

VILLAGGIO  
**ITALIA**



**AMERIGO  
VESPUCCI  
WORLD  
TOUR  
2023-2025**

# VESPUCCI MEETS... THE MARINE ECOSYSTEM

**AMERIGO VESPUCCI WORLD TOUR  
2023-2025**

***06.10.2024, DARWIN, Northern Territory (AUSTRALIA)***



The Amerigo Vespucci World Tour: an exceptional means to develop and consolidate scientific and academic collaborations among Italy and other Countries.

*Australian-Italian dialogue on Marine protection, Marine scientific and technological research, Biosafety and Astronomy.*

The oceans and the seas are an interconnected unicum. Actions on one part may reflect on the waters, the ecosystems and the people living at the opposite site of the earth. Indeed oceanic waters are constantly stirred, and one of the main motors of this perpetual motion has its heart in the Antarctic Circumpolar Current. Hence the investigation of the seas of our planets requires a global efforts with a collaboration that transcend national specific interest and policies: indeed oceanic waters, as well as the atmosphere, does not know what borders are.

Italy and Australia at the opposite countries in many aspects, but surprisingly similar when talking of marine economy and environment, and of the impact that anthropization has on marine ecosystems. In particular the 35% and 85% of the Italian and Australia population respectively live on the coast: this brought both country to develop advanced conservation strategies and modern tools to investigate and protect the marine environment.

Along its 8000 km of coastline, Italy has established around 29 protected areas for a total of 700 km of coastline (9%) to protect the biodiversity present in the Mediterranean. And it represents a virtuous example of environmental conservation policies in the Mediterranean basin. Added to this is the establishment of the Pelagos Sanctuary signed in Rome by France, Italy and the Principality of Monaco on 25 November 1999 and which came into force on 21 February 2002: an international initiative involving Italy, France and the Principality of Monaco to protect from the highest concentration of cetaceans in the Mediterranean.

Several Italian vessels are dedicated to oceanographic and marine investigations: one of the most famous is the icebreaker Laura Bassi, whose red hull can be seen every Austral summer to sail the Antarctic Ocean. But the worldwide recognised excellence of Italian scientific research in the field of marine sciences is also demonstrated by the multidisciplinary research activities underway on board the prestigious and historic vessel Amerigo Vespucci during its voyage around the world, where scientific and technological research activities are being carried out with the most advanced technologies in a unique context.

To facilitate the sharing of know-how, infrastructures and data is the realm of scientific diplomacy, in the interest of individuals, nations, and the humanity as a whole. This workshop will provide a little contribution to the advancement of knowledge and the strengthening of the scientific collaboration between our two countries.

The scope of the meeting is to compare the methodologies of marine science investigations in the two countries. Due to the substantial differences between the geographical areas on which the two countries insist in terms of marine environment, extension, local communities, level of anthropization and commercial exploitation, different approaches and different tools have been adopted and developed: their comparison and the possibility of identifying points of contact and sharing successful practices, represents an interesting opportunity for exchange and cooperation between the two countries.



## PROGRAM

**14.00 – 14.30** Introduction to the exhibition: **Siamo Mare.**

**14.30 – 16.00** Human health, ecosystems and biohazard.

**Dr. Fulvio Ferrara** (SeA Care Project Coordinator - Italian National Institute of Health - Rome).  
Enhancing Public Health through Ocean Research.

**Prof. Paola Magni** (School of Medical, Molecular and Forensic Sciences, Murdoch University – Perth).  
The ocean give it back – What forensic science can get from the ocean.

**Prof. Monica Montefalcone** (Dipartimento di Scienze della Terra, dell'Ambiente e della Vita, University of Genoa, Genoa). Knowing the past to understand the future: the importance of historical series of data for coral reefs management.

**Dr. Valeria Foster Senigaglia** (Queensland University of technology, Brisbane). Tourism and conservation of cetacean in Australia.

**Dr. Paola Tepsich** (CIMA Research Foundation · Marine Ecosystems, Savona). Cetaceans and human activities: tools and methodologies for a sustainable use of the sea, from the Pelagos Sanctuary to the world oceans onboard Nave Vespucci.

