



PROGRAM TUESDAY, JUNE 1ST

10:00 – 10:15 **WELCOME ADDRESS: TRIBUTE JEAN CLAUDE SORBE**
Javier Cristobo (IEO), Andrés Arias (UNIOVI), Almudena Álvarez (DGPM)

Marine Biodiversity and Ecosystem Function

CHAIRPERSONS: Andrés Arias - Javier Cristobo

10:15-10:30 More than 60 years of studies about marine tardigrades in the Bay of Biscay. Past, present and future (Marcos Rubal *et al.*)

10:30-10:45 Soft-bottom macrofaunal community structure and biodiversity patterns in the continental shelf, canyons and pockmark fields in the southeastern Bay of Biscay at a range of depths of 97-1476 m (Germán Rodríguez *et al.*)

10:45-11:00 Cockle as second intermediate host of trematode parasites: consequences on sediment bioturbation and nutrient fluxes across the benthic interface (Anais Richard *et al.*)

11:00-11:15 Demersal and epibenthic communities of sedimentary habitats in the Avilés Canyon System, Cantabrian Sea (NE Atlantic). Environmental factors determining faunal assemblages (Larissa Modica *et al.*)

11:15-11:30 Detecting climate regime shifts and biodiversity redistribution in the Bay of Biscay with GAMMs (Guillem Chust *et al.*)

11:35-11:40 POSTER SESSION

- Circareef / Circatax project: Biodiversity and structure of rocky circalittoral habitats on the Basque coast (South of the Bay of Biscay) (Marie Noelle de Casamajor *et al.*)
- New records of deep-sea anthozoans (Cnidaria) for the Bay of Biscay (northeastern Atlantic), collected during ECOMARG, INDEMARES and INTEMARES expeditions (Álvaro Altuna & Pilar Ríos)
- Diversity of Echinoids in Galicia Bank (Project LIFE+ INDEMARES) (Laura M^a García-Guillén *et al.*)
- Polychaete diversity from cold-water corals of the Central Cantabrian Sea (Bay of Biscay) (Esteban Pascual-Parra & Andrés Arias)

- New records of Calanticidae (Cirripedia Calanticomorpha) on the southern Bay of Biscay (Teo P. Ibarrola *et al.*)
- HARD-bottom bathyal species Associated TO *Asconema setubalense* Kent, 1870 (PORIFERA, HEXACTINELLIDA) (Marcos González-Porto *et al.*)

11:40-11:50 **BREAK** (Projection video expedition SponGES0617)

11:50-12:05 The contribution of siliceous sponges to the silicon cycle of a diatom-rich shallow bay (María López-Acosta *et al.*)

12:05-12:20 Using multiparametric observatory for assessing patterns of animal behavior in relation with water dynamics in El Cachucho MPA (Cantabrian Sea) (Cristina Rodríguez-Cabello *et al.*)

12:20-12:35 Automatic echotrace classification of pelagic species in the Bay of Biscay (Aitor Lekanda *et al.*)

12:35-12:50 Ecological traits identification of recent space-time changes in demersal communities (Julia Polo-Sainz *et al.*)

12:50-13:05 Study of the communities of a complex circalitoral rocky shelf in the Cantabrian Sea (southern Bay of Biscay) (Augusto Rodríguez-Basalo *et al.*)

13:10-13:15 **POSTER SESSION**

- Recent Brachiopod diversity and distribution from the Central Cantabrian Sea and the Avilés Canyon System (Bay of Biscay) (Nuria Anadón *et al.*)
- Diversity of Asteroids in Galicia Bank (Project LIFE+ INDEMARES) (Laura M^a García-Guillén *et al.*)
- The substrate matters. The strategy of seeking a settlement in the deep Cantabrian Sea (Cristina Boza *et al.*)
- New records of Bivalvia and Gastropoda (Mollusca) in the southern Bay of Biscay and Galicia Bank (NE Atlantic) (Teo P. Ibarrola *et al.*)

