

MOSTRA DOS  
**FUNDOS  
EUROPEUS**

*Pitch* de projetos  
**Investigação  
e Saúde**





# GreenCoLab

Bernardo Carvalho

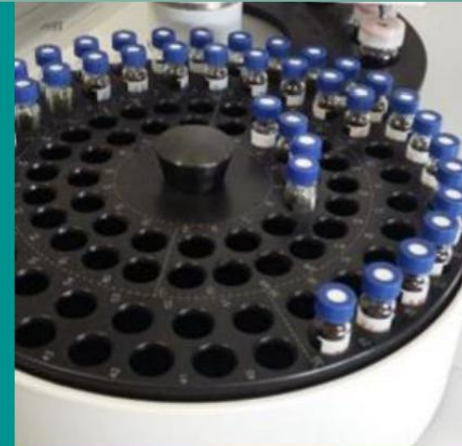
**Investigação e Saúde**



GreenCoLab

# GreenCoLab is a collaborative platform to bridge the transfer of knowledge in the field of **algae biotechnology**

R&I agenda based on the exploration of **microalgae** and **seaweed** for different applications



ACADEMIA



ALGAE  
PRODUCERS



ALGAE  
VALORIZATION

Based at the University of Algarve (Faro) we count on **12 strategic partners** located all over Portugal



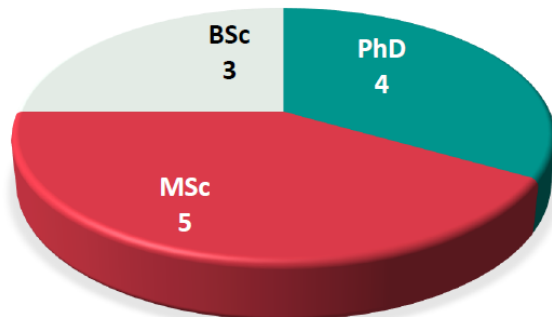


# The team has grown steadily

2020

12 Highly Qualified Human Resources

✓ 12 work contracts: 4 PhD holders



✓ 5 x ♀ + 7 x ♂

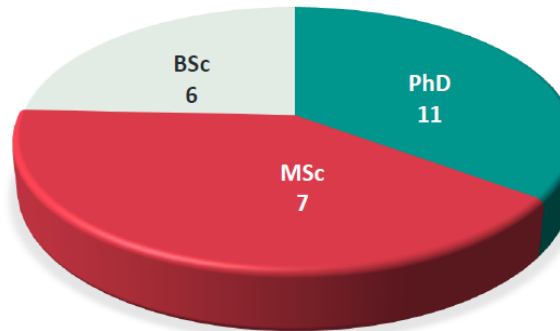
✓ 3 different nationalities

0 PhD students (FCT Grants)

2022

24 Highly Qualified Human Resources

✓ 24 work contracts: 11 PhD holders



✓ 14 x ♀ + 10 x ♂

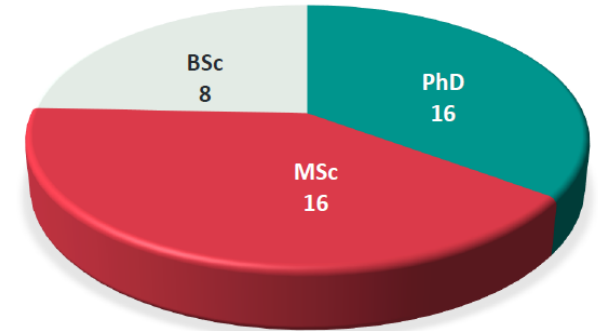
✓ 6 different nationalities

+ 7 PhD students (FCT Grants)

2024

40 Highly Qualified Human Resources

✓ 40 work contracts: 12 PhD holders



✓ 24 x ♀ + 16 x ♂

✓ 6 different nationalities

+ 18 PhD students (FCT Grants)



