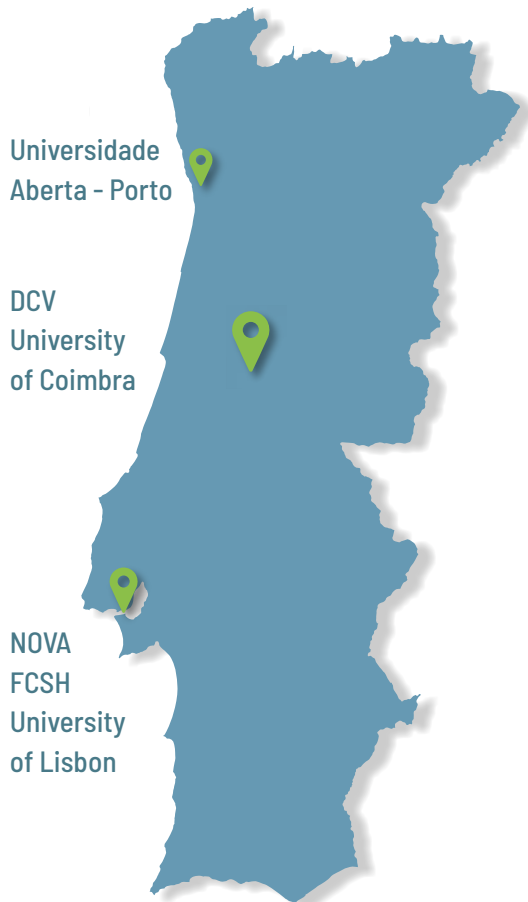


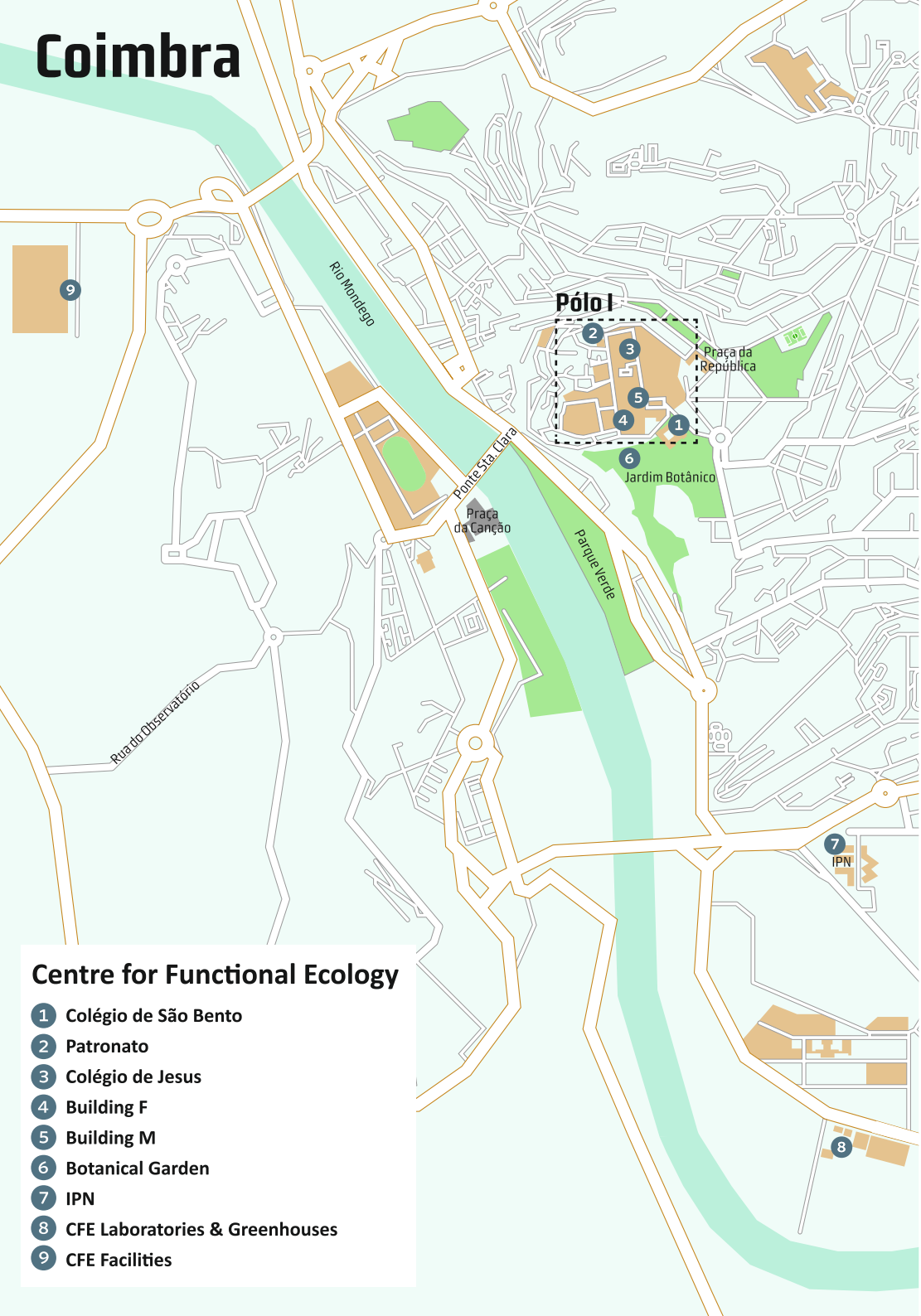


THE CENTRE FOR FUNCTIONAL ECOLOGY (CFE)

The Centre for Functional Ecology - Science for People & the Planet (CFE) brings together researchers from all fields of ecology, environmental and territorial sciences, social sciences and humanities. The multidisciplinary dimension of the CFE reflects contemporary societal challenges in interaction with the complexity of the global commitment to sustainability.



Coimbra



Pólo I

Praça da República

Jardim Botânico

Parque Verde

Praça da Canção

Ponte-São Clara

Rio Mondego

Rua do Observatório

7
IPN

8

Centre for Functional Ecology

- 1 Colégio de São Bento
- 2 Patronato
- 3 Colégio de Jesus
- 4 Building F
- 5 Building M
- 6 Botanical Garden
- 7 IPN
- 8 CFE Laboratories & Greenhouses
- 9 CFE Facilities

Pólo I



Centre for Functional Ecology

1 Colégio de São Bento

Plant Biotechnology Laboratory
MycoBiodet Laboratory
MedDendro Laboratory
Laboratory of Terrestrial Ecology I
Laboratory of Terrestrial Ecology II
