging reflects a diverse deep sea

17h20 **Luís Barcelos** IBBC Macaronesia as a biogeographic unit: what the diversity of sea turtles and cetaceans tells us 

17h30 **Maria Dias** CSES Tracking birds to reveal migratory and terrestrial-marine connectivity


17h40 Discussion

18h00 End of 1<sup>st</sup> day | *The island awaits you!*

*Room C-025*

Chair: **Margarida Matos**

**Francisco Pina-Martins** CoBig2 Selection detection on a massive scale for non-model organisms

**Bernardo Rocha** eChanges To see past pollution – a key step towards the global application of lichens as ecological indicators of climate change in cities 

**Cristina Antunes** ESFE Groundwater-driven changes in coastal dune vegetation

Discussion

September, 9<sup>th</sup> Program

## Sustainable Health and Society

Chair: **Gabriela Rodrigues**

### Plenary Session *Auditorium*

09h00 **João Paulo Teixeira** National Health Institute Doutor Ricardo Jorge (Porto) “One Planet, One Air, Our Home!”

10h00 **Coffee-break** *Campus bar* ☕ 🌐

### Regular Session *Auditorium*

10h30 **Carolina Gándara** PSE Plasmid domestication for sustainable agriculture (AGRIPLAS)

10h40 **Leonor Rodrigues** EE On the road to sustainability aboard the Agroecological Caravan

10h50 **Mario Yanez** CCIAM Organized complexity, the patterns that connect, and the organization of knowledge: implications for the Great Warming 🏆

11h00 **Patrícia Garcia** IERS Volcanism and human health: the hazardous effects of hydrothermal emissions on the respiratory system [Did not attend due to logistic constraints]

11h10 **Pedro Santos** DEM Decellularized 3D Matrices: an *in vitro* approach to cell dynamics in the context of muscular dystrophy 🏆

11h20 **Filipe Bernardo** IERS Influx of cruise ships has not significantly impacted air quality at Ponta Delgada city

11h30 **Discussion**

12h00 **Lunch** *Campus canteen* 🍴 🌐

## Sharing our Science

Chair: **Rosalina Gabriel**

### Invited Speakers' Session *Auditorium*

13h30 **Sara Luna** Biotechnology Centre of Azores - School of Agricultural and Environmental Sciences (CBA) Virome analysis of Azorean native plants

13h40 **Rita Cordeiro** Research Center in Biodiversity and Genetic Resources (CIBIOInBIO-Azores) Cyanobacteria biodiversity and toxicity assessment in the Azores

13h50 **Joana Barcelos e Ramos** Institute for Research and Technology of Agronomy and Environment (IITAA) Phytoplankton – bacteria interactions in a changing ocean

14h00 **Diana Catarino** Institute of Marine Sciences, Okeanos Comparing non-invasive monitoring techniques with longlines catches for deep-water sharks monitoring and conservation

14h10 **Diana Linhares** Research Institute for Volcanology and Risk Assessment (IVAR) Essential elements in the volcanic soils of São Miguel (Azores): linking geology to human and animal health

14h20 **Discussion**

September, 9<sup>th</sup> Program

## Project Winners | cE3c Participatory Budgeting 2021 *Auditorium*

Chair: Rui Rebelo

- 14h45 **Ana Júlia Pereira** ESFE Contrasting effects of management on the phylogenetic diversity of arable plant communities: implications to their conservation
- 14h55 **Raquel Mendes** CSES “Escolas biodiversas” project: online questionnaire for teachers and activities for students on the topics of biodiversity and sustainability
- 15h05 **Paolo Vaglini** PSE Priming of the wheat holobiont: novel insights on the mode of action of bacterial inoculants unraveled by untargeted FT-ICR-MS metabolomics [Pre-recorded communication]
- 15h15 **Discussion**
- 15h30 **Coffee-break** *Campus bar* ☕ 🌐

## Project Winners | cE3c Participatory Budgeting 2022 *Auditorium*

Chair: Tiago Lourenço

- 16h00 **Alejandra Ros Prieto** IBBC Biodiversity characterization and comparison between different types of pasture hedges (exotic plants and native plants) in Pico island
- 16h10 **Ana Luísa Barros** CSES Mechanisms of coexistence between mesocarnivores in High Nature Value Farmlands: valuing their ecological role through community outreach
- 16h20 **Gonçalo Costa** CoBig2 The Final Cries: Species discovery and documenting habitat loss of Moroccan cicadas
- 16h30 **Susana Martins** DEM Using p53 deletion to revert LAMA2-congenital muscular dystrophy
- 16h40 **Discussion**

