



# MER

## Newsletter

February 2024

## Welcome to the MER Newsletter

It is with a great pleasure that we launch the winter MER newsletter 2024. This second newsletter aims to keep highlighting the MER community activities by promoting prizes, awards, labels, scientific projects, theses, expeditions, careers through short marine stories, articles, interviews or press release. We all know that working for and with MER as a professor, manager or student requires a huge time, physical, psychological, economical investments and efforts. However, we can permanently feel the positive vibes rising from the MER community giving us enough energy to strengthen networking and to constantly improve our communication.

Nowadays, the communication is fully integrated in our current lives. Some will prefer to use classic media (TV, radio), others - youngers - will rather favor social networks (Instagram, X, TikTok...) or alternative medias (podcasts, YouTube channels) to communicate. Regardless the media chosen, we still believe that there is a room for sharing a such newsletter as .pdf published every 6 months. We did not want to print it out and send a paper version to everyone but keep it digital. It is easier to spread and to share. This is a great opportunity to maintain a long-term connection between the former and future cohorts, the teachers and administrative staff; a strong continuous line that can reinforce the interactions within the whole MER community.

Sharing your current position could significantly help the future graduated students to build their own career pathway. Sharing your current research could open new scientific perspectives and lead to new contacts. Sharing publications and experiences could definitely help some to solve professional or more personal issues. Sharing is important to know what we are all doing **so feel free to share with us any relevant material that we will be happy to include in the next newsletters and to distribute them with your institute, colleagues, students... i.e., with anyone who might be interested.** Sharing is and will be always a key of our success.

February 1<sup>st</sup>, 2024  
Donostia-San Sebastián, Spain

**Johan Etourneau &  
Belen González-Gaya**  
The Newsletter editors



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## Erasmus Mundus Association Day

### October 2023. Bordeaux

Md Mahamudul Hasan Mredul, MER+ 2020 – 2022

The students of Erasmus Mundus Joint MSc in Marine Environment and Resources (MER) celebrated the EMA day at Bordeaux France in October 2023. A total 23 participants joined the event where the theme of the event was “uncovering skills”. The meetup was a valuable opportunity to connect, learn, and discuss key aspects of the Erasmus Mundus Association. The event was coordinated by [Md Mahamudul Hasan Mredul](#), the program representative of EMJM MER, in collaboration with [Tutul Saha](#), a member of the 2023-25 cohort. Their dedication and leadership ensured the success of the meetup, providing a platform for students to engage in constructive dialogues and enhance their understanding of the Erasmus Mundus community.

An unanimous agreement among all participants emerged on the importance of networking, both on a personal and professional level. This recognition highlights the value of connecting with fellow students, faculty members, and industry professionals to enrich our academic and career journeys. The meetup concluded on a positive note, with all participants expressing their interest in registering for the [EMA community portal](#). This portal will be our hub for large-scale communication and development within the program. It promises to be a centralized platform for collaboration and knowledge sharing.



## A MER Charlemagne prize academy winner

Veronica Relaño, MER+ 2020 – 2022

**Dr. Veronica Relaño** is a MER fellow from 2013/2014 and currently works as a postdoctoral researcher at the University of Santiago de Compostela (Spain) and as the Oceans Program manager of the energetic science communication NGO known as [Onewater](#).

Veronica's recent accolade as a laureate of the Charlemagne Academy Prize Fellowship for her project titled *How can the EU reach its objective to legally protect 30% of European seas by 2030*, during the research year 2023/24. This is a testament to her visionary work in marine conservation and dedication to effectively implementing Marine Protected Areas. This honor, awarded in Aachen on November 2023, not only recognizes her significant contributions but also aligns with the broader objectives of the Charlemagne Prize Academy, *fostering innovative and feasible solutions for the complex challenges facing Europe today*.

Join us to celebrate Veronica's achievement and the importance of protecting our oceans to ensure a prosperous blue European future. If you want to know more about her work, please visit [www.somosoceanos.com](http://www.somosoceanos.com), [www.onewater.blue](http://www.onewater.blue) or connect on [LinkedIn](#).

## Congratulations MER+ EMJMD for the Erasmus+ “Good Practice Label”!

I am pleased to let you know that the MER+ EMJMD 2017-2022 project was awarded with the **Erasmus+ “Good Practice Label”** (GPL), which recognises that it was particularly well managed and can be a source of inspiration for others. The evaluation criteria, defined by the European Commission, were the relevance of the results and objectives, the overall quality of management and the degree of implementation, impact and dissemination. Projects that obtain a score higher than 75/100 upon assessment of the final report against these criteria are eligible for this label of excellence. The global score of MER+ EMJMD was 86/100, which reflects its excellent quality against the assessment criteria; even though it was run throughout the challenging years of the Brexit and the Covid-19 pandemics, full of uncertainty and unexpected hurdles. As MER Consortium Chair, I wish to thank you all, members of the MER Community, because you made possible this successful accomplishment of the MER+ EMJMD, which includes very diverse aspects that are summarised below.