Laboratory of Forensic Anthropology
Laboratory of Marine Algae

2 Patronato

Chemistry Laboratory
Freshwater Ecology Laboratory
Laboratory of Soil Ecology and Ecotoxicology
Marine Research Laboratory
Optical Microscopy Laboratory
Laboratory of Aquatic Ecotoxicology
MicroResist Laboratory

3 Colégio de Jesus

Laboratory of Nematology

4 Building F

Bioelectronics & Bioenergy Laboratory

5 Building M

Environmental Genomics Laboratory

6 Botanical Garden

CFE Greenhouse facilities



**CENTRE FOR
FUNCTIONAL ECOLOGY**
SCIENCE FOR PEOPLE & THE PLANET



**CENTRE FOR
FUNCTIONAL
ECOLOGY**

SCIENCE FOR PEOPLE
& THE PLANET

Main research infrastructures



Plant Biotechnology Laboratory



Main equipment: Laminar flow chambers, Plant Growth Greenhouses, Autoclaves, Orbital shakers, Microscopes, Magnifiers

Research teams: Plant Biotechnology Lab



Mycobiodet Laboratory



Main equipment: Vertical laminar flow chamber, Horizontal laminar flow chamber, Leica optical microscope with attached camera, Applied Biosystems thermocycler, MinION portable sequencer

