

# Mission Microbiomes

## The expedition

Sailing for 21 months  
to sample the ocean microbiome  
and share with the public



1 mission, 2 phases

**CHILI**  
**SOUTH ATLANTIC WITH  
THE ATLANTECO PROGRAM**

Nutrients rich  
upwelling areas

### RESEARCH APPROACHES & FOCUS

#### OCEAN STREAMS

How climate change is impacting  
ocean currents and the microbiome  
distribution ?

- 1 • **Chilean coasts** : oxygen depleted area
- 2 • **Guyane - Amazone** : influence of Amazon river's  
outputs on the link between the South and North Atlantic
- 3 • **Weddell Sea** : one of the key ocean & climate area  
with the major drawdown of surface waters
- 4 • **Chili and Africa** : upwellings areas of rich deep ocean  
waters driving the most productive fisheries on earth  
and the biological carbon pump

#### FERTILIZATION & POLLUTION

How watersheds use and pollution  
such as agriculture or microplastic pollution  
alter the microbiome structure and function ?

- 5 • **Chilean Coasts** : influence of the melting glaciers  
on salinity and local microbiomes
- 6 • **Great rivers** : (Amazone, Orange, Congo, Ogooué,  
Volta, Senegal) with great influence on local oceans

#### SMALL SCALE FEATURES

How small scale ocean features  
alter the ocean microbiome models  
at large scale ?

- 7 • **Atlantic Ocean** : understand how the  
microbiome is modified by small gyres ?

program  
**CEO  
DOS  
Chile**

**AtlantECO**