The MER+ EMJMD 2017-2022 project stemmed from the preceding European MSc in Marine Environment and Resources (MER EMMC 2012-2017), which was started in 2006 as an integrated Joint MSc Programme of high quality initially recognised and funded by National programmes. Further, MER+ EMJMD gave rise to its successor programme MER2030 EMJMD 2021-2026. MER+ EMJMD received **more than 1200 applications** (3 intakes) and **106 selected students**, 65 EM student scholarship holders and 41 self-funded, completed the programme and graduated. Together with [student mobility pathways](#), staff mobility was pivotal, with **more than 60 guest lecturers**, 28 of them (from 9 EU member states, UK, Mexico, USA, Canada and Switzerland) recipient of EM Scholar Scholarships.

The joint management bodies included the Joint Programme Board, MER Secretariat, Selection Board and MSc Thesis Examination Board. Joint academic activities and procedures were developed; these included application, selection, recruitment, reporting, mark transfer and degree awarding. The on-line application platform, mark converter tool, MER transcript, and joint diploma constituted highlights of jointness, clearly reflected on the [MER Consortium website](#). Both EM scholarship holders and, which is exceptional even for EMJMDs, self-funded students benefited from the provision of Erasmus Mundus type medical [insurance](#). Joint actions such as the **MER Consortium Grants** (MCG) were instrumental to provide support for excellent self-funded students, who received 154 MCG (79 waivers and 75 mobility grants). Joint actions also aimed at promoting the EHEA or creating a **MER community** sense, say: student and staff mobility, use of ECTS and the RiMER course, Alumni Portfolio and MER Community Summit 2022.

International and inter-sectoral networking were crucial, as evidenced by the regular participation of [MSc Thesis supervisors](#) from institutions outside the MER Consortium. MER+ EMJMD made great progress in innovative teaching and learning, with the consolidation of the RiMER and Stareso courses and the launching of the [Professional Placement](#) as landmarks. Prominent students of every intake were awarded ([Collins Award](#) to the best MSc Thesis presentations, and [Calypso Prize](#) -Cousteau Foundation- to the best research on Marine Environment Conservation).

The sense of belonging to the MER community was pursued through **inter-cohort meetings** and interactions, both academic and social. Students of 2-3 successive different cohorts had the opportunity to meet physically at the **RiMER course, Vivas and Graduation**. Besides, Vivas were offered open access by video streaming to graduates, teaching staff and supervisors. Graduates have good memories of the Cider-house Diner and Farewell Terrace-Wine parties, with the celebration of the **MER Community Summit** in September 2022 as historical landmark in which **more than 220 attendees** embraced an exceptional opportunity to consolidate a global MER community forever.

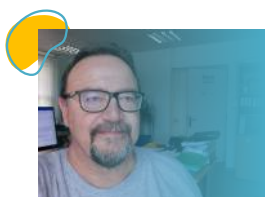
### TIMES OF UNCERTAINTY

The Covid-19 pandemics was a major challenge; however, we were able to adapt to minimize its impact and even to learn to improve the sustainability of the programme. The Covid-19 response plan included remote teaching and tutorials, and regular communication with students (virtual assemblies, notices, emails, on-line surveys). Special documents were prepared regarding updates in visa regulations and mobility issues. The "Covid-19 Response" documents provided details on Health Safety Special Conditions in the partner universities. The "Travel/Visas: 2021 update" document included regulations in force in EU after 2018 (i.e. Directive 2016/801) and guidelines including links and Covid-19 related updates for visa procedures and residence permits in the countries of the Partner Universities. The "Intro-week online survey" collected detailed data on mobility and visa and residence permit procedures in order to track the students before their arrival to the Induction Week.

Unfortunately, despite of the great efforts of the academic management and administrative staff (herein, the degree of involvement of the MER Secretariat and partners' IIRR officers must be publicly acknowledged), a few students still encountered additional difficulties in obtaining visa and residence permits. Nevertheless, all the students were able to follow the programme through one or another means. A system was established in 2020 to follow completion of remote learning (individual Remote-Learning Report), which continued until 2022 for students who, obliged by travel restrictions or health safety, followed the programme remotely. Examination and grading were adapted when so required avoiding any major impact that these might have on student performance and achievements.

All this experience has been inspirational for the currently ongoing MER2030 EMJMD 2021-2026 programme. I wish MER2030 EMJMD and incoming MER EMJM proposals to be as successful as MER+ EMJMD has been.

Plentzia, January 5<sup>th</sup> 2024.



