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Synopsis of the second virtual meeting of the Blue Genes community:
In search of new ways to increase our connection with Nature

BLUE GENES

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Introduction

Participatory meeting for artists and scientists to share experiences, initiatives, ideas, reflections, and future actions related to the Oceans and Waters.

On June 22, 2023, the second online meeting of the Blue Genes initiative took place, uniting members of the Blue Genes Community. The aim was to exchange experiences, discuss initiatives, and share insights concerning the Ocean and Waters.

Over 30 participants joined this virtual assembly. Following a series of inspiring presentations delivered by several of the community members, the meeting transitioned into an interactive session, enabling attendees to actively participate in discussions and to share their viewpoints. Among other relevant conversations, the meeting proposed to target a milestone: to organize a Satellite Event during the 2024 UN Ocean Decade Conference, which will take place in Barcelona in April 2024, as an open space to explore how to search for new ways to increase our connection with Nature, with the ocean as its central component. The participants felt this in-person meeting would be an excellent venue to work towards defining the priorities and strategies for the future of the Blue Genes community, as well as to engage a wider number of actors.

Presentations

Exploring collaborative frontiers: Perspectives on Nature, Art-Science fusion, and Sustainable ocean initiatives

01

The need for a collaborative revolution through an expanded cognition of Nature, which blends intellectual knowledge and sensory experiences into lasting changes. (Josep L. Pelegrí)

02

The importance of art and science collaborating to change our perspective of the environment and the need to challenge existing power structures. (Jaron Rowan)

03

An introduction of the Centre of Excellence on Sustainable Blue Economy, describing its focus on sustainable blue economy and presenting its main activities, including upcoming conferences and journals. (Diana Rico)

04

A project where dancers and scientists work together to communicate climate change through dance. (David White)

05

An introduction to the Posidonia Green Project, a NGO focused on marine ecosystem protection, and their innovative project with surfers. (Edoardo Brodasca)

06

The journey of an ocean activist using social media to raise awareness about marine pollution and to engage communities. (Elisabeth (Liz) Sherr)

07

The community of ICM young marine scientists and their efforts to create a support network and to address workplace challenges. (Carlos de Juan Carbonell)

08

The Ocean Decade and ECOP Spain, a group of young ocean professionals aiming to bring new ideas and perspectives to ocean sustainability. (Inés Mas de la Peña)

Expanding our real world: finding new ways to perceive and experience Nature

Josep Lluís introduced the origin of the Blue Genes initiative and presented his views on how to advance the ways we interact and perceive Nature.

During his presentation, Josep LLuis proposed that the central challenge is to recognize that each of us is part of the living planet, a simple fact that interconnects all creatures and, particularly, all human beings. This recognition requires finding new ways to perceive and experience Nature – to enhance our participation in the living Earth – as what we reckon as reality precisely arises through these perceptions and experiences (enaction).

Homo sapiens should not evolve into a technologically-driven species but rather should use technology to increase the cognitive and sensory perceptions of Nature. The development of new perceptions and relations with the Ocean, not only because of its economic value but mostly because of its central and essential role in the living Earth, will undoubtedly determine our individual and collective futures.



A collaborative revolution, enhancing our connection with nature, emphasizing harmony through empathy, trust, and love.

Humankind and the ocean are essential and equal participants in the collaborative revolution, with and for people and nature. This collaboration requires expanded cognition of the ocean: the combination of cognitive knowledge and sensory experiencing, enbluement. We are in front of a unique opportunity (SDGs, Ocean Decade, Mission Ocean) to grow towards greater complexity as individuals and as a species. But this growth is not technological complexity, not even the welfare society, it is individual and collective harmony and happiness with people and nature, based on true and lasting connections: empathy, sensibility, trust, hope, joy, and love.

Jaron Rowan - Director of Research at the BAU College of Arts and Design of Barcelona

Art, science, and design: Learning to investigate from a sensitive approach

Insights were provided by Jaron on the reciprocal learning between art and science, where art offers a distinct perspective blending objectivity and critical thinking in our perception of the world. The discussion highlighted how the exploitation of resources by capitalism is reaching its limits. For this reason, we need new ways of thinking: new spaces and practices where art, science, and design can help each other to understand and to produce new worldviews.

