



Valentina Asnaghi

Fixed-term assistant professor

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Education and training

2012

European PhD in Environmental Science Marine Science

Structure and functioning of temperate reef benthic communities in the Ligurian sea under global change scenarios - Excellent
University of Genoa - Genoa - IT

2007

Master Thesis in Biology

Monitoring of the superficial assemblages of the Ligurian rocky reefs ecological quality sensu Water Framework Directive 2000/60/EC - 108/110
University of Milano-Bicocca - Milano - IT

Academic experience

2012 - 2018

Post-doctoral fellow

University of Genoa - Genoa - IT

'Biodiversity and connectivity in the resilience of marine benthic communities' - 'Restoration of Patella ferruginea populations in Ligurian Marine Protected Areas' - 'Conservation and restoration of priority species threatened by anthropogenic action within Natura 2000 sites and Marine Protected Areas the gastropod mollusk Patella ferruginea and structuring macroalgae of the genus Cystoseira'

Work experience

2018 - 2019

Professional technician Biologist

ARPA Lombardia - Milan - IT

Technical assessments monitoring and controls at the O.U. Sustainable Water Uses concerning surface water uses to ensure ecosystem health compliance with minimum vital flow and ecological quality for sustainable use of natural resources.

Language skills

English

Proficient

First Certificate in

English Cambridge

2008

French

Basic

Teaching activity

I am currently a lecturer of two teachings in the Master's Degree in Marine Biology and Ecology at the University of Genoa:

- Quantitative Ecology (6 CFU)

- Restoration Ecology (2 CFU)

and one teaching of the Master's Degree in Environmental Engineering at the University of Genoa:

- Marine Biodiversity Management (5 CFU)

Postgraduate research and teaching activity

Supervision of PhD students, residents and post-doctoral fellows

Lecturer of the course "Basics of applied statistics and probability" (2 CFU; for 3 academic years) for PhD students in Science & Technology for Earth and Environment and Science & Technology of the Sea- University of Genoa (Italy)

Supervisor of two PhD students at University of Genoa (Italy)

Research interests

My research activity is focused on the study of the structure, dynamics and functioning of **benthic ecosystems**, in the scenario of human induces **local and global changes**. I am interested in the relative importance of local and regional processes to biodiversity and resilience, studying the effects of coastal urbanization and habitat fragmentation, global warming, and ocean acidification on coastal ecosystems, highlighting cascading effects. Given the current regression/loss of ecologically relevant species caused by anthropogenic stressors, I directed my attention to conservation and **restoration** of priority species (*i.e.* macroalgal forest of the genus *Cystoseira sensu lato*, the molluscs *Patella ferruginea* and *Pinna nobilis*) using reproduction techniques in a controlled environment. I addressed ecosystem functions, services and natural capital provided by *Cystoseira sensu lato* canopies and their potential as sources of bioactive products. A parallel research topic I addressed throughout my whole research career concerns the proliferation of the toxic benthic microalga *Ostreopsis ovata* and its bloom dynamics in temperate areas, investigated both in an ecological, eco-toxicological, management and modellistic approach. More recently, I addressed my interest to **blue and circular economy** involving macroalgae and sea urchins in virtuous circuits to transform wastes in resources.

Grants

2022 - ONGOING

REEForest

Life Programme

Participant

“Restoration of *Cystoseira* macroalgal FORESTs to enhance biodiversity along Mediterranean rocky REEFs” (48 months) funded by LIFE Programme (LIFE21-NAT-IT-REEForest n. 101074309). I am the Technical responsible for UNIGE and WP4 leader.

2022 - ONGOING

RESTART

University of Genoa - IT

70 000 - Pricipal investigator

RESToration of marine forests on ARTificial reefs” (24 months) funded by the CURIOSITY DRIVEN Call of the University of Genoa (Bando D.R. n. 5074 del 29/10/2021)

2021 - ONGOING

SEAWHEAT

EU COST ACTION

Participant

Member of the Management Committee of the project SEAWHEAT - 'Tomorrow's wheat of the sea: *Ulva*, a model for innovative mariculture' (48 months) funded by EU COST (CA20106)

2019

Seaweeds for Human and Environmental health (SHE)

EMBRIC Programme

Pricipal investigator

2014 - 2015

M3-HABs 'Risk Monitoring Modeling and Mitigation of Benthic Harmful Algal Blooms along Mediterranean coasts'

ENPI-CBCMED Programme

Pricipal investigator

Co-coordinator (for CoNISMa) and WP leader of the project M3-HABs

2021 - ONGOING

LIFE PINNA

LIFE Programme

Participant

Conservation and re-stocking of the *Pinna nobilis* in the western Mediterranean and Adriatic Sea

2020 - ONGOING

'BRITEs- Byproduct Recycling Innovative TEchnology from the Sea

PRIN - IT

Participant

2016 - 2022

RE-LIFE Re-establishment of the Ribbed Limpet (*Patella ferruginea*) in Ligurian MPAs by Restocking and Controlled Reproduction

LIFE Programme

Participant

2017 - 2021

ROC-POP-LIFE Promoting biodiversity enhancement by Restoration Of *Cystoseira* POPulations

LIFE Programme

Participant

Editorial activity

Review Editor for Marine Conservation and Sustainability in *Frontiers in Marine Science*

Reviewer for more than 10 scientific international journals (e.g., *Frontiers in Marine Science*, *Marine Environmental Research*, *Marine Pollution Bulletin*, *PeerJ*, *Scientific Reports*...)