**Ionan Marigomez**  
MER Consortium Chair and  
Full Professor in the  
Plentzia Marine Station PiE-UPV/EHU



#### 4. NEWS ABOUT THE MASTER AND AGENDA

## RiMER's day – Part I

### Donostia-San Sebastián, 2024

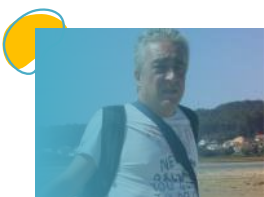
The **RiMER's days**, organized each year at the **aquarium of Donostia-San Sebastián**, remain a tremendous moment in the Master MER student's life.

During 5 days, professors are invited to share their scientific knowledge on specific topics. This year, **48 students** attended the RiMER's days and listened **12 different lectures on sustainable ocean services, global climate changes and marine pollution**.

The lecture morning sessions particularly addressed important questions on **new challenges** faced by EU aquaculture, fisheries management, polar climate changes, coral bleaching or chemical pollution in the oceans. The afternoon sessions were dedicated to **round-table discussions**. Students prepared a series of questions for each lecturer before presenting their own highlights. A presentation of some **ongoing MER PhD thesis research** and a **closing lecture about climate change challenges** concluded these wonderful days.



Although this working week was quite intense, a dinner break at the Cider House was very welcomed!



**Manu Soto**  
Full Professor in the  
Plentzia Marine Station PiE-UPV/EHU

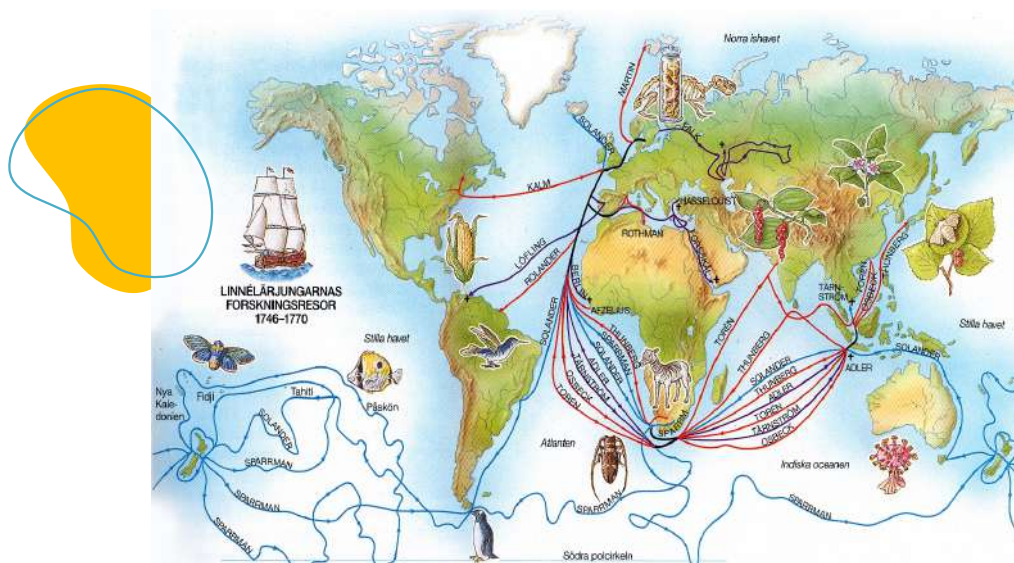
## Goodnight you Apostles of Linnaeus, you Bulldogs of Darwin!

**Forenote:** Academia in occident drinks of the Greco-Roman tradition of narrating tales. Here you go one about teachers, students, explorers and dedication to science to the last breathe/cough. I hope someone reads this aloud for you before you go to sleep!

**Teaching and communicating science** has a lot of evangelising. Studying and conducting research asks for a pinch of dedication that sometimes has been taken to the limit. **Linnaeus**, father of taxonomy, is praised to have been a captivating speaker using unconventional teaching approaches. His methods in fact were quite Aristotelian! While **Aristotle** taught walking around the Lyceum (Peripathetic philosophy), Linnaeus engaged his students with lessons in the Botanical Garden and Saturday exploratory walks in the nature (exploring plants and animals) around Uppsala. Sometimes he was followed by hundreds of students.

After his early trips around Europe, and after manifesting that he was not able to stand warm climates, he never left Sweden after 1738. He had first published his **“Systema naturae”** in the Netherlands in 1735 introducing the binomial nomenclature approach. Back in homeland he worked as doctor and helped to found the Swedish Royal Academy of Sciences becoming its first president. In 1741, he became Professor in the University of Uppsala first teaching on issues related to Medicine and then taking the responsibility of the Botanical Garden. He was made rector of the University in 1750, position that he held until 1772.

