



Jornada de presentación del nodo español de EMBRC

Estación de Ciencias Mariñas de Toralla (CIM-Uvigo)

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14 junio 2021, Las Palmas de Gran Canaria

A photograph of laboratory equipment, specifically several vertical glass or plastic chambers containing liquid. Each chamber is topped with a black sensor unit labeled 'LDO'. The background is a blurred laboratory setting. A blue gradient bar is on the left, and a white box with the 'ctm' logo is on the right.

CENTRO DE INVESTIGACIÓN MARIÑA





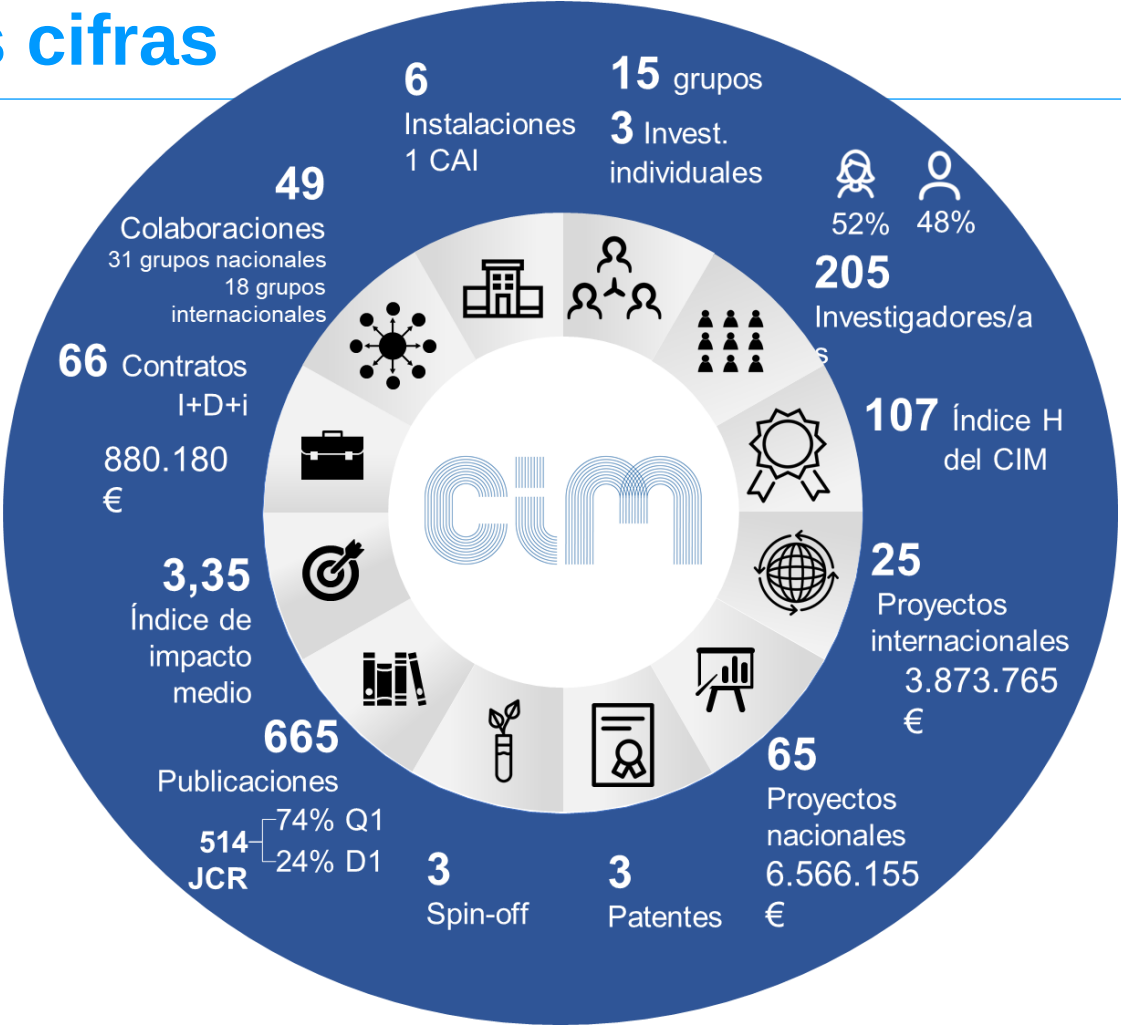
“ELEMENTO CENTRAL DE LA ESTRATEGIA MARINA DE LA UNIVERSIDADE DE VIGO”

