

Cofinanciado por:



Project name | The MARVEN Project: The Portuguese biotechnological database for marine animal venoms and toxins

Project Reference | FA_05_2017_007

Thematic objective | To investigate marine animal toxins in the Portuguese EEZ under a biotechnological perspective in order to produce the foundations for comprehensive but practical database that can be continuously updated.

Consortium | Instituto Português do Mar e da Atmosfera, I.P. and UCIBIO (FCT-NOVA)

Approval date | 05-08-2019

Start date | 01-01-2020

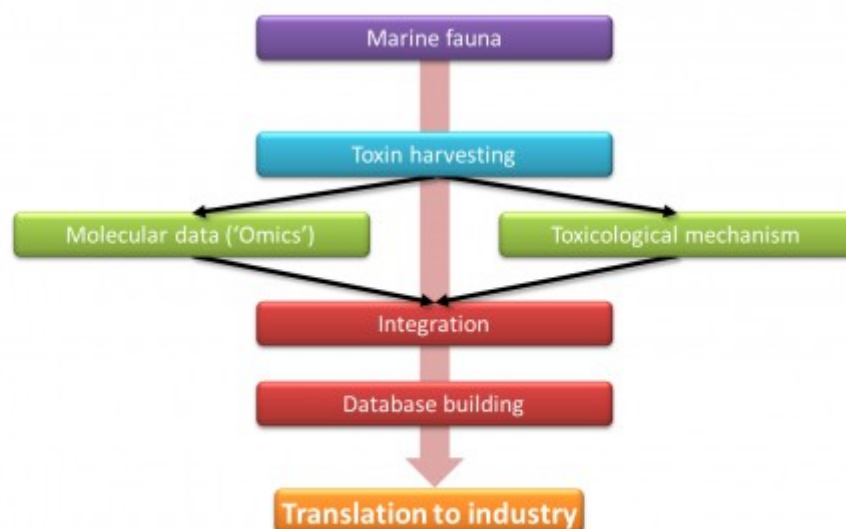
End date | 31-12-2021

Total amount eligible | 199.884,00 EUR

Total funding | Fundo Azul , 179.896,00 EUR

Description:

The MARVEN project, which is a partnership between several research groups of UCIBIO and IPMA, led by the SeaTox Lab, has been designed to build the foundations for a permanent, dynamic and ever-evolving database of marine animal toxins from the Portuguese coast, being devised from the start as a direct tool to meet the needs of industrialists and other societal stakeholders.



Objectives:

- 1) Laying-out the backbone of a permanent, dynamic and continuously updated database for marine animal toxins. This database will be public-access and application-oriented and designed to promote networking with industry and research.
- 2) Scanning for new peptidic toxins secreted by representative marine animals from the Portuguese continental coastline through a fill-the-gap strategy in existing information and develop expeditious tools for locating species of interest.
- 3) Providing the essential characterisation, and functional validation, of the toxins at the ecological, toxicological and molecular levels.
- 4) Predicting biotechnological applications by contrasting toxin aminoacid and nucleotide sequences to known interactome sequences, with priority on human data.

Work packages:

Work package 1. Specimen identification, selection and collection

Work package 2. Toxicological characterisation and validation

Work package 3. Linking toxicology and application: The 'Venomics' approach to the interactome

Work package 4. Building a biotechnology-oriented database

Expected outcomes and impact:

- 1) Promoting marine conservation
- 2) Meeting the demands of industry
- 3) Creating a permanent knowledge pipeline between and within science and industry
- 4) Promotes highly-qualified employment and training within the fields of marine science and biotechnology

Link: <https://sites.fct.unl.pt/seatox/pages/marven>