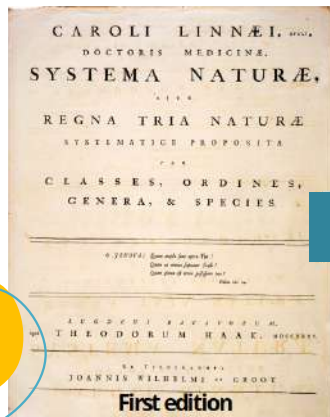
In the meanwhile, the 11 pages of the 1st edition of Systema naturae (1735) became 3000 pages in the last one, the 13th (1770). How did it grow like that? He applied an **early Erasmus Mundus mobility program**, so to say! He sent some of his best students to gather botanical and zoological samples to include in his Systema naturae and to spread the Linnaean taxonomy across the 4 cardinal points of the planet. Linnaeus first referred to them as **the “Apostles”** in 1950. They were a total of **17 men** travelling between 1745 and 1779 with the last one, Adan Afzelius, exploring Sierra Leona (1792-1796) already after the death of Linnaeus in 1778. Among them, **Daniel Solander** travelled with Cook on his first circumnavigation while **Anders Sparrman** accompanied Cook in his second one. In general, the Apostles of Linnaeus acted as chaplains or doctors aboard ships of the Swedish East India Company, and once on their destination they collected samples.



Exploratory voyages of the Apostles of Linnaeus. In capital letters the surnames of the 17 Apostles, indicating with a cross the 7 that never returned home. Illustration Hans Sjögren. Sveriges Nationalatlas, from Bd. Växter och djur.



However, not all of them returned and seven died abroad. The toll of dedication to exploratory science at the time. However, the Linnaean system soon triumphed, and initiated a tradition in British research (Not in vain, the Linnaean Society is in London and not in Uppsala!). After Cook, often a naturalist was included aboard the British exploratory vessels of the 19<sup>th</sup> century, with **Thomas Huxley** (*Bulldog of Darwin*) on board of the HMS Rattlesnake or **Charles Darwin** on board of the HMS Beagle being just two examples.



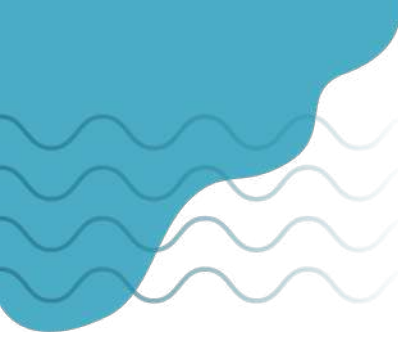
*Linnaean Systema naturae* did not only grow in content and in number of pages, it also improved between editions. Whales were classified as fishes in the 1<sup>st</sup> edition, but were included within the mammalian group in the 10<sup>th</sup> edition. Still a lot has rained in systematics since the last edition of 1770.

Linnaeus was not the only “Pied Piper of Hamelin” luring his students. **Johannes Müller** (1801-1858) Professor in the University of Berlin, one of the recognised fathers of physiology, can be considered one of the most successful academic educators in history. Müller was mentor to some of the leading minds in medicine, chemistry and biology of all times; von Helmholtz, du Bois-Reymond, Schwann, Henle,

Virchow, Von Kolliker, Ludwig, Haeckel, Remak, Wundt...themselves in turn, educators of many of the research giants on whose shoulders we stand. He defended that any biological problem in zoology needs to be analysed across the diversity of animal forms. This ultimately **required the study of marine animals**. For his research by the sea he used to travel during summer holidays to Helgoland, Ostend, Messina or Naples, among other places. In such trips he was normally accompanied by some of his students but in the sampling places there was never any equipment, shelter or local know how available for the samplings and observations. In 1855, returning from a research trip to (precisely) Sweden, Müller survived a shipwreck but a young student who had accompanied him drowned. Another student with bad luck!

One of Müller´s late students and one of the main defenders of Darwin's theory, **Ernst Haeckel**, had a lot of impact in Marine Science as professor of young Prussian naturalist **Anton Dohrn**. Haeckel introduced Dohrn to Evolution turning him into a fervent promoter of Darwinism, a “marine bulldog of Darwin”! As a ‘Darwinian morphologist’ his particular apostles were the marine animals and he understood that he would be paying an enormous service to science and the Evolution theory if he could host scientists by the coastline, where biodiversity is found at its highest complexity, facilitating their research.

In 1870, Dohrn decided that the big city of Naples sitting by its Gulf with high biological richness was the place to build such a marine research station. A Prussian in Italy, a curious mobility scheme! His station should allow researchers to access ready-to-use and permanent laboratories, support facilities, equipment, libraries and trained personnel, something that Müller never dreamed of having. This is something **MER students can experience in the Marine Stations of Fayal, Stareso or/and Plentzia**. Dohrn opened Stazione Zoologica Anton Dohrn (SZN) to visiting scientists in late 1873, soon becoming a biological research hub worldwide. When Dohrn died in 1909 more than 2200 researchers had visited SZN. He was a research facilitator to all of them. Over 20 Nobel Prize winners have worked in SZN to date.