French philosopher Bruno Latour described how Galileo was not the first person to have a telescope, but the first one who saw the moon as a sphere: Galileo was an artist. The way that we perceive allows us to see things differently. The combination of instrumental reason and sensitive perception generated a new moon that did not exist so far. For the last 400 years, we have been looking at nature just as a resource and not as part of what we are. We need to change this and art can be a methodology that can help us go towards this change.

Jaron concluded that our imagination needs to change, but we also need to change extractivist relations to the world, challenge the system (institutions, markets, and regulations), and be collectively empowered. **Our proposal is towards a sensible ecology for a better collective life.**

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Advocating for transformative imagination, challenging extractive relations, and proposing a sensible ecology for collective well-being.

Diana Rico, Jr. - Researcher/Project Manager at the Centre of Excellence on Sustainable Blue Economy

Jean Monnet Centre of Excellence on Sustainable Blue Economy

Diana gave a presentation on the activities carried out at the **Jean Monnet Centre of Excellence on Sustainable Blue Economy**. The Centre fosters interactions in the knowledge triangle (academia-policy-society) related to the blue economy, exploring its relevance for the EU and in particular for the Mediterranean region. By consolidating knowledge and expertise, the Centre plays a pivotal role in providing comprehensive insights into the EU Blue Economy.

The Centre is relatively new but has a network of experts working in several countries of the Euro-Mediterranean region, carrying out very diverse activities. One of these activities is a Summer School and Training, whose last edition counted with the participation of some 30 participants and over 20 speakers from the southern Mediterranean, Italy, Spain and the Balkans. In the near future they plan to conduct a Conference in Sustainable Blue Economy and to start the publication of a dedicated research journal.

The seal of Jean Monnet Centre of Excellence was awarded to the Euro-Mediterranean University (EMUNI) by the European Commission for the period 2022-2025.



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Jean Monnet Centre of Excellence on Sustainable Blue Economy, fostering knowledge interactions in academia-policy-society triangle.

David Whyte, Researcher at the [SFI Research Centre for Energy, Climate and Marine research and innovation](#)

Dancing science, reflections on a recent science-arts collaboration

David presented recent work done with the socially inclusive dance company [Croí Glan Dance](#) (Clear Heart Dance), based in Cork, South of Ireland: a company where people with and without disabilities feel their equality and shared humanity through an immediate and visceral experience.

This integrated dance company together with scientists is co-producing a show on climate change. As this is a recently initiated two-year project, the outcome remains uncertain. However, the project will evolve in time and choreographers will craft a dance piece from the ongoing creative process.

The **creative process begins with “expert talk,” where dancers lie on the floor, listen, and subsequently engage in improvisation as the discussion unfolds. The entire process is recorded for internal use and later reviewed.**

Several reflections originating within the dance group are as follows: They would communicate science through dance, with the scientists being the experts.

CROÍ GLAN
integrated dance company



Dance company that blends art and science, exploring climate change through inclusive performances, and fostering enriching collaboration and shared learning experiences.

However, they recognized that expertise in climate change extends beyond scientists. Farmers, as an example, are actors that may also take part and this might be reflected in the choreography. Other considerations involve thinking about your creative work in very different ways. How can I be evocative, or how can I express my work emotionally to a group of people. And finally, reflect on the strengths and weaknesses of our different modes of communication. We are all trying to communicate but there are strengths and weaknesses in each kind of communication.

David concluded that this work has been an enriching and interesting learning process and the collaboration between art and science is a relevant tool to create new knowledge and spaces.

Edoardo Brodasca, Executive Director at the Posidonia Green Project

The Posidonia Green Project, an ecosystem of actions to understand and protect the BLUE

Edoardo presented the Posidonia Green Project, an NGO focused on protecting the blue ecosystems (marine plants, animals, corals, and other creatures in the oceans). The goal is to promote awareness and sustainability for the preservation of seas and oceans; the NGO operates in the Mediterranean region with a global perspective.