FUNCIONES:

- Representar a la Universidade de Vigo en grandes iniciativas como la Marine Board.
- Liderar el Campus de Excelencia Internacional del Mar (Campus do Mar).
- Coordinar el nodo español del Centro Europeo de Recursos Biológicos Marinos (EMBRC).
- Canalizar las principales iniciativas de investigación e innovación marinas de la Uvigo.



Principales cifras





Estación de Ciencias
Marinas de Toralla (ECIMAT)



Edificio
Olimpia



Edificio
Filomena
Dato



Edificio Ciencias
Experimentales



Edificio Campus da
Auga de Ourense



Edificio Politécnico del
Campus de Ourense



Muestreadores
de sedimento,
agua y plancton



Perifoneo de fondo



Ámbitos de especialización





ESTUDIOS DE GRADO

Facultade de Ciencias do Mar
Universidade de Vigo

Facultade de Química
Universidade de Vigo

Facultade de Bioloxía
Universidade de Vigo

DOCTORADO



Portal Europeo de formación en ciencia marina



MÁSTERES

- » Máster Interuniversitario en **Oceanografía** (máster de referencia europea en el que colaboran las Universidades de Vigo, Cádiz y Las Palmas de Gran Canaria)
- » Máster Interuniversitario en **Acuicultura** (UVigo, USC y UDC)
- » Máster Interuniversitario en **Bioloxía Marina** (UVigo, USC y UDC)
- » Máster interuniversitario de **Genómica y genética** (UVigo y USC)
- » Máster Interuniversitario en **Biotechnología Avanzada** (UVigo y UDC)
- » Máster Universitario en **Gestión del Desarrollo Sostenible** (UVigo)
- » Máster en **Biotechnología Avanzada** (UVigo)
- » Máster en **Ciencia y Tecnología de Conservación de los productos de la Pesca** (UVigo en colaboración con AFACO)



ESTACION DE CIENCIAS MARIÑAS DE TORALLA

ECIMAT
Estación de Ciencias
Marinas de Toralla

Universidade de Vigo



La ECIMAT, un Centro de Apoyo a la Investigación (CAI) de la UVigo para los investigadores del CIM

Nuestros valores principales:

- Orientación de servicios
- Apoyo a los usuarios
- Flexibilidad
- Mejora continuada



Acceso a Ecosistemas Marinos

- Barcos de investigación costera
- Equipo de muestreo (dragas, CTD, Botellas Niskin, Redes de plankton...)
- Equipo de buceo y personal científico asociado
- Apoyo a la experimentación en el campo





Suministro de recursos biológicos marinos



- Cultivo de organismos marinos
- Recogida de especies en el medio
- Colección de cultivo de microalgas
- Suministro de organismos marinos modelo
- Solicitud de permisos

La ECIMAT: cumplimiento de la normativa ABS



ECIMAT / CONVENTION ON BIOLOGICAL DIVERSITY AND THE NAGOYA PROTOCOL

Convention on Biological Diversity and the Nagoya Protocol

The fair and equitable sharing of benefits arising from the use of genetic resources is one of the three objectives of the Convention on Biological Diversity (CBD). In 1992 CBD recognized the sovereign rights of countries over their genetic resources, and access to those resources has been subject to the provisions of each country's national legislation since then. The Nagoya Protocol (NP) entered into force on the 12th of October 2014 and develops the third objective of the CBD, namely instructions on access to genetic resources and fair and equitable sharing of benefits arising from their use (ABS, Access and Benefit Sharing).