The Gulf of Naples has disclosed many “biological secrets” and a lot of knowledge has come from its biological resources. And I do not know of any exchange student casualties there, but yes of many discoveries from visitors. One example. Linnaeus only dealt with **eukarya**, name coined to refer to nucleated cells. The distinction eukaryote vs prokaryote was first done by **Edouard Chatton**, the director of another marine station (Oceanological Observatory of Banyuls-sur-Mer). The archaea joined bacteria and eukarya as the last kingdom to be discovered after the molecular studies of **Carl Woese** in 1977. One of the first archaeas to be isolated and cultured was ***Thermococcus litoralis***, found in a shallow submarine thermal spring at Lucrino Beach in the Bay of Naples, in 1985. This discovery was done by visiting American researchers from Woods Hole Marine Lab in Massachusetts. Latter a thermostable DNA polymerase, the “**Vent polymerase**” was isolated from this culture and it has been extensively used in COVID PCR tests!

So Goodnight you Apostles of Linnaeus, you Bulldogs of Darwin! Dream of voyages of discovery, of Erasmus mobility schemes and distil the essence of the Oceans in the company of “facilitating” pied pipers!

*Goodnight you princes of Maine, you kings of New England*

In “The Cyder House Rules”, John Irving 1985



**Ibon Cancio**

Full Professor in the  
Plentzia Marine Station PiE-UPV/EHU

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## O<sub>2</sub> and CO<sub>2</sub> together keep autonomous sensor performance in check



### Unmanned ocean observation

Autonomous ocean monitoring platforms not only operate in inaccessible oceanic regions and under extreme weather, they also perform high resolution ocean monitoring. The [\*\*SOCOM\*\*](#) (Southern Ocean Carbon and Climate Observation and Modelling) Project, has been profiling the Southern Ocean for the past decade by deploying biogeochemical sensors mounted on [\*\*Argo floats\*\*](#). Crossover analyses between these floats and other shipboard measurements maintain its data quality.

### Questioning data quality

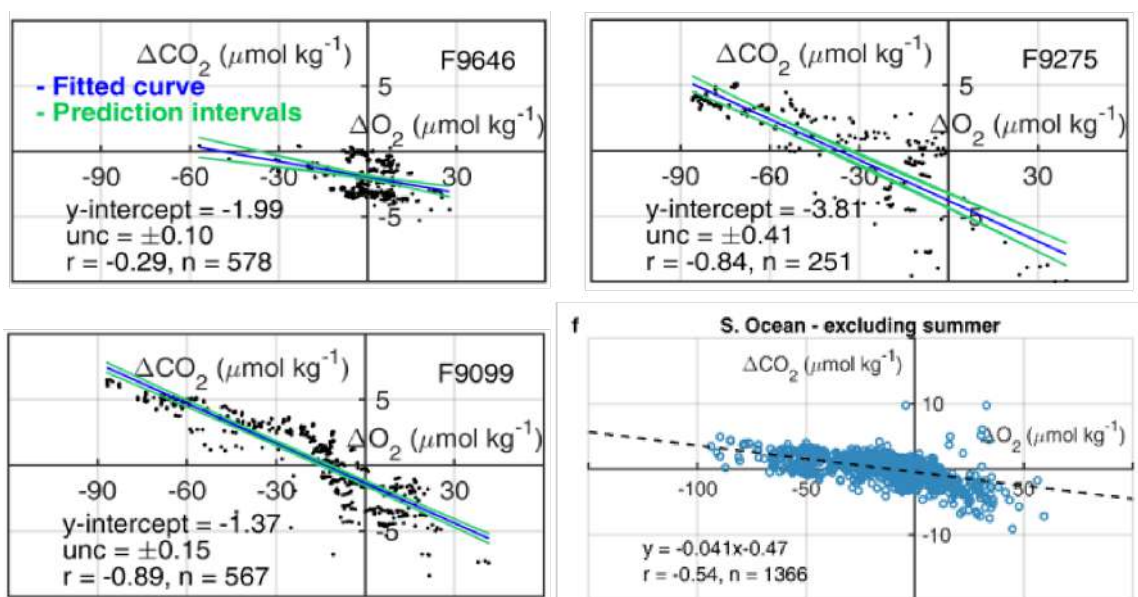
pH sensors on the SOCCOM's Argo floats collect real-time pH data from which CO<sub>2</sub> is calculated. When coupled with direct O<sub>2</sub> measurements, the dataset produces a panorama on the O<sub>2</sub>-CO<sub>2</sub> dynamics of the Southern Ocean, which may be useful in a future warming world. Although Argos' O<sub>2</sub> sensors provide accurate measurements, concerns about their CO<sub>2</sub> data quality have been raised. Therefore, further investigations on the quality of the estimated CO<sub>2</sub> data are much needed to ensure the reliability of the sensor-based ocean monitoring.