**Round table** – Moderates **Marco Lazzarino**, Embassy of Italy in Canberra

16:00 – 16.30 Coffee Break

**16.30 – 18.00** Research and Navy vessels: oceans and more

**Prof. Marco Giovine** (President of the Sea Study Centre University of Genoa, Genoa). The University of Genoa and Istituto Idrografico della Marina scientific research activities on Amerigo Vespucci vessel.

**Dr. Fabrice Jaine** (Principal Science Officer, Integrated Marine Observing System, Hobart). Australia's Integrated Marine Observing System: supporting best practice ocean science through sustained, high-quality and open data.

**Dr. Patricia Miloslavich** (East Antarctic Monitoring Program Lead, Australian Antarctic Division, Hobart). The RSV Nuyina as a platform for oceanographic research and monitoring.

**Prof. Jennifer Verduin** (College of environmental and life Science, Murdoch University, Perth). Oceanography in Western Australia.

**Dr. Fabio Gargano** (National Institute for Nuclear Physics, Bari) Detector design and Cosmic rays detection on the Vespucci.

**Prof. Orsola de Marco** (School of Physics, Macquarie University, Sydney) High Energy Astrophysics in Australia, onshore and offshore.

**Round table** – Moderates **Marco Lazzarino**, Embassy of Italy in Canberra



**Prof. Orsola De Marco** - School of Physics, Macquarie University, Sydney and chair of the board of Astronomy Australian Limited

Orsola De Marco is a Professor at Macquarie University and Director of the Macquarie Research Centre for Astronomy, Astrophysics and Astrophotonics. She is an Astrophysicist interested in theory and observations of old stars and stars that interact with one another, generating outbursts and all manner of Astrophysical complexity. In her capacity as chair of the board of AAL she supported the Australian capacity of instrumentation development and the participation of Australia to the European Southern Observatory organization.



**Dr. Fulvio Ferrara** - (SeA Care Project Coordinator - Italian National Institute of Health - Rome)

Fulvio is a senior researcher at the National Centre for Water Safety of the Istituto Superiore di Sanità (Italian National Institute of Health), Rome. Expert in the study of human-environment interactions and the role of the sea in particular, and surface waters in general, in the transfer of environmental contaminants of anthropogenic origin to humans and their possible effects on human health.

He graduated in Biological Sciences with a specialisation in Marine Biology, he has been appointed as Italian expert to represent the Italian the Ministry of Health to several national and international projects.



**Dr. Valeria Foster Senigaglia** - School of Mathematical Sciences, QUT, Brisbane

Valeria Senigaglia (PhD) is a Research Fellow at the Queensland University of Technology and part of the Securing Antarctica's Environmental Future program. Formally trained as a behavioural ecologist and marine scientist, Valeria is interested in the relationship between marine conservation and the management of human activities. By exploring the resilience of socio-ecological systems and their current governance, she aims to assist decision-makers to sustainably manage Antarctica's Cultural Ecosystem Services.



**Dr. Fabio Gargano** - National Institute for Nuclear Physics and Italian Space Agency, Bari

Fabio's focuses on the study of topics related to astroparticle physics and fundamental interactions physics, as well as the study and development of new detectors primarily for space applications. I am currently a member of the international collaborations DAMPE and Fermi-LAT, satellite experiments collecting data on high-energy cosmic radiation, both neutral and charged. I am also involved in other initiatives for future experiments, both satellite-based (HERD, eASTROGAM, AMEGO, ADAPT, APT) and at LHC (SAS), related to the study of both charged and neutral cosmic radiation.



**Prof. Marco Giovine** - *President of the Sea Study Center University of Genoa, Genoa*

Professor of molecular biology. During his career, he participated in numerous national and international research projects. He is currently the President of the Sea Study Center of the University of Genoa ([www.mare.unige.it](http://www.mare.unige.it)). He published numerous scientific articles in international journals and filed some patents in the field of biotechnology. An eclectic person, he carries out basic and applied research on marine molecular biology and biotechnology with a transversal approach.