13:15-14:15 **LUNCH**

14:15-14:30 Deep learning supported high resolution mapping of vulnerable habitats. Its application to the rocky bottoms of the Cap Breton canyon (Bay of Biscay) (Alberto Abad-Uribarren *et al.*)

14:30-14:45 The role of prey and environment in driving decadal spatio-temporal patterns of a highly mobile top predator (Amaia Astarloa *et al.*)

14:45-14:50

POSTER SESSION

- Historic collection of sponges from the Museo Marítimo del Cantábrico (MMC): 1893-1912 (Pilar Ríos *et al.*)
- INTEMARES Capbreton Canyon System: an ecosystem multidisciplinary study (María Gómez-Ballesteros *et al.*)
- Preliminary results of epifauna collected in the INTEMARES CAPBRETON Expeditions (2019-2020) (Pilar Ríos *et al.*)
- Application of focus stacking in benthic fauna identification (Alejandra Calvo-Díaz *et al.*)
- Deep-learning approach to improve knowledge about Cold Water Coral Reef in La Gaviera Canyon (Bay of Biscay) (Elena Prado *et al.*)

15:00-16:00

INVITED SPEAKERS: Sarah A. Woodin & David S. Wethey

Stressors and ecosystem engineers and aquaculture

END

1st

DAY

PROGRAM WEDNESDAY, JUNE 2ND

Marine Biodiversity and Ecosystem Function

CHAIRPERSONS: Eugenia Manjón-Cabeza– Santiago Parra– Alberto Serrano– Sergio Taboada

- 10:00 –10:15 Aviles Canyon System (SCI): Increasing the biodiversity knowledge (Javier Cristobo *et al.*)
- 10:15 -10:30 Life history and reproductive traits of the eastern North Atlantic deep-sea quillworm *Hyalinoecia robusta* (Annelida: Onuphidae) (Andrés Arias & Hannelore Paxton.)
- 10:30-10:45 Hybrid modeling of *Gelidium corneum* distribution in a changing environment: Experimental characterization of its vegetative propagation capacity (Samuel Sainz-Villegas *et al.*)
- 10:45-11:00 Diversity and distribution of the bivalve molluscs in the Central Cantabrian Sea and the Avilés Canyon System (Bay of Biscay) (Ricardo López Alonso *et al.*)
- 11:00-11:05 POSTER SESSION
- Optimization of the use of biological traits susceptible to climate change and fishing pressure to characterize ecosystems vulnerability (Marta Sainz-Barriain *et al.*)
 - Functional costs of arm autotomy on the locomotion of stellate echinoderms: two different outcomes of two distinct modes of locomotion (Irene Fernández-Rodríguez *et al.*)
 - Do wastewater treatment plant discharges drive rocky subtidal community shifts? A case study (Laura Huguenin *et al.*)
 - Mercury and emerging pollutants contamination in feathers of resident Yellow-legged Gull (*Larus michahellis*) in the southeastern Bay of Biscay (Emilie Milon *et al.*)
 - Bioaccumulation of total mercury and methylmercury in a deep-sea fish assemblage (Sonia Romero-Romero *et al.*)

SPEED-TALKS - ALL SESSIONS

- 11:05-11:10 Seamounts, canyons and slope: the preference of a new stiliipedid amphipod for the Bay of Biscay (Inmaculada Frutos & Jean Claude Sorbe)
- 11:10-11:15 Sea Bream (*Pagellus bogaraveo*) fishery and deep-water corals in the Bay of Biscay: Chronicle of a Death Foretold? (Raul Castro)
- 11:15-11:20 Recent freshening and cooling of Biscay subsurface waters (César González-Pola *et al.*)
- 11:20-11:25 Seasonality in the condition of megrim and its somatic growth in Cantabrian Sea and Galician waters (Jorge Landa *et al.*)