The organization operates within three strategic domains: Science and innovation, Communication and dissemination, and Policy and lobbying. They provide valuable information about the state of the BLUE ecosystem and encourage actions to make a difference. A recent initiative is the "Surfstainable" project, which incorporates surfers into climate and environmental research through an innovative device integrated into surfboards. The device measures ocean temperatures and transmits data to a research platform. The NGO also organizes the annual "Posidonia Green Festival" to celebrate the oceans and raise awareness about their preservation through various activities.

The Posidonia Green Project aims to involve more people and create changes by combining information, action, and collaboration.



The Posidonia Green Project safeguards marine ecosystems, promotes awareness, engages surfers in research, and hosts an annual festival.

Elisabeth (Liz) Sherr

Ocean activist and Science communicator

Scaling ocean impact through video storytelling

Liz shared a video presenting her project as an ocean activist and science communicator.

Three years ago she was surprised about the amount of trash littering the beach of Barcelona and started making TikTok **videos documenting her clean-up efforts**. In this way, she influenced many people to clean-up their communities, an action that went viral and engaged many young communities. Following this, it drew the interest of the European Parliament, which invited her to undertake a comparable campaign for World Ocean Day in 2021. This virtual challenge engaged participants from over 33 countries, exemplifying the significant role that social media can play in fostering positive impacts on the ocean.

Liz continues to raise awareness about marine pollution, with an online community of approximately **135K followers**, primarily on TikTok and Instagram. Drawing from her experience, she has also produced videos sharing ocean stories featuring marine animals.

Liz recently met Ona, an ocean storytelling agency for the oceans. They produce content to reach larger audiences and highlight the positive developments taking place. They are together planning to organize media corners and similar actions for the UN Ocean Decade conference in the upcoming year in Barcelona. Liz is genuinely curious to learn about the activities of other participants in the conference and to explore opportunities for mutual support, especially in the realm of communication.

Liz is also working on a forthcoming series entitled Together Living Blue where she will introduce new marine science research and solutions to broader audiences in a fun and engaging manner. The primary goal is to connect with people, to share projects, and to narrate inspiring stories that express passion for the ocean.

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Liz, an ocean activist and communicator, gained global influence through viral clean-up videos, engaging communities worldwide.

Carlos de Juan Carbonell, PhD candidate at the [Institut de Ciències del Mar, CSIC](#)

The ICM Young Researchers community

Carlos presented the community of young marine scientists at the ICM-CSIC. Around 20% of the staff at ICM (about 300 people) are doctoral students. Further, if adding the young technicians or management employees and post docs, the percentage increases considerably. The association was established to advocate for the interests of these younger professionals, as they frequently encounter similar challenges within the scientific career path.

The association, with over 100 members, is engaged in networking, sharing professional opportunities, ideas and concerns while they develop outreach and social activities, such as beach clean ups and monthly Hot Topics talks.

Their involvement extends to mentoring programs, collaboration in open-door initiatives, and participation in various European projects. In addition, they have identified several structural problems associated with their stage and have formulated a protocol for the prevention of workplace harassment. In coordination with the ICM Direction they have reached a series of commitments that aim towards a healthy environment during the thesis development. Thanks to their work and activities, their voice is gradually becoming more present inside the institute.

Carlos proposed that ICM Young Researchers could act as a direct liaison to the Blue Genes community, leveraging their strong transversal skills and enthusiasm.



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Young marine scientists at the ICM-CSIC advocate for fellow professionals, fostering community, addressing challenges, and promoting positive changes.

Inés Mas de la Peña

Early Career Ocean Professional (ECOP) Spain

Early Career Ocean Professional (ECOP) Spain

Inés initially provided several insights regarding the **Ocean Decade** declared by the United Nations and subsequently presented ECOP Spain.