This Protocol seeks to strengthen compliance with national access rules of countries providing genetic resources by requiring the implementation of compliance and monitoring measures in third countries where these genetic resources are used. Thus, the signatory countries of the protocol commit themselves to ensure that the genetic resources used within their jurisdiction are accessed in accordance with the national framework of the country where the resource was originated, thus committing themselves to fighting against biopiracy. Therefore, countries must establish control points in the territory under their jurisdiction, to which the users of genetic resources must provide information on the legal access to such resources, mainly through the Internationally Recognised Certificate of Compliance (IRCC). A bulk of the legislation in place, as well as the contact information of the National Focal Points of each signatory country, can be found at [ABS Clearing-House](#).

In the case of Spain, access to Spanish genetic resources is regulated by the [Law 33/2015 on Natural Heritage and Biodiversity](#) and the [Royal Decree 124/2017](#), which regulates access to genetic resources from wild taxa and the sharing of benefits derived from their use. The access permit is requested through the Ministry of Ecological Transition (MITECO) [online portal](#) ([link](#)).

Regarding the control mechanisms described in the Nagoya protocol, the measures for the entire European Union are included in EU Regulation (EU) no. 511/2014, which entered into force together with the NP on the 12th of October 2014 and establishes the measures for compliance by users on access to genetic resources and the fair and equitable sharing of benefits arising from their use in the European Union.

It is the responsibility of the user of biological resources provided by ECIMAT to ensure that the use that the user will carry out of these genetic resources complies with the ABS legislation of the country of origin of the genetic resource (generally Spain, but in the case of strains the country of origin could be another one).



Information for users of Spanish genetic resources

The competent authority in Spain who implements Nagoya protocol is the Ministerio para la Transición Ecológica y el Reto Demográfico (MITECO), Subdirección General de Biodiversidad Terrestre y Marina del MITECO.

1. Who must request the authorization for Access to Spanish genetic resources?

All users (regardless of their nationality) who wish to get access after the 12th of March 2017 to Spanish genetic resources from wild taxa whose activities involves the utilization of genetic resources must apply for an authorization. In this context, "utilization of genetic resources" means to conduct research and development on the genetic and/or biochemical composition of genetic resources, including through the application of biotechnology as defined in the Law 42/2007, of the 13th of December, on natural heritage and biodiversity.

The Royal Decree 124/2017, of 24th of February, regulates access to genetic resources from wild taxa *in situ*, i.e., in their natural environment, and *ex situ*, out of their natural environment.

2. Are there exemptions to RD124/2017?

Yes, there are several exemptions, described in the Royal Decree 124/2017, and who available in the following [link](#). As for the MARINE genetic resources are concerned, users are exempted from obtaining an authorization under the following circumstances:

-Access to genetic resources from fisheries regulated by law of "Pesca Marítima del Estado" from 26 March. Notwithstanding this, should access be requested with a different purpose to fisheries or aquaculture exploitation and/or beyond research in the fisheries or oceanographic domain (according to Law 33/2001), those genetic resources would fall within Royal Decree 124/2017 scope.

-Access to Spanish genetic resources exclusively with taxonomic purposes according to definition on Article 2.3 of Royal Decree 124/2017, of 24 February. For this matter, "exclusively with taxonomic purposes" implies the application of principles and methods of identification, delimitation and classification of living beings, requiring the study of their phylogenetic relationships and evolutionary and ecological process leading to biodiversity and using morphological, physiological, genetic, behavioural and environmental. It is important to highlight that transmission to third parties will only be allowed when the purpose remains being exclusively taxonomic. Otherwise an authorization will have to be requested.

Programa Operativo FEDER Galicia 2014-2020
Proyecto de desarrollo científico-tecnológico, innovación e investigación de calidad
"Unha maneira de facer Europa"



ECIMAT
Estación de Ciencias
Maríñas de Toralla

Universidade de Vigo



Instalaciones de investigación y equipamiento



Laboratorios
secos y
húmedos



Mesocosmos



Acuarios y tanques



Procesado de muestras y análisis

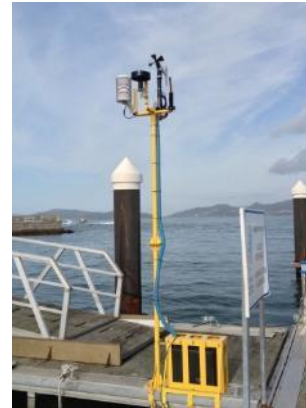


- Procesado de muestras histológicas
- Análisis de muestras
- Ensayos ecotoxicológicos