- 11:25-11:30 Assessing antropogenic pressure index for the management of marine ecosystem (Ulla Fernandez-Arcaya *et al.*)
- 11:30-11:35 First record of *Plicopurpura patula* (Gastropoda: Muricidae) in European waters: new evidence to the 'tropicalization' of the Bay of Biscay or human assisted arrival? (Omar Sánchez *et al.*)
- 11:35- 11:40 Poaching in the European Stalked Barnacle fishery: Insights from a BiodivERSA international stakeholder workshop (Cudillero 2020) (Katja J. Geiger *et al.*)
- 11:40-11:45 **BREAK** (Projection video Lander Geodia - INTEMARES Capbreton 2020)
- 11:45-11:50 Study of the life traits of demersal fish in Atlantic Iberian waters (Davinia Lojo *et al.*)
- 11:50-11:55 Testing Surplus production models sensitivity: a case study for ASPIC and SPiCT (Anxo Paz *et al.*)
- 11:55-12:00 Genetic monitoring of the declining European sea urchin *Paracentrotus lividus* from the central Bay of Biscay (Asturias, NW Spain) and attempts to restore its wild populations (Marina Parrondo *et al.*)
- 12:00-12:30 **INVITED SPEAKERS: Jose Manuel Guerra**
A new method to study the diet in small marine invertebrates: amphipods as study case.
- 12:30-12:40 POSTER SESSION
- Channels hierarchy classification in the Avilés Canyon System (Irene Díez *et al.*)
 - ODATIS: the gateway to French open ocean and coastal data (Sabine Schmidt *et al.*)
 - Summer hypoxia in a small estuary of the French Atlantic coast (the Charente): findings from high-frequency and long-term surveys (Sabine Schmidt & I.I. Diallo)
 - Environmental and anthropogenic driven transitions in demersal ecosystems (Julia Polo-Sainz *et al.*)
 - Detection and prevention of biological invasions in marinas and ports: Epibionts and associated fauna of *Mytilus galloprovincialis* revisited (Irene Fernández_Rodríguez *et al.*)
 - Knowing the bristle worms (Annelida, polychaetes) from the Cantabrian Sea: an experience with Primary School students (Miguel González *et al.*)
 - Variability of growth, protein content and fatty acids of *Ulva rigida* under different culture conditions (Rebeca Aduriz *et al.*)

Threatened Marine Ecosystems and Endangered Species

CHAIRPERSONS: Jose Luis Acuña – Yaisel J. Borrell

- 12:45-13:00 Identifying potential habitats of a locally overexploited species: case study of the blackspot seabream in the Bay of Biscay (Lola De Cubber *et al.*)
- 13:00-13:15 Measurement methods to quantify habitat forming species using video-transect: the case of the deep-sea sponge *Asconema setubalense* Kent, 1870 (Laura Martín-García *et al.*)
- 13:30-14:30 **LUNCH**

Biological, Chemical and Physical Oceanography

CHAIRPERSONS: Jose Luis Acuña – Yaisel J. Borrell

- 14:30- 14:45 Organic carbon burial in the West Gironde Mud Patch sediments (Bay of Biscay) (Nicolas Dubosq *et al.*)
- 14:45- 15:00 Long-term observations of water column stratification on the American Shelf using ARVOR-C profiling floats (Louis Marié *et al.*)
- 15:00- 15:15 Increase of extreme wave events and impact in beach erosion in the Basque coast (Roland Garnier *et al.*)
- 15:15-15:30 Impact of sediment on macroalgal blooms on mudflats in Brittany (Pierre Anschutz *et al.*)
- 15:30-15:45 Characterization of marine heatwaves on the Asturian coast, SW Bay of Biscay (Paula Izquierdo *et al.*)
- 15:45- 16:00 Investigating sediment budgets on a continental shelf subtidal mud patch under estuarine influence: a numerical modelling analysis (Melanie Diaz *et al.*)