## The CORS Technique

Our team, led by [Prof. Toby Tyrrell](#) and [Dr. Yingxu Wu](#), introduced a new analytical approach to address this issue by comparing the project's CO<sub>2</sub> data to the trustworthy O<sub>2</sub> data: the CORS (Carbon and Oxygen Relative to Saturation) Technique. We used simultaneous measurements of surface O<sub>2</sub> and CO<sub>2</sub> concentrations to estimate their deviations from saturation ( $\Delta\text{O}_2$  and  $\Delta\text{CO}_2$ ). These values were then compared on a scatter (XY) plot known as the 'CORS plot', with the y-axis showing  $\Delta\text{CO}_2$  and the x-axis,  $\Delta\text{O}_2$ . In theory, the y-intercept (c) of a best-fit line ( $y = mx + c$ ) of a 'CORS' cluster shows the saturation status of CO<sub>2</sub> when O<sub>2</sub> is at equilibrium (when  $x = 0$ ,  $c = y$ ).

## Insights from the CORS plots

Some of the CORS plots derived for SOCCOM's  $\Delta\text{O}_2$  and  $\Delta\text{CO}_2$  (Figures 1a - c) showed negative y-intercepts suggesting that the surface Southern Ocean should be undersaturated in CO<sub>2</sub> ( $y < 0$ ) when O<sub>2</sub> is in saturation ( $x = 0$ ). On the contrary, near-zero y-intercept derived from extensively quality controlled shipboard measurements (Figures 1d) revealed that when O<sub>2</sub> is saturated ( $x = 0$ ), CO<sub>2</sub> would also be saturated ( $y = 0$ ). Thus, we attribute the negative y-intercepts from the SOCCOM data as a result of CO<sub>2</sub> underestimation due to systematic biases reported in the pH sensors which has been the focus of several other independent research. In light of these findings we demonstrate the importance of using O<sub>2</sub> and CO<sub>2</sub> together to improve the quality of unmanned measurements with future implications for more reliable autonomous ocean research.



CORS plots and y-intercept of some float-derived (a, b, c) and ship-derived (d) measurements for the surface Southern ocean (Wu et al., 2022).

Wu, Y., Bakker, D.C.E., Achterberg, E.P. et al. Integrated analysis of carbon dioxide and oxygen concentrations as a quality control of ocean float data. *Commun Earth Environ* 3, 92 (2022). <https://doi.org/10.1038/s43247-022-00421-w>



**Amavi N. Silva**  
University of Southampton  
MER+ 2017 - 2019



## Once-in-a-lifetime Voyage: the White Continent. Narratives to a fragile eden

In 2023, the world celebrated the 64<sup>th</sup> anniversary of the Antarctic Treaty— an international agreement that designated Antarctica as a region for peace, cooperation and scientific collaboration. Coincidentally, this milestone year also marked the realization of a longstanding dream for me: the opportunity to set foot on this untamed and icy continent. In the following narrative, I am eager to recount an exceptional facet of my Antarctic expedition; the place where many explorers struggled to reach and which for so long had been beyond their grasp.

### I. Who did I team up with: EXPLORANT III team and Project

My involvement was within the framework of the Exploring the marine realm III project (EXPLORANT III) from November 15<sup>th</sup> to 29<sup>th</sup>, 2023 alongside Dr. Johan Etourneau (EPOC- U.Bordeaux) and Dr. Belen Gonzalez Gaya (PiE-UPV/EHU). This paleoceanography and biogeochemical based-project aimed to enhance traditional proxy calibration in paleoclimate records by reconstructing the distribution of their producers (mostly phytoplankton) in the Southern Ocean. Additionally, the expedition included two further projects: SSSICE-SO - *Satellite Sea Surface Salinity assessment close to the ice edge in the Southern Ocean* and SEASON 3 - *Baleen whale abundance and distribution in key Southern Ocean krill fishing grounds*. The wide range of fields and survey techniques, under supervision of the scientific coordinator aboard, significantly contributed to my general knowledge about marine geochemistry, physics and marine mammals. The expedition was across the Drake Passage as well as around the waters off the northern tip of the Antarctic Peninsula (AP) (see map), the spiny tail of the continent stretching north, a waterway spanning 1000 kilometres between Ushuaia and the AP.



*In the continuous daylight of the continent...*

My daily basis involved data collection and laboratory work (primarily water filtration) to the most extraordinary part of the journey: venturing out of the cruise for sampling in one of the most remote places on Earth. This included collecting snow samples in isolated islands blanketed with snow and ice, away from passengers and Antarctic fauna, as well as the striking deployment of phytoplankton nets in the frozen waters of the Weddell Sea. Whether on the mainland or aboard zodiacs, the overpowering sensory experience captured the silence, the essence of my work and the awe of being surrounded by that amalgamation of snow-capped mountains set against blue skies and icebergs sculptured by sunlight and shadow.

