

COMPARATIVE ANALYSIS OF THE RESISTOME AND THE MOBILOME OF ESTUARINE AQUACULTURES AND OTHER AQUATIC ENVIRONMENTS

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9 - 11 June 2021 · Copenhagen · Denmark



Antimicrobial Determinants in Aquaculture Environments





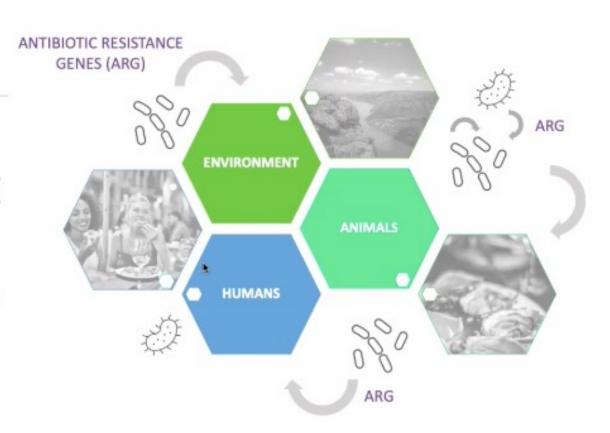


THE ONE HEALTH CONCEPT

One Health is an approach that recognizes that the health of people is closely connected to the health of animals and our shared environment.

One Health issues include zoonotic diseases, antimicrobial resistance, food safety and food security, vector-borne diseases, environmental contamination, and other health threats shared by people, animals, and the environment.

CDC - https://www.cdc.gov/onehealth/



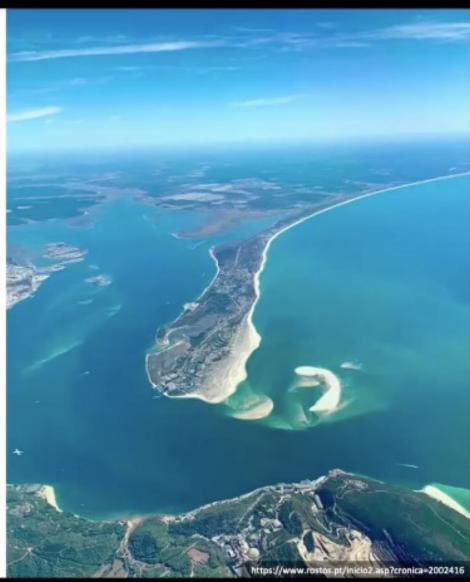




AIM OF THE WORK

To perform a comparative analysis of the ARGs profiling of bacterial communities of sediments of semi-intensive aquaculture farms in Portugal and compare and other aquatic environments







METHODS – THE PIPELINE







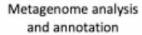








DNA extraction sequencing of metagenomes from aquatic sediments



Generation of reviewed databases of: Integrases, Transposases, Relaxases, of antibiotic resistance genes Blast alignment of the metagneomes against the database of ARG and MGEs Computation of the number ARG orthologues, and MGEs















