



Giorgio Bavestrello

Full professor

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Education and training

1982

Graduated with honors in Biological Sciences

Il genere Eudendrium (Cnidaria Hydrozoa) sul promontorio di Portofino -
110/110 e lode

University of Genoa - Genova - IT

1990

PhD in Marine Sciences

University of Genova - Genova - IT

Academic experience

2011 - ONGOING

Full Professor in Zoology

University of Genoa - Genova - IT

Coordinamento CCS Biologia Coordinamento CCS Scienze Ambientali e
Naturali Giunta di Dipartimento Consiglio di Scuola

2001 - 2011

Full Professor in Zoology

Polytechnical University of Marche - Ancona - IT

Coordinatore Dottorato Scienze del Mare

1998 - 2001

Associate Professor

Polytechnical University of Marche - Ancona

Work experience

Nothing

Nothing

Language skills

Italian

Mother tongue

English

Independent

French

Basic

Spanish

Basic

Teaching activity

From 2017 to present– Co-ordinator of the courses of ***Biology, Molecular Biology, Marine Biology and Ecology*** at the University of Genova

From 2013 to 2017– Co-ordinator of the courses of ***Environmental and Natural Sciences, Marine Sciences*** and ***Sciences of Natural Systems*** at the University of Genova

From 2011 to present - Chair of ***Zoology and Animal Behaviour*** at the University of Genova

From 1998 to 2011 – Chair of ***Zoology*** and ***Animal Behaviour*** at the Polytechnical university of Marche

From 2002 to 2009 – Director of the ***PhD School of Marine Biology and Ecology*** of Polytechnical university of Marche

From 2001 to 2006 – Director of the ***Master School in Tropical Biodiversity and Bioactive compounds*** in collaboration among the University of Genoa, the Polytechnical University of Marche and the Sam Ratulangi University of Manado.

Giorgio Bavestrello has graduated six PhD students and is currently advising two more. Two students acquired a position of scientific researchers (Stefania Puce at the Polytechnical University of Marche, Marzia Bo at the University of Genoa), one (Michela Martinelli) is research at the CNR (Ancona). Finally Dr. Masteria Yunovilsa Putra is now Postdoc students at the Seoul National

Postgraduate research and teaching activity

Supervision of PhD students, residents and post-doctoral fellows

Giorgio Bavestrello has graduated eight PhD students and is currently advising two more. Two students acquired a position of scientific researchers (Stefania Puce at the Polytechnical University of Marche, Marzia Bo at the University of Genoa), one (Michela Martinelli) is research at the CNR (Ancona). Finally Dr. Masteria Yunovilsa Putra is now Postdoc students at the Seoul National University.

PhD committees membership

Phd in Environmental Sciences (Marine Sciences) at the University of Genova

Research interests

The research topics of Giorgio Bavestrello are:

1. Taxonomy, morphology and ecology of sponges and cnidarians
2. Ecology of deep benthic communities through ROV imaging
3. Mineral/organism interactions
4. Ecology of coral reefs
5. Ecology of Antarctic benthos

6. Conservation of marine ecosystems

In the taxonomic studies of Sponges and Cnidarians he has described numerous new taxa (species and genera) using both traditional and genetic taxonomic tools. Relevant, at this subject, is the study of the variability of morphological taxonomic characters according to gradients of ecological factors. In some critical groups as stylasterid corals he has applied new method of morphological description as the computerised X-ray microtomography. Thank to an intense diving activity he has studied, directly in the field, the ecology of hard bottom benthic assemblages. He was among the first that focused the attention on the mass mortalities of sea fans and sponges in the Mediterranean monitoring all the recorded episodes occurring in the Tyrrhenian Sea in the last two decades. Relevant are the studies on the ecology and biology of bioeroding organisms, mainly sponges. Particularly, the morphological study of the scars produced in the calcareous substrata have demonstrated the specificity of these signs of erosions producing evidence that have paleontological relevance. He was particularly interested by the mineral/organism interactions regarding both the biomineralisation in skeletal structures and the selection and incorporation of mineral particles of environmental origin. The use of foreign bodies in the sponge skeleton is, until now almost unexplored. The researches of Giorgio Bavestrello have demonstrated the selectivity in the choice and utilisation. Particularly relevant is the finding that a sponge species (*Chondrosia reniformis*) is the only animal able to dissolve crystalline quartz. Also the researches of the author regarding the spicule production provided important finding. The more relevant is the finding that the siliceous sponge spicules act as optical fibres canalising the light inside the sponge tissues. From the ecological point of view the study of the mineral/organism interactions (Biomineralogy) are a source of new evidences clarifying un-explicated aspects of benthos distribution. Thank to a long collaboration with the Sam Ratulangi University of Manado (North Sulawesi, Indonesia) Giorgio Bavestrello had the possibility to built a small research centre on the small coralline island of Sealaden (Bunaken Marine Park, North Sulawesi, Indonesia). This site was

