

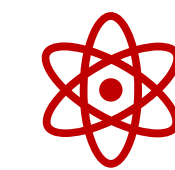


# Blue Ecotoxicology Research

Vanessa F. Fonseca, Ana Rita Matos, Isabel Caçador, Bernardo Duarte

R&D UNIT: MARE | BioISI

CONTACT: [vffonseca@fc.ul.pt](mailto:vffonseca@fc.ul.pt); [baduarte@fc.ul.pt](mailto:baduarte@fc.ul.pt)



## Elemental Fingerprinting & Contaminant Analysis

Ionomics, elemental analysis, contaminant screening in biological and environmental matrices.



## Bioindicators

Environmental and mesocosms studies towards assessing bioindicator species potential.



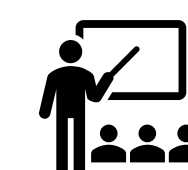
## Marine Biomonitoring

Biomonitoring projects for impact assessment and ecological quality evaluation.



## Scientific Production

29 publications in SCI journals (2019-20)  
Incentive for science communication and outreach.



## Advanced Training MSc and PhD plans

Master and doctoral thesis opportunities.

For more information visit our website at <https://biotoxlab.wixsite.com/home>



## Ecotoxicological Assays

Toxicity assays using model marine species (algae, invertebrates and fish), including Pharmacotoxicology and Nanotoxicology.



## Biochemical Stress Biomarkers

Antioxidant biomarkers assays, fatty acid profiles, ROS analysis, pigment analysis.

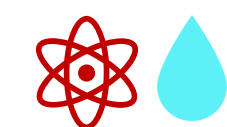


## Bio-optics and Phenomics

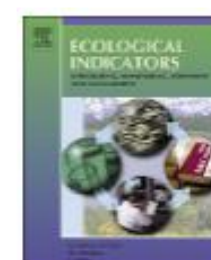
Bio-optical screening of marine phototrophs under different stress conditions using high-throughput phenomics



Reis-Santos *et al.* 2018



Screening of human and veterinary pharmaceuticals in estuarine waters: A baseline assessment for the Tejo estuary



Fonseca *et al.* 2020



Roving pharmacies: Modelling the dispersion of pharmaceutical contamination in estuaries



Cruz de Carvalho *et al.* 2020



Halophyte bio-optical phenotyping: A multivariate photochemical pressure index (Multi-PPI) to classify salt marsh anthropogenic pressures levels



Duarte IA *et al.* 2020



Depressed, hypertense and sore: Long-term effects of fluoxetine, propranolol and diclofenac exposure in a top predator fish



Feijão *et al.* 2020



Fluoxetine Arrests Growth of the Model Diatom *Phaeodactylum tricornutum* by Increasing Oxidative Stress and Altering Energetic and Lipid Metabolism



Duarte B *et al.* 2018



Phytoplankton community-level bio-optical assessment in a naturally mercury contaminated Antarctic ecosystem (Deception Island)