**Prof. Paola Magni** - *School of Medical, Molecular and Forensic Sciences, Murdoch University, Perth*

Paola is a world-leading researcher, expert witness, media commentator and corporate speaker forging new frontiers in forensic science and the most challenging criminal investigations. Renowned forensic specialist and innovator and Australian of the year 2024, Dr Paola Magni uses insects and other small creatures to help solve murders, suspicious deaths and cold cases. She also conducts research to enhance law enforcement's ability to resolve criminal cases.



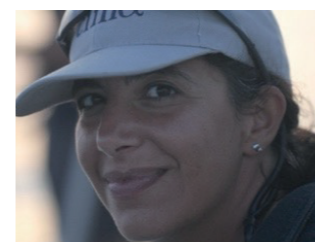
**Patricia Miloslavich** - *East Antarctic Monitoring Program Lead, Australian Antarctic Division, Hobart*

Dr. Miloslavich leads the RSV Nuyina Underway Science project, focusing on long-term observations of East Antarctica and the Southern Ocean. A former Simon Bolivar University professor, she was the Executive Director of the Scientific Committee on Oceanic Research (SCOR), led the development of biological essential ocean variables for the Global Ocean Observing System (GOOS), and chaired the UN OceanDecade Working Group #7 addressing the expansion of global ocean observations. She currently co-chairs the IPBES Monitoring Assessment.



**Prof. Monica Montefalcone** - *Dipartimento di Scienze della Terra, dell'Ambiente e della Vita, University of Genoa, Genoa*

Monica Montefalcone is the head of the Seascape Ecology Laboratory, dedicated to the study of the seascape and of marine coastal habitats. She is working in the monitoring, characterization, cartography, evaluation of ecological status and change over time of coastal habitats (mainly seagrass, rocky reefs, coralligenous, marine caves, and coral reefs), biodiversity assessment, species and habitat restoration. A major component of her research is the adoption of scientific diving techniques for field investigations.



**Dr. Paola Tepsich** - *CIMA Research Foundation, Marine Ecosystems, Savona*

Paola is the Head of the Marine Ecosystems Department at CIMA Research Foundation and professor of cetacean ecology and monitoring techniques at the University of Genoa. Paola works on marine mammal habitat modeling, with a focus on impacts of anthropic activities and climate change. Her research activity foresees also field work on dedicated research vessels as well as on platform of opportunities. Currently she is part of the Italian delegation of the Scientific and Technical Committee of the Pelagos Sanctuary.



**Dr. Fabrice Jaine** - *Principal Science Officer, Integrated Marine Observing System, Hobart*

Fabrice is the Principal Science Officer for Australia's Integrated Marine Observing System (IMOS, [www.imos.org.au](http://www.imos.org.au)), a national collaborative research infrastructure enabled by the Australian Government and a Regional Alliance of the Global Ocean Observing System. His scientific research has focused on understanding the influence of ocean dynamics on the behaviour and movement ecology of marine predators. Fabrice now promotes collaboration among research agencies to collect sustained measurements of Australia's vast marine estate, as well as best practices in ocean observing and open data principles to support research, weather and climate forecasting, natural resource management and the blue economy.



**Prof. Jennifer Verduin** - *College of environmental and life Science, Murdoch University, Perth*

Jennifer is a keen oceanographer with a passion for seagrass ecosystems. One of the key reasons that attracts me to the field of oceanography is its interdisciplinary nature, which allows me to explore various aspects of the marine environment. I have a particular interest in the interface between physics and biology. I have developed a deep understanding of the effects of coastal hydrodynamics on benthic vegetation and structures. My research encompasses the study of physical processes that shape seagrass habitats, such as water flow and sediment transport as well as climate trends and implications, and how these processes interact with biological processes that support seagrass growth and reproduction in coastal marine environments.

**BOOK A SEAT AT:**

<https://tourvespucci.it/en/events/vespucci-meets-the-marine-ecosystem/>

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