Occasionally during this polar oceanographic experience, curious Emperor penguins sneaking around, mischievous gentoos mingled among Adélies hiking back and forth between rockery and the sea, Weddell seals would unexpectedly appear in the natural pool during the deployment of a CTD and even whales spouted far off in the distance while udden disappeared. The entire journey followed the rules set by the International Association

of Antarctica Tour Operators (IAATO) and Antarctic treaty including guidelines that ensured a limited number of passengers in penguin colonies to prevent disturbance and virus contaminations e.g. in Trinity Island, Brown Bluff and Half Moon Island.

## II. The lure of the Southern Ocean: “Le Commandant Charcot”

The passenger cruise named "Le Commandant Charcot" by Le PONANT company is a maritime gem: while it is a powerful ice-breaker externally, it holds an internally luxurious ambiance of a 5-star hotel with both dry and wet lab facilities. These features invited passengers to relax while providing scientists with unparalleled travel conditions making this polar oceanographic traineeship a truly comfortable experience. One of the most fascinating areas of the cruise was definitely the Bridge, the decision-making hub where captains steered the ship. Simultaneously, the Bridge featured a vast glass window, offering a front-row seat to witness the gradual breakup of icebergs into smaller chunks known as bergy bits. By November, when the expedition unfolded, the pack ice had typically receded around the rugged coast of the Peninsula, revealing a complex network of surrounding islands and narrow, rock-strewn beaches between land and ocean.

## III. Beyond science: Amplifying our voice aboard

The interaction with passengers, mostly far beyond the realms of science, posed both a challenge and a profoundly rewarding feeling. Recognizing that, as scientists on board, we served not only as conduits of knowledge but also as advocates for conservation through effective communication, was an enlightening realization. Our efforts in outreach involved introducing passengers to our research projects, inviting them to tour our labs and providing those interested with hands-on experiences. This interaction became a two-way street, offering opportunities to exchange ideas about climate and ecological crises affecting polar regions while we fielded inquiries about environmental commitments in our ever-changing world. This experience reinforced the notion that our role as scientists extends beyond the laboratory, providing a platform for meaningful dialogue between science and society.

*One feels 'the dearth of human words, the roughness of mortal speech' in trying to describe things intangible, but a record of our journeys would be incomplete without a reference to a subject very near to our hearts. Ernest Shackleton (polar explorer).*



**Paula Fragueiro**  
MER master student (cohort 2022-2024)

## Cecilia D'Angelo

**Current position:** Associate Professor, Coral Reef Laboratory, School of Ocean and Earth Sciences, University of Southampton, @TheCoralReefLab



**Why have you chosen working in (marine) science? When did you make this decision? Which do you think is your main labor achievement?**

I did my undergraduate degree in Biotechnology in Argentina. After graduation, I was awarded a scholarship to complete a PhD project in plant molecular biology in Germany. It was after finalising my PhD that I decided to move to a marine biology career. I chose a post-doctoral project studying molecular responses of photosynthetic dinoflagellates that form symbioses with reef-building corals, and that changed my life forever. Part of my research has dealt specifically with coral communities that tolerate the hottest and saltiest reef waters on the planet - the Persian / Arabian Gulf. These contributions are key to ongoing improvement knowledge-based conservation opportunities for coral reefs.

**Which is the best thing about working in marine science for you?**

The privilege to study and work with corals is definitely the best part of my work. These are truly remarkable organisms responsible for building and supporting the most biodiverse ecosystems in the ocean. Understanding the complex interactions between different members of diverse ecosystems among themselves as well as with their environment makes marine research captivating.

**Which is the “B side”?**

Unfortunately, coral reefs are under existential threat from a combination of climate change as well as from anthropogenic impact. Being constantly reminded that humans are exerting an immense influence on the marine environment, modifying and affecting whole ecosystems even faster than we can understand them, can be challenging at times.

**Which are your personal strengths and weaknesses as (marine) scientist?**

I'm a resilient person that can adapt and work efficiently in different cultural settings. This has clearly helped me to progress my career in different countries. My interest to learn new languages has also been beneficial throughout the years, helping me to settle quickly into new working environments.

**What is your relation with MER? For how long have you been involved in the Master MER?**

I have been the University of Southampton lead for the MER consortium since September 2022. I really enjoy the international links and the interdisciplinarity with the marine sciences that are at the heart of the programme.

**What would be your advice for the MER students and their future career in marine science?**

By choosing MER, I believe that students have already made a great start as they opted for a degree that allows them to gain broad international experiences. I would advise them to stay open for interdisciplinary opportunities, especially if a position will further their career in the long run, for example, through the acquisition of useful technical skills that could help them secure professional positions in various marine sectors.



## I 6. INTERVIEWS



### Isabelle Noirot

#### Current position:

International Relations Officer at the University of Liège.

#### What is your relation with MER?

I am working at the International Office of the University of Liège. My tasks involve helping the students for the administrative formalities regarding their stay: admission, registration, visa, residence permit, and then along their stay, if they encounter issues, they can always get back to me and I can redirect or help, depending on the situation.