particularly suitable for a series of studies about the ecology of coral reefs. These researches were mainly focused on the role of symbiotic relationships in the production of increasing levels of biodiversity. Particularly relevant was the record of zooxanthellae in black corals, a group traditionally considered not involved in autotrophic symbiosis. Moreover he was the coordinator of the italo-indonesian expedition for the evaluation of the effects of the tsunamis event of December 2004 on coral reefs. During this expedition, that has studied, the lands most close to the earthquake epicentre, was studied a portion of reef uplifted 2 m upon the sea level. In the last ten years a major part of the research activity of Giorgio Bavestrello was related to the established relationship with a group of researchers of ISPRA allowing the conduction of a long series of ROV campaign all around the Tyrrhenian Sea. Thank to these researchers it was put in evidence the importance of deep coral communities characterised by sea fans and black corals. During these researchers the first ROV study of a Mediterranean Seamount.

Grants

1999 - 2000

Interazioni ecologiche e biochimiche tra biosistemi acquatici e substrati naturali (Coordinatore scientifico Prof. Cattaneo-Vietti R.)

Italian Ministry for Scientific Research MIUR - IT
Participant

2003 - 2004

Effetti a lungo termine del riscaldamento globale sulla composizione delle comunità bentoniche del Mediterraneo

Italian Ministry for Scientific Research MIUR - IT
Principal investigator

2009 - 2010

Tyrrhenian Seamounts ecosystems an Integrated Study (TySEc)

Italian Ministry for Scientific Research MIUR (PRIN 2007) - IT
120000 - Principal investigator

2013 - 2016

Biocostruzioni costiere struttura funzione e gestione

(Coordinatore scientifico Prof. Boero F.)

Italian Ministry for Scientific Research MIUR (PRIN 2007) - IT
Participant

2001 - 2002

**FIRB 2001 Biodiversità e organizzazione delle comunità in
differenti contesti ambientali**

Italian Ministry for Scientific Research MIUR - IT
Participant

2001 - 2003

**Master in Conoscenza e gestione della biodiversità delle
scogliere coralline indonesiane INTERLINK 2001-2003**

Italian Ministry for Foreign Affaires - IT
Principal investigator

2004 - 2006

**Conoscenza e gestione della biodiversità delle barriere
coralline indonesiane INTERLINK 2004-2006**

Italian Ministry for Foreign Affaires - IT
Participant

2004

**Progetto MAE 'Grande Rilevanza' tra Italia e Indonesia
2004 'Biodiversità e sue variazioni stagionali nelle
scogliere coralline indonesiane'**

Italian Ministry for foreign affaires - IT
Principal investigator

2005

**Progetto MAE 'Grande Rilevanza' tra Italia e Indonesia
2005 'Biodiversità e sue variazioni stagionali nelle
scogliere coralline indonesiane'**

Italian Ministry for foreign affaires - IT
Principal investigator

2006

**Progetto MAE 'Grande Rilevanza' tra Italia e Indonesia
2006 'Biodiversità e sue variazioni stagionali nelle
scogliere coralline indonesiane'**

Italian Ministry for foreign Affaires - IT
Principal investigator

2015 - 2018

**SIR BIOMOUNT 2015-2018. Biodiversity patterns of the
Tyrrhenian Seamounts. RBSI14HC90.**

Italian Ministry for Scientific Research MIUR - IT

268301 - Participant

2014 - 2015

ENPI-EU-ECOSAFIMED 2014-2015 (204680.8 euros).

Towards Ecosystem Conservation and Sustainable Artisanal Fisheries in the Mediterranean basin.

EU

Participant

Editorial activity

He is Editor of the European Journal of Zoology and Plos One He has also reviewed articles for several international journals.

Assigments abroad

Nothing

Other professional activities

Nothing