END

2nd

DAY

PROGRAM THURSDAY, JUNE 3RD

Exploitation, Management and Conservation of Marine Resources

CHAIRPERSONS: Pablo Abaunza – Almudena Álvarez – Francisco Sánchez

- 10:00-10:15 Future trajectories of marine resources of the Bay of Biscay under impacts of fishing and ocean warming (Xavier Corrales *et al.*)
- 10:15-10:30 Assessment of the Impact of the Set Gillnet on the Seabed Habitats (Antonio Punzón *et al.*)
- 10:30-10:45 Can we trust commercial landings data to identify essential habitats of harvested fish? (Baptiste Alglave *et al.*)
- 10:45-11:00 Red mullet abundance in the Bay of Biscay: main drivers and spatio-temporal dynamics (Claire Kermorvant *et al.*)
- 11:00-11:15 Purse-seine fishery - its importance in Portugal (Diana Feijó & Alexandra Silva)
- 11:15-11:30 Do biological characteristics of Manila clam claim for a possible revision of the minimum catch/harvest size in Arcachon Bay? (Nathalie Caill-Milly *et al.*)
- 11:30-11:45 **BREAK** (Projection video The MPA El Cachucho)
- 11:45-11:55 POSTER SESSION
- This is what we know: assessing the stock status of the data-poor common sole in the Bay of Biscay and Iberian Coast ecoregion (Grazia Pennino *et al.*)
 - Applying length-based assessment methods to fishery resources of the Bay of Biscay and Iberian Coast ecoregion: stock status and parameter sensitivity (Marta Cousido-Rocha *et al.*)
 - Spatio-temporal variability of the first sale price of target species of the southern Bay of Biscay (Patricia Verisimo *et al.*)
 - Megrim (*Lepidorhombus whiffiagonis*) weight-length relationships in the northern Bay of Biscay and Celtic Sea (Jorge Landa *et al.*)
 - Advances in the study on sexual maturity of chub mackerel (*Scomber colias*) in Cantabrian Sea and Galician waters Charo Navarro *et al.*)
 - Littoral Guardians, European Program “Coastwatch” in Asturias (Irene Felgueres Rivero *et al.*)
 - The stalked barnacle *Pollicipes pollicipes* elongated morphology: no evidence for epigenetic variation (Alina Sousa *et al.*)
 - Predation on juveniles of the sea urchin *Paracentrotus lividus* (Silvia de la Uz *et al.*)
 - Feasibility of the release of hatchery sea urchin juveniles as a tool to improve the natural stocks (Silvia de la Uz *et al.*)

- 12:00-12:15 Going beyond the otolith bubble: Fin spine oxygen isotopes ($\delta^{18}\text{O}$) as a proxy for Atlantic bluefin tuna (*Thunnus thynnus*) movements (Patricia Luque *et al.*)
- 12:15-12:30 A comparison of extraction methods in the collection of ocle (*Gelidium corneum*) along the Asturian coast and their influence on the sustainability of the resource (Jaclyn Higgins *et al.*)
- 12:30-12:45 On the presence of a giant polychaete species on the NW Iberian Peninsula: taxonomic identity and preliminary data on its reproductive biology (Daniel Escobar *et al.*)
- 12:45-13:00 iFADO project: contribution to the implementation of the MSFD in the Atlantic Area through modeling and *in situ* monitoring approaches (Luz García-García *et al.*)
- 13:00-13:15 Establishment of an integrated marine observing system in an offshore aquaculture site to monitor, study and predict the occurrence of marine biotoxins and shellfish poisoning events (Yolanda Sagaminaga *et al.*)
- 13:15-14:15 **LUNCH** (Projection video Gatherers in XXI century Europe: The gooseneck barnacle fishery)

Science-Policy Communication, Governance, Adaptive Management and Education

CHAIRPERSONS: Pablo Abaunza – Almudena Álvarez – Francisco Sánchez

- 14:15-14:30 Nature-Based solutions in the Basque coast: Capitalization on Restoration, Marine Protected Areas and Sustainable fishing approaches (Jose A. Fernandes-Salvador *et al.*)
- 14:30-14:45 Testing fishery essentiality as a tool to manage some artisanal fisheries under data poor conditions (C. Dorta & Pablo Martín-Sosa)
- 14:45-15:00 Surveys as a tool for evaluating public knowledge and attitudes on cetacean conservation (Alicia García-Gallego *et al.*)