**General Manager**  
Hugo Pereira

**ADMINISTRATIVE & FINANCE**



**Financial & Administrative Manager**  
Pedro Cláudio



**Attorney**  
Teresa Pimenta



**Finance & Administrative Officer**  
Jorge Marujo



**Finance & HR Officer**  
Sandra Silva



**Accountant**  
Paulo Custódio



**Project Financial Officer**  
Ana Oliveira

**BUSINESS & OUTREACH**



**Business & Dissemination Manager**  
Daniel Silva



**Dissemination Specialist**  
Fátima Pereira



**Dissemination Designer**  
Maria Eduarda Mendes



**Service Platforms Manager**  
Monya Costa

**RESEARCH & INNOVATION**



**Projects Manager**  
Ana Ramos



**Innovation Manager**  
Payam Mehrshahi

**RESEARCH GROUPS**

**Strain Improvement**

PhD Student



Daniel Figueiredo

Technician



Ricardo Francisco

Technician



Inês Trincheiras

**Bioprocess Optimization**

Group Leader



Pedro Moñino

Technician



Gustavo Nogueira

Technician



Mariana Lima

**Animal Nutrition**

Group Leader



Ana Gonçalves

Researcher



Maria João Xavier

Technician



Anna Stryzhak

Technician



Soraia Santos

Specialist



Rute Félix

**Biostimulants & Biopesticides**

Group Leader



Florinda Gama

PhD Student



Catarina Viana

Specialist



Luísa Coelho

**Food Nutrition**

Group Leader



Kricelle Deamici

PhD Student



Inês Guerra

Technician



Marta Fitas

**Sustainability**

Group Leader



Lais Speranza

Technician



Alexandre Lima

PhD Student



Sofia Navalho

**Biorefinery**

Group Leader



Mariam Kholany

PhD Student



Bernardo Carvalho

PhD Student



Pedro Cunha

PhD Student



Rafael Vitorino

Technician



Carlos Gamarano

Technician



Santiago Diego

**Molecular Biology | Contaminants**

Lab & Security Manager



Cristina Paulino

PhD Student



Méliissa José

**SPECIALIZED PLATFORMS**

**IBAB**

Culture Collection Platform Manager



Gabriel Bombo

PhD Student



Madalena Mendes

**Chemistry**

Chemistry Manager



Sara Ferreira

Specialist



Vítor Spinola

Technician



Maria Lourenço

RESEARCH GROUPS

SPECIALIZED PLATFORMS



# Infrastructures

2020 - 2025



## ALGAEREFINE

Establishment of a pilot scale biorefinery for algae biomass fractionation





# ALGAEREFINE Approach

## Technologies

Scalable and available at lab and pilot-scales.

### Downstream Process

Cell disruption	Extraction	Purification / Fractionation	Stabilization
High Pressure Homogenization Milling Enzymatic hydrolysis	Solvent extraction Enzymatic hydrolysis	Micro/ultrafiltration Centrifugation Precipitation	Spray Drying Freeze Drying

## Target Products

### Enriched Extracts:

Pigments | Proteins | Polymers

### Functional Ingredients



# Our New Headquarters...

>Q1 2026



Direção Regional de  
Agricultura e Pescas do  
Algarve | DRAP

Patação, Faro, Portugal







## What we do



**PRODUCTS**



**SERVICES**



**RESEARCH**



**OUTREACH**

## R&I Agenda

6 Action Lines

Covers the whole value chain

Innovative products & services

High focus on sustainability



# R&I agenda

## Working Groups



Working Group

**Strain Improvement**



Working Group

**Bioprocesses  
Optimization**



Working Group

**Contaminants**



Working Group

**Biorefinery**



Working Group

**Food Nutrition**



Working Group

**Animal Nutrition**



Working Group

**Biostimulants  
& Biopesticides**



Working Group

**Sustainability**

## Platforms



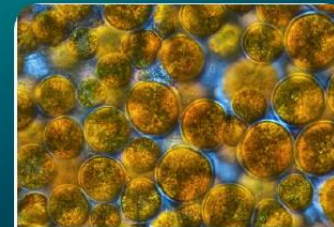
Plataform

**Chemistry**



Plataform

**Molecular Biology**



Plataform

**Culture Collection  
IBAB**



Plataform

**Biorefinery**

# Clean Culture<sup>®</sup> molecular kit

## Contaminant Detection Solution

- Colorimetric test
- No DNA extraction needed
- Early detection of contaminants:
  - *Paraphysomonas* sp.
  - *Poterioochromonas malhamensis*
  - More contaminants under development

Reduce culture collapse in large-scale, avoiding economic losses



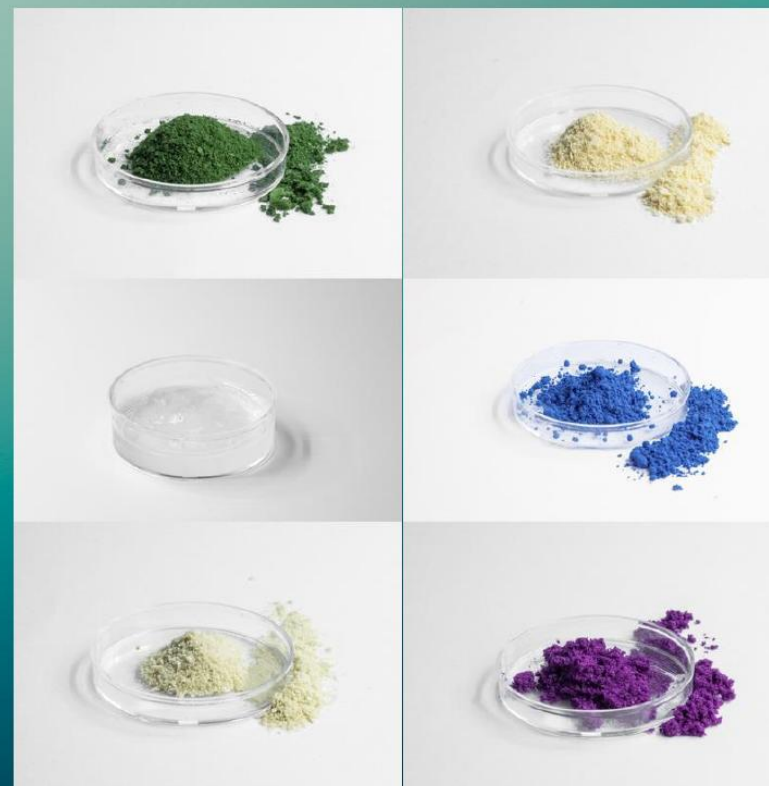


# Biorefined Ingredients Catalogue

## Raw materials

- Flexible biorefinery “zero-waste” approaches
- Green solvents
- 50 ingredients developed
- Thorough biochemical and bioactivity characterization

Functional and versatile renewable ingredients



# Algae-based Biostimulants and Biopesticides

- **ALLFERTIS®**
  - Novel biofertilizer/biostimulant product developed in collaboration with Allmicroalgae
- **Blended products of microalgae and seaweeds**

Reduces chemical inputs and increases crop yields by 21–52%.





We continue to develop  
industrial solutions  
in co-promotion...



iOysters

Algaelicious





# THANK YOU!

Let's stay in touch!



**Bernardo Carvalho**

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NextGenerationEU



Cofinanciado pela  
União Europeia