Research teams: MycoBiodet Lab



Laboratory of Terrestrial Ecology I



Main equipment: Carbon Nitrogen Elemental Analyzer, Gas chromatography system, Automated Upright Microscope System, Ultra-Thin Semiautomatic Rotary Microtome, Fluorescence microscope with image acquisition system

Research teams: Stress Physiology Lab, FLOWer Lab, Mountain Lab, MedDendro Lab, BEWild Lab



Laboratory of Terrestrial Ecology II



Main equipment: Multiskan™ FC Microplate Photometer, Growth Chamber, Microscopes, Stereomicroscopes

Research teams: FLOWer Lab, BEWild Lab, MyCoLAB, Community Ecology Lab, Landscape Ecological Modeling Lab, INVASORAS.PT Lab



Laboratory of Forensic Anthropology



Main equipment: NextEngine™ 3D Scanner HD, MicroScribe® G2X, Digital calipers, Skull calipers, Osteometric tables

Research teams: Forensic Anthropology Lab



Laboratory of Marine Algae



Main equipment: FTIR-ATR Bruker Alpha II, Viscometer Brookfield IKA ROTAVISC Iovi, Spectrophotometer UV/Vis VWR UV-3100PC, Rotary evaporator Witeg 2600000 with a refrigeration system Heidolph 'Hei-CHILL 350

Research teams: Marine Algae Lab



Chemistry Laboratory



Main equipment: Ultra-precision scale, Ultra-pure distilled water machine, Chemical Fume Hood, Autoclave

Research teams: FReE Lab, SEEL Team, Marine Research Lab



Freshwater Ecology Laboratory



Main equipment: Greenhouse, Centrifuge, Spectrophotometer, Flow Chamber, Horizontal shaking tables, Field Devices (Conductivity meter, Oxygen meter, pH meter and Flow meter)

Research teams: FReE Lab



Laboratory of Soil Ecology and Ecotoxicology



Main equipment: Climatic chambers, Portable Soil Respirometer, Wet Sieving Apparatus

Research teams: SEEL Team



Marine Research Laboratory



Main equipment: Microplate reader, Freeze Drier, Microtube Centrifuge, Furnace, Drying Oven, Fume hood, Portable Photometers, Climate chamber with illumination, Orbital shaker

Research teams: Marine Resources, Conservation and Technology Group



Optical Microscopy Laboratory



Main equipment: Optical microscopes with digital camera, Stereomicroscopes with and without digital camera, Computer image analysis systems

Research teams: SEEL Team, Marine Research Lab



Laboratory of Aquatic Ecotoxicology



Main equipment: Microtox Analyzer, VIS Spectrophotometer, Ultrasonic Bath, Heterogeneous Multi-Habitat Assay System (HeMHAS), Insect Cultivation Chamber

Research teams: AquaTox Lab



MicroResist Laboratory



Main equipment: Laminar Flow Chamber, Autoclaves, Electrophoresis tanks and power supplies, Incubators, Deep Freezer

Research teams: MicroResist Lab



Laboratory of Nematology



Main equipment: Thermocyclers, Refrigerated centrifuge with several rotors, Benchtop centrifuge for Eppendorf tubes, Precision scales, Transilluminator, Incubator, Deep-freezer

Research teams: NEMATO-Lab



Bioelectronics & Bioenergy Laboratory



Main equipment: Triax Probe Station, Semiconductor Device Parameter Analyzer, Advanced Low-Frequency Noise Analyzer, High current potentiostat/galvanostat, Fluorescence Stereo Zoom Microscope

Research teams: Bioelectronics & Bioenergy Lab



Environmental Genomics Laboratory



Main equipment: NextGenPCR System, Low-Power Microscope, High-Power Microscope, MinION Mk2 Nanopore Sequencing Device, MinION VoITRAX Library Prep System, Pipetting Robot, TapeStation, Electrophoresis System, GelDoc System

Research teams: ENGEL Lab



Research Laboratory III



Main equipment: Laminar flow cabinet, Intact soil core Terrestrial Model Ecosystem, Potter tower, Reach-in climatic chamber, Autoclave, Refrigerated Laboratory Centrifuge