She reviewed the three primary objectives of the Ocean Decade "Moving from the ocean we have to the ocean we want:" 1) to identify the required knowledge for sustainable developments, 2) to generate comprehensive knowledge and understanding of the ocean, and 3) to increase the use of ocean knowledge. The idea for ECOP (Early Career Ocean Professional) Network Program arose during the First Global Planning Meeting (May 2019) organized by the Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO). Its primary goal is to incorporate fresh perspectives into the global challenges of ocean sustainability and stewardship by fostering professional networking and development. One of their current major challenges is to secure funding to support its structure and capabilities.

Since September 2022 the ECOP community has grown incredibly, currently counting 1992 members based in 117 countries, and having four task teams: Ocean Literacy; Training and Mentoring; Diversity, Equity and Inclusivity; OceanBRIDGES.

The ECOP Action Plan includes organizing workshops and training, creating a feeling of community, and sharing resources and job opportunities, among others. ECOP is interested in participating in the UN Ocean Conference to be held next year in Barcelona. Furthermore, they remain receptive to any form of feedback, funding, ideas, assistance, and support. More information can be found at [ECOP Spain](#) and spain@ecopdecade.org

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ECOP Spain is part of the UN Ocean Decade, fostering global ocean sustainability and facilitating professional networking and development.

Space for dialogue and reflections

This section served as an open space for dialogue and reflections, inviting exploration of diverse perspectives in art and science collaboration.



Different interpretations of the "bottom-up" concept.



Sharing experiences on transmitting science, including the use of music.



The importance of art and science collaboration in exploring new perspectives.



The importance of simplifying complex issues while preserving their conceptual depth.



The value of experiences and the urgency of shifting from the past to welcome new perspectives.



Recommendations for reading materials.



Plans for a collaborative Satellite Event during the 2024 UN Ocean Decade Conference in Barcelona.

Space for dialogue and reflections

This section served as an open space for dialogue and reflections, inviting to explore diverse perspectives in art and science collaboration.

The discussion on the "Bottom-up" concept began with several insights from artist Chris Wilmott and expanded to include distinct interpretations, which highlight how this concept may apply in different contexts. Chris Wilmott, an artist based in the UK who focuses on coastal cities and the impacts of rising sea levels, emphasized the importance of the "bottom-up" concept when engaging with the general public. From his viewpoint, this concept embodies a collaborative experience where individuals are not dictated on what to do, but rather actively participate in shaping the process. Anna Cabre, a postdoc based in Germany, commented that "bottom could just mean people power"; while María de la Fuente, a postdoc based in Belgium, commented that "even if commonly the bottom-up approach is associated to people-based decisions, we should not forget that its original description defines it as an approach to solve problems based on data and facts". Chris Wilmott also noted that the interpretation of "bottom-up" likely varies among the different arts. This diversity is intriguing because, in the realm of art, the start of creative process does not always require the kind of data that is typical in scientific contexts. Josep Lluís Pelegrí added that "words by themselves mean nothing unless you fulfill them with experiences".

The dialogue continued as Diana Zuñiga, a member of the [North Wind - Sailing for Science project](#), shared a recent compelling experience regarding the effective communication of science to young audiences. Diana explained a week of activities related to climate change and polar zones that was organized in Galicia where scientists and artists collaborated to engage and raise awareness of these critical issues among students. A music group (Oreka Tx), featuring a traditional instrument called the "chalapata", did an impressive performance with ice in the Arctic. The music group presented a video from around 20 years ago when they visited and shared experiences with the nomads in the Arctic ([Nömadak TX video](#)). Diana expressed that music can be a key element in communicating climate change, as "kids really connected with the musicians".

Jade Zoghbi, a doctoral candidate in Spain, shared her experiences from Northern Iceland while navigating and observing marine life. Jade emphasized how concepts such as ecocentrism or anthropocentrism can serve to understand other views around the Ocean.