Oceanografía

- Datos océano-meterológicos
- Medida de corrientes superficiales en tiempo real (HF-Radar)
- Equipamiento de muestreo oceanográfico
- Apoyo en el muestreo



The background of the slide is a photograph of laboratory equipment. It shows several clear plastic chambers or incubators arranged in a row. Each chamber has a black top section with a label that includes the text 'LDQ'. The equipment is connected by various cables and hoses. The lighting is bright, and the overall scene suggests a high-tech research environment.

EUROPEAN MARINE BIOLOGICAL RESOURCE CENTRE SPAIN



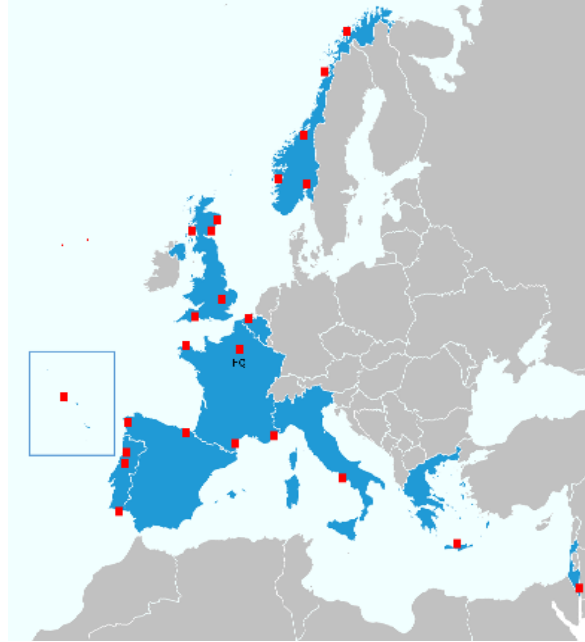
EMBRC
EUROPEAN
MARINE
BIOLOGICAL
RESOURCE
CENTRE
SPAIN

¿Qué es EMBRC?



El European Marine Biological Resource Centre (EMBRC) es una “**infraestructura de investigación**” europea que provee a los investigadores y empresas de acceso a los organismos y ecosistemas marinos y las instalaciones necesarias para estudiarlos, incluyendo instalaciones experimentales y plataformas tecnológicas.

El nodo español de EMBRC: EMBRC-ES



Estación de Ciencias
Mariñas de Toralla
(CIM-Uvigo)



Estación Marina de
Plentzia
(UPV/EHU)



Banco Español
de Algas



EMBRC-ES

Objetivos del proyecto EMBRedES:

- dotar al nodo de herramientas para su correcta gestión y organización,
- establecer mecanismos para la incorporación de nuevas entidades,
- reforzar sus capacidades de transferencia y comunicación,
- fomentar la interacción con otras entidades españolas participantes de ERICs.



Líneas de Investigación de EMBRC



- Aumentar los servicios de EMBRC y sus actividades
- Fortalecer colaboraciones con otras organizaciones europeas similares
- Estructurar la comunidad investigadora

Compartir el conocimiento para optimizar la investigación fundamental y aplicada



Proyectos de investigación de EMBRC-ES



EMBRedES





Programa de calidad para **acceder a las instalaciones y recursos** de 30 estaciones marinas

Observatorios
genómicos

Criobancos

Genómica
funcional

Desarrollo de
instrumentación

Submarinis-
mo científico

Accesos Transnacionales

Evolution of Ascidians under Ocean Warming and Ocean Acidification
Access provider: Toralla Marine Science Station, University of Vigo, Spain ([ECIMAT](#))



Tiago Repolho
University of Lisbon
(Portugal)

The aim of our research project was to experimentally assess the adaptive potential of the sea squirt *Diona intestinalis* (Linnaeus, 1767) to ocean warming and ocean acidification conditions, under a multigenerational perspective.