Research teams: B-Team, SEEL Team, Plant Biotechnology Lab



FITOLAB - Laboratory for Phytopathology (IPN)



Main equipment: Exhaust chambers, Flow chamber, Automated DNA, RNA and protein purification system, UV chambers, Thermocyclers (conventional and real-time)

Research teams: Fito Lab



Main Field Equipment



Main equipment: Research Vessel Darwin I, UAV Matrice 300 with real time kinematic and LIDAR and Thermal Sensors, Spotting scope 30-70x115mm, Thermal Binoculars, Binoculars, Gas exchange system LiCOR, Portable Soil Gas Chamber

Research teams: Marine Research Lab, BEWild Lab, FLOWer Lab, Stress Physiology Lab, Mountain Lab, MedDendro Lab



Other infrastructures



Main infrastructures: Greenhouses, Aquariums



Field stations

Field Station Sea Centre
Figueira da Foz

Field Station Estrela
Mountain Lab

Field Station Monte Silveira
Idanha-a-Nova

Research teams: Marine Resources, Conservation and Technology Group, FAST Thematic line, Mountain Lab



Digital Infrastructures/ Databases



Portuguese Biosphere Reserves Portal: <http://biospherereserves.org>

Digital Catalogue Herbarium UC: <https://coicatalogue.uc.pt/>

Oral History Database: www.memoriesforall.org

Invasive Plant Species Portal: <https://invasoras.pt/>

Historical Botanical Archive Database: <https://cartasdanatureza.uc.pt/>

eHALOPH - Database of Halophytes: <https://ehaloph.uc.pt/>

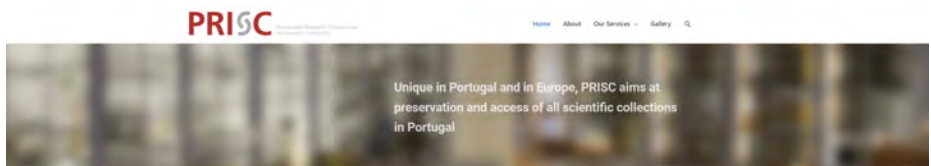
Portuguese Seaweeds website: <http://www.flordeutopia.pt/macoi/>

Database on Conservation Actions in Europe:

<https://conserveplantsdata.bio.bg.ac.rs/>



Research infrastructures



The CFE integrates the National Infrastructure Roadmap and European Research Infrastructure Consortia (ERIC), both through its laboratory and field infrastructure and equipment, and through the collections it maintains and curates.

PRISC - Portuguese Research Infrastructure of Scientific Collections:

<https://www.prisc.pt/>

PORBIOTA - Portuguese e-Infrastructure for Information and Research on Biodiversity: <https://www.porbiota.pt/en/porbiota>

DISSCO - Distributed System of Scientific Collections: <https://www.dissco.eu/>

LifeWatch ERIC: <https://www.lifewatch.eu/>

CETAF - Consortium of European Taxonomic Facilities: <https://cetaf.org/>

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brings together researchers from all fields of ecology, environmental and territorial sciences, social sciences and humanities. The multidisciplinary dimension of the CFE reflects contemporary societal challenges in interaction with the complexity of the global commitment to sustainability.

Integrates knowledge from genes to biomes to study the mechanisms responsible for biodiversity conservation and the composition, structure and functioning of biological communities and ecosystems; considers the disciplinary diversity essential to understanding the relationship between People and the Planet, the territories and communities.

Since its creation in 2009, the CFE has shown remarkable growth in size, reach and impact.

The CFE comprises more than 400 researchers organized into ten strategic research groups.

- **Biodiversity, Conservation and Natural Capital**
- **Terrestrial Ecosystems and Global Change**
- **Marine Resources, Conservation and Technology**
- **Soil Health**
- **Societies and Environmental Sustainability**
- **History, Territories, Communities**
- **One Health**
- **Forensic Anthropology and Paleobiology**
- **Bioelectronics & Bioenergy**
- **Aquatic Ecology and Ecotoxicology**

Secretariat

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