Space for dialogue and reflections

Josep Lluís Pelegrí added that experiences are important but that many times it is necessary to get rid of this “baggage of experiences” to embrace fresh perspectives and new outlooks. Anja Wegner, a doctoral student in Germany, emphasized the importance of understanding the context and being aware of the baggage carried by each individual. She explained her work linked with Fish Architecture, where she collaborates and merges scientific and artistic disciplines. She redesigns aquatic spaces as an interspecies collaboration, as a co-creation process. She wondered aloud: “What does it mean to co-create with other animals? How do we learn from those animals? What does it do to us if we engage with them?”. Anja endorsed the need to revisit the nexus between arts, sciences, and technologies, and pointed out that artificial intelligence will challenge our ethics and the structure of our society, with technology as an opportunity to reconsider many ideas and concepts.

Diana Zuñiga added a recommendation to read the works of marine biologist Edward Ricketts, particularly his book “The Breaking Through”, which delves into discussions about nature, ecology, as well as philosophy, and political aspects. Anna Cabre recommended the book “Why Fish Don't Exist: A Story of Loss, Love, and the Hidden Order of Life” by Lulu Miller. Chris Wilmott recommended “Five Times Faster” by Simon Sharpe, which states the need to rethink the science, economics, and diplomacy of climate change. Lastly, Josep Lluís Pelegrí recommended “Homo Deus: A Brief History of Tomorrow” by Yuval Noah Harari, which examines what might happen to the world when old myths are coupled with new godlike technologies, such as artificial intelligence and genetic engineering.

Conversations continued with interesting thoughts about art and science collaborations. Maria de la Fuente highlighted that the challenge of raising awareness often leads to oversimplification, especially when dealing with complex topics such as climate change and biodiversity loss. She pointed out that collaborative efforts should aim to simplify the message without sacrificing the depth and complexity of the problems they seek to address. During the meeting, several significant discussions unfolded and eventually led to the proposal of a milestone: **the organization of a collaborative satellite event during the UN Ocean Decade Conference that will take place in Barcelona in April 2024.** Consequently, a forthcoming and logical step for the Blue Genes Community will be to foster engagement and cooperation to plan an in-person activity in Barcelona before and during the Ocean Decade Conference.

Recommendations at a glance

Projects discussed:

- [Blue Genes: Art&Science community](#)
- [BAU College of Arts and Design of Barcelona](#)
- [Centre of Excellence on Sustainable Blue Economy, \(CoE-SUBE\)](#)
- [SFI Research Centre for Energy, Climate and Marine research and innovation \(MaREI\)](#)
- [Croí Glan Dance](#)
- [Posidonia Green Project](#)
- [Ocean activist and science communicator](#)
- [Storytelling agency for the oceans ONA](#)
- [ICM Young Researchers, Institut de Ciències del Mar \(ICM-CSIC\)](#)
- [Early Career Ocean Professionals \(ECOP\)](#)
- [Music group Oreka Tx & Nomads in the Arctic: A video](#)
- [UN Ocean Decade - Satellite events](#)

Books:

- "Why Fish Don't Exist: A Story of Loss, Love, and the Hidden Order of Life" by Lulu Miller.
- "Homo Sapiens: A Brief History of Humankind" by Yuval Noah Harari.
- "Homo Deus: A Brief History of Tomorrow" by Yuval Noah Harari.
- "The Breaking Through" by Edward Ricketts.
- "Five Times Faster" by Simon Sharpe.

Closing remarks

The meeting served as a platform for thought-provoking presentations and discussions that revealed critical aspects of our relationship with nature, through a variety of aspects such as the integration of **art and science, sustainable blue economy initiatives, creative science communication, marine ecosystem protection, and the power of social media in ocean activism.**



Multifaceted Exploration

The meeting explored art-science integration, sustainable blue economy, and marine protection, revealing diverse facets of our relationship with nature.

"Bottom-up" Insights

Diverse interpretations of "bottom-up" highlighted the essence of collaboration, showcasing how arts effectively communicate science and deepen our connection to nature.



Future Collaboration

Plans for a Satellite Event at the 2024 UN Ocean Decade Conference as a signal of collective dedication to address ocean concerns and foster collaboration within the Blue Genes Community.

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We thank the participants for their contribution, enriching this initiative with their collective expertise and insights

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