To kick start our project, Portugal have applied to derived from different poq were provided by the prt start our project and achis

Overall, our experience a further develop additional

Phytoplankton responses to a climate change scenario in the NW Iberian upwelling system
Access provider: Toralla Marine Science Station, University of Vigo, Spain ([ECIMAT](#))



Isabel Teixeira
University of Aveiro
(Portugal)

I applied to ASSEMBLE Plus to carry out a kind of experiments that would be very difficult to execute at my home Institution.

My research is focused on phytoplankton ecology, and I am especially interested on the response of phytoplankton communities to a future climate change scenario.

With ASSEMBLE Plus, I could access to excellent infrastructures and successfully perform climate change simulation experiments with natural phytoplankton communities. Collaboration with a local research group allowed expanding the experimental design, resulting in the collection of more data than initially proposed, and enhancing the complexity of the project.

Thus, my experience was very positive, having obtained very good results and established new professional collaborations. I truly acknowledge the research and technical staff from the Access Provider for their help and involvement during my research stay.



PERSPECTIVE
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The Use of Cryopreserved Biological Material for Water Quality Assessment

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O3D OCEAN SAMPLING DAY
21st June 2021
www.assembleplus.eu/research/ocean-sampling-day



- Join more than 200 registered sites
- Produce FAIR contextual geoscientific data
- Contribute samples from everywhere in the world
- Share open access data

Contact us today at o3d-contact@embrc.com

Proyectos de EMBRC-ES



Desarrollar y aplicar un marco de trabajo novedoso y uniforme que provee de recursos basados en el conocimiento para **un mejor entendimiento y gestión del Océano Atlántico y su ecosistema de servicios**



13 Infraestructuras de Investigación Europeas de las Ciencias de la Vida juntas para crear un **espacio colaborativo abierto y digital** para la investigación biológica y médica

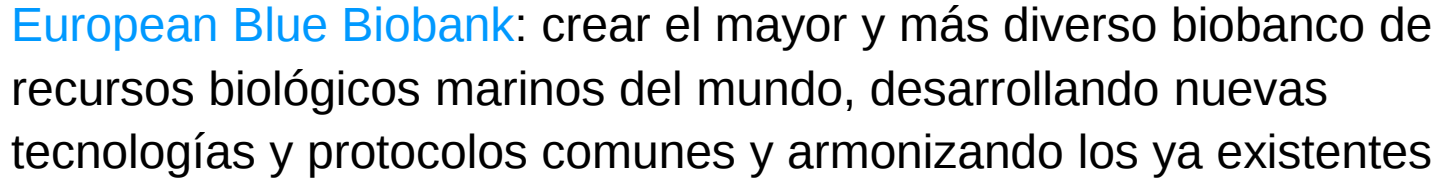
European Open
Science Cloud

FAIR data

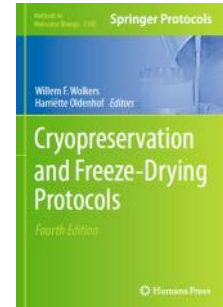
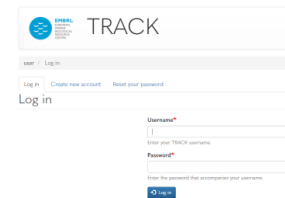
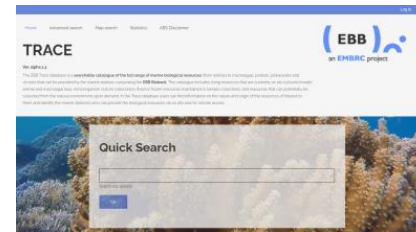


Agrupación de 20 ERICs y 3 ERICs en preparación para fortalecer su coordinación y aumentar sus colaboraciones





Par DUY1 23/10/2018



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EMBRC-ES Liaison Officer

¡Gracias!

<https://www.embrc.es/>



EMBRC
EUROPEAN
MARINE
BIOLOGICAL
RESOURCE
CENTRE
SPAIN



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