## Closing Ceremony *Auditorium*

- 17h00 **Paulo A.V. Borges** Azorean Biodiversity Group (cE3c) Director  
**Rui Bento Elias** President of Assembly of the Faculty of Agricultural Sciences and Environment of the University of the Azores  
**Cristina Máguas** cE3c Director  
**Artur Lima** Vice-President of the Regional Government of the Azores  
**Artur Gil** Vice-Rector for "Science, Innovation, and Knowledge Transfer" of the University of the Azores
- 17h30 **“Ana Neto Award” Prize-giving by the Vice-President of the Regional Government of the Azores, Artur Lima, to the best cE3c PhD Student of 2021**  
**Best Poster Prize-giving by Professor Margarida Matos**  
**Best Short Talk Prize-giving by Professor Cristina Máguas**
- 18h00 **Closing remarks**

20h00 **Conference Dinner** *Terceira Mar Hotel* 🍷 🍴 🍸



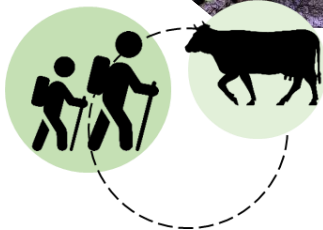
September, 10<sup>th</sup> Program

Field trips *Outdoor*

**Morning**

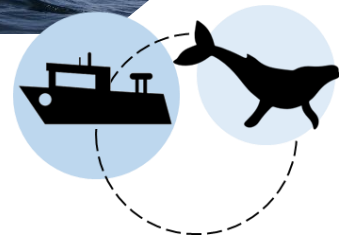
Guide: **Paulo Borges**

**Journey into a  
Hyper-Humid Forest**



Guide: **João Pedro Barreiros**

**Whale & Dolphin  
Watching Tour**



*[Cancelled due to weather  
conditions]*



## List of Posters

### Sustainable Environment: Biodiversity/Evolution & Climate Change

**Ana Seca** IBBC *Cystoseira abies-marina*: Extraction of antiaging compounds by optimized green methodology

**Inês do Rosário** CSES LTsER Montado Platform: building the future database

**Manuela Sim-Sim** NHS The long journey of *Exormotheca pustulosa* (Exormothecaceae, Marchantiophyta). Insights from an integrative taxonomic study

**Maria Filomena Magalhães** CSES Beta diversity patterns in intermittent rivers: dispersal limits to fish metacommunity assembly

**Maria Filomena Magalhães** CSES Living at the edge: status and conservation management of brown trout in Portuguese rivers

**Mário Boieiro** IBBC Análise preliminar da riqueza de carabídeos (Coleoptera, Carabidae) em habitats característicos do Parque Nacional da Gorongosa (Moçambique)

**Mário Boieiro** IBBC The Caraboidea (Coleoptera: Cicindelidae, Carabidae) of the Gorongosa National Park (Mozambique). A preliminary approach

**Ana Paula Rosa** PSE Soil, vegetation and cropland interactions in the shores of Guinea-Bissau, West Africa

**Ana Paula Rosa** PSE The importance of drought stress early identification: tomato as a case study 🏆

**Anabela Martins** NHS Effects of climate change in Macaronesian unisexual bryophytes. Understanding rarity to ensure conservation strategies in the face of global change 🏆

**Sara Vicente** ESFE Genetic structure and variation of isotopic contents of native and invasive populations of *Acacia longifolia*

**Tomás Calheiros** eChanges Environmental Module of the Integrated Assessment Model WILLIAM

**Bishwajit Roy** CCIAM Sea level rise induced impacts on coastal areas of Bangladesh and local-led community-based adaptation 🏆

**Mariya Kozak** EE Spider mites do not modify their interaction with plant defences when evolving with a competitor 🏆

**Marta Ferreira** EE Adaptation of *Tetranychus urticae* to cadmium on a spatially heterogeneous environment: a genomics approach 🏆