#### For how long have you been involved in the Master MER?

For nine years.

#### Why have you chosen working in (marine) science?

Actually, I did study Marine Science, after my master in Biology. I had Professor Poulicek and Professor Gobert as teachers! This was a way back, in another worlds. It is hard to recall the exact reasons why I studied marine science. I think that the mysteries of the seas and the oceans where very appealing. This and the wish to know how to better protect the environment.

#### Which is the best thing about working with people involved in marine science for you?

It is very rewarding to be working for a master in which I have personal interests. If I can help the students with the administrative formalities, so that they have more time to focus on their studies, that is a very good thing! I enjoy the collaboration I have with my colleagues at the University and the other Partner Universities, to make this master prosper.

#### Which is the “B side”?

It can be stressful when students don't achieve their tasks in the recommended timeframe. Seeing the master from the other side also sometimes makes me miss working in science.

#### Which do you think is your main labour achievement?

There have been some students who had issues, for whom I could provide some help. When I see the outcome, I am happy for the students involved.

#### Which are your personal strengths and weaknesses

Strengths: I try to be clear with the information provided, so that students get all the info they need before they start their semester or at arrival. Still, there is always room for improvement, so I always welcome students' feedback. I try to help the students where I can.

Weaknesses: Perfectionism and restlessness.

#### What would be your advice for the MER students and their future career in marine science?

With your broad knowledge and the international network you are building throughout your master, thanks to the MER community (partner Universities, the associated Partners, the other students from all over the world, etc.), I hope you can make a great contribution for the environment. Work on a small scale and on a bigger scale if you can. Never forget the big picture: there is no Planet B! We need to protect our planet and the marine environment where and when we can.

## Letter on publications - not to give up?

**Dragana Paleček.** University of Southampton, MER+ 2017 – 2019

*Dear MERmaids and MERmen,*

This is a letter from a fellow MER alumnus to motivate you to not give up easily. My name is Dragana Paleček and I am finishing my PhD in Environmental and Cultural Heritage at the University of Bologna.

The last few months have been a true rollercoaster for me, since I had to submit my PhD thesis in the end of October and in parallel was trying to publish the work in the form of scientific articles. Apart from all this, I had to apply for a PostDoc and keep working on the ERC Project I was a part of.

Within my PhD, I had written two manuscripts which I submitted to different journals. The first manuscript was sent to review in the first journal I submitted to. For the other one, I had received several rejections, and it definitely was not easy to keep going. However, I did not let this get me down and I kept working on the manuscript. I followed the comments I was lucky enough to get from a review, before Communications Chemistry rejected the manuscript. Once the work was done, I wrote an e-mail to the Editor asking for advice on how to proceed, since they had suggested I try publishing in Scientific Reports next. Apparently, the editor had liked the manuscript since their suggestion was to make an appeal to their decision and try again. After the appeal, they had sent my manuscript for review once again. In the same week, I received the decision on the first manuscript with major revisions (after 7 months) and for the second one just minor revision. Only a month later, and I am completing the procedure for the publication of the manuscript in Communications Chemistry, along with the last revisions for the resubmission of the other manuscript.



I have also received the evaluation of my PhD thesis, which had excellent reviews and no corrections. It is going to be a good ending to this PhD, and a reward for all the hard work done in these three years. It was never easy, but once the manuscripts are published, and I defend my thesis, it will all have been worth it!

To all of you, who perhaps are struggling to publish your work, I understand how hard it is, I have been through it, and I am seeing the light at the end of the tunnel now. Keep going, believe in yourself and in your work, and do not give up!

With love and support,

(Almost) PhD Dragana Paleček

## Send a “Letter to the Sea”

Veronica Relaño & Christian Fischer from <https://onewater.blue>

Dear ocean lover,

from the **SOMOS OCEANOS** team, we would love you to participate in our event, **Voices from the Shore**, at the **2024 Ocean Decade Conference**!

This is your chance to have your voice heard by writing a “**Letter to the Sea**”.

We will be reading the letters aloud at the Conference in order to share youth perspectives on marine conservation and sustainable practices.

Dear Ocean Lovers, **Who are we looking for?** Our aim is to help the younger generation be heard. So, if you are aged 3-22, or you know someone in that range, we would love to hear from you. You can be from anywhere in the world, although we are especially looking for letters from those living near oceans or on small islands.

**What can you write?** Follow your intuition and trust your creativity: write how you truly feel in your Letter to the Sea. This is your opportunity to share why you love the ocean and explain why we should care for it. What have you done for the ocean, and what has it done for you?



All languages and additional drawings are very welcome! Deadline for sending your letter [here](#) on **February 10<sup>th</sup> 2024**. More info [here](#), [here](#) or contacting [sos@onewater.blue](mailto:sos@onewater.blue).





# MER

Newsletter

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<https://merconsortium.eu/>