Blue Biotechnology and Marine Genetic Resources

CHAIRPERSONS: Sergio Taboada – Francisco Sánchez

- 15:00-15:15 Chaotic genetic patchiness in the high valued Atlantic stalked barnacle *Pollicipes pollicipes* from Iberia Peninsula: implications for fisheries management (Marina Parrondo *et al.*)

END

3rd

DAY

PROGRAM FRIDAY, JUNE 4RD

Water Quality

CHAIRPERSONS: Jose Luis Acuña - Andrés Arias

- 10:00-10:15 Setting boundaries of nutrients quality status classes in transitional and coastal waters of the southeastern Bay of Biscay, under the European Water Framework Directive (J.G. Rodríguez -Javier Franco- *et al.*)
- 10:15-10:30 Tributyltin compound evolution in Bidasoa (SE Bay of Biscay) transboundary estuarine waters (Joana Larreta *et al.*)
- 10:30-10:45 Antibiotics in the Basque coast (N Spain): occurrence and risk assessment for a better water monitoring and management (Oihana Solaun *et al.*)
- 10:45-11:00 Toward the assessment of the chemical status for metals in transitional and coastal waters within the EU Water Framework Directive using Diffusive Gradients in Thin films (J.G. Rodríguez -María Jesús Belzunce-Segarra- *et al.*)
- 11:00- 11:15 An assessment of metal(oid)s in mussel tissues along the Asturian Coast (Bay of Biscay, Spain) (Lorena Sanz-Prada *et al.*)
- 11:15-11:30 **BREAK**

Invasive Species and Anthropogenic Pressure

CHAIRPERSONS: Andrés Arias-Javier Cristobo

- 11:30-11:45 Application of risk-based approach to non-indigenous species in the Bay of Biscay and the Iberian Coast, and in Macaronesia (Claudia Hollatz *et al.*)
- 11:45-12:00 Building on gAMBI in ports for a challenging biological invasions scenario: Blue-gNIS as a proof of concept (Aitor Ibabe *et al.*)
- 12:00-12:15 Changes on the abundance and distribution of non-indigenous macroalgae after seven years. Growing pains in the intertidal (Marcos Rubal *et al.*)
- 12:15-12:30 Microplastic contamination of the ecosystem and sea products. Arplastic: a case study of the Arcachon Bay (Benedicte Morin *et al.*)
- 12:30-12:45 Does nutrient enrichment interact with a physical disturbance in the sediment and plant responses in a *Zostera noltei* meadow? (Inés Viana *et al.*)

Coastal Development and Engineering

CHAIRPERSONS: Andrés Arias-Javier Cristobo

12:45-13:00 Development of new image analysis methods for quantifying the reef surface built by an engineer polychaete species, *Sabellaria alveolata* (Alicia Romero-Ramirez *et al.*)

13:00-13:15 A socio-economic assessment of the sea-level rise on the Basque Coast municipalities (NW coast of Spain) due to climate change (Andrea del Campo *et al.*)

13:15-13:30 Developing a Bayesian network for storm impact assessment on the Grande Plage de Biarritz based on observational data and statistical model (Aurelien Callens *et al.*)

13:30-13:45 Modelling the morphological response of the Oka estuary (SE Bay of Biscay) to climate change (Roland Garnier *et al.*)

13:45-14:15 **INVITED SPEAKERS: Ana Riesgo.**

Molecular ecology of keystone species in VMEs to support conservation strategies.

Awards ceremony and Closure ISOBAY 17

- Best oral presentation Award
- Best speed-talk presentation Award
- Best poster presentation Award
- Jean Claude Sorbe Award to the best early career presentation
- Honorary mention to Nuria Anadón for a lifetime devoted to study the biodiversity of the Bay of Biscay

Conclusions and the place to the next ISOBAY.... in France

(Projection video NO SCIENCE, NO #WorldOceansDay)

<https://isobay17.com/>