



## Marco Giovine

Full professor

BIOS-08 A Molecular biology

### EDUCATION AND TRAINING

1987

**High School Diploma**

Grade 60/60

"A. Issel" Scientific High School Finale Ligure (SV)

1991

**Degree in Biological Sciences**

Grade 110/110 cum laude

University of Genova

1992

**Diploma of qualification for the profession of biologist**

University of Genova

1995

**PhD in Biochemistry**

Thesis: A new controlled release system for antiviral drugs based on the construction and characterization of bioreactor erythrocytes

University of Pavia

### PROFESSIONAL HISTORY

*[Previous positions held at this or other universities, etc]*

1995-1996

**Military Service**

Italian Army

1996-1998

**Post- doc Fellowship**

University of Genova

1998-1999

**Study grant fellowship**

University of Genova

2000-2005

**Technologist III level**

Target Project on Biotechnology

National Research Council

2005-2024

**Associate professor**

Molecular biology

University of Genova

2024-ongoing

**Full professor**

Molecular biology

University of Genova

## ACADEMIC APPOINTMENTS

2007-2019

**Board Member of the State Examination for Professional Qualification as a Biologist**

7 non-continuous years, as President or Member

University of Genova

2011-2014

**Member of the University Board referred to the procedures for granting authorizations to carry out assignments extra-institutional by full-time professors**

University of Genova

2012-2014

**Board Member of the University inspection service**

University of Genova

2012-2014

**Departmental executive committee member**

DIPTERIS

University of Genova

2014-2015

**President of the First Level University Master**

“Expert in food biotechnology”

University of Genova

2014-2020

**Rector's delegate for students orientation**

Rector's executive committee member

University of Genova

2021-ongoing

**Departmental executive committee member**

DISTAV

University of Genova

[2021-ongoing](#)**President Strategic Centre**

Sea Study Centre

University of Genova

[2025-ongoing](#)**University disciplinary board member**

Disciplinary actions concerning faculty members.

University of Genova

## INSTITUTIONAL APPOINTMENTS AT EXTERNAL ENTITIES

[2017-2021](#)

President of the Consultative Council of the Regional Agency for Student Support Services

ALFA/ALISEO

Liguria Region

[2024-ongoing](#)

Member of the Board of Directors of "Acquario di Genova Foundation ONLUS"

Designated as representative of the University

Acquario di Genova Foundation ONLUS

[2025-ongoing](#)

Member of the steering committee for "Promotion, development, enhancement of research, innovation and university and higher education activities" Regional Law no. 2 of 16.1.2007

Designated as representative of the University

Liguria Region

## SCIENTIFIC RESEARCH

**MAIN TOPICS**

Molecular biology and marine biotechnologies with a particular focus on invertebrates

Specifically:

heat stress response;

molecular responses resulting from the interaction of animal cells with mineral structures;

extracellular matrix proteins of porifera and their biotechnological applications;

biomineralization mechanisms in siliceous sponges;

pro-inflammatory processes in ancestral models (porifera).

**SCIENTIFIC RESPONSIBILITY FOR RESEARCH PROJECTS ACCEPTED FOR FUNDING ON THE BASIS OF  
COMPETITIVE CALLS INVOLVING PEER REVIEW**[2006-2009](#)

“Biominalisation for lithography and microelectronics (BIOLITHO)” STRP 031541 (FP6- STRP)

PI RU UniGE

EU project

#### 2008-2009

Regulation of biomineralization mechanisms in marine organisms

PI National coordinator PRIN2007

Italian MIUR project

#### 2009-2010

Establishment of experimental models for laboratory study of a family of key enzymes involved in the biomineralization process in siliceous sponges and corals

Italy-Germany bilateral cooperation Vigoni project. PI RU UniGE

MIUR/DAAD joined project

#### 2010-2013

Sponge Enzymes and Cells for Innovative Applications (SPECIAL), FP7 Grant agreement

266033

PI RU UniGE

EU project

#### 2011-2013

Role of biosilica in Antarctic seas: ecological and physico-chemical aspects.

PI RU UniGE

CNR-PNRA project

#### 2018-2020

Sponge MARiculture for innovative bioTechnological Exploitations” (SMARTEX)

Italy-Israel scientific cooperation PI RU uniGE

MAECI project

#### 2018-2020

Marine Sponges as Sources for Bioinspired Materials Science

Italy-Germany bilateral scientific cooperation PI RU UniGE

DAAD-MIUR project

#### 2024-2026

Spicule Mats: Advanced Research on technologies of naTure (SMART)

PI project coordinator

CNR-PNRA project

#### MAIN SEMINARS (LAST 10 YEARS)

##### 2016

Marine sponges: a precious source of new biomaterials for biotechnology

Invited speaker, 11th International Marine Biotechnology conference- Baltimora- Maryland  
IMBS

##### 2017

Recombinant production of hydroxylated non-fibrillar procollagen polypeptide and gelatin fragment derived from the marine sponge *C. reniformis*: a new biotechnological source of marine collagen

Invited speaker, International Symposium on Marine Science, Blue business and Society, Blanes, Spain

CSIC

2017

Interaction between silicon and marine invertebrates models: a comparative study

Oral preentation IBiS 2017 Silicon, Silica and their isotopes, Blanes (Spain)

CSIC

2017

Silica-induced fibrosis: an ancient response from the early metazoan

Oral presentation 10th World Sponge Conference, Galway (Ireland)

2022

Lysosome related Biosilica Machinery in the Demospongiae *Petrosia ficiformis*

Oral presentation 11th World Sponge Conference Leiden (Netherlands)

2023

Collagen filaments derived from *Ircinia oros* (Schmidt, 1864) and *Sarcotragus foetidus* (Schmidt, 1862): potential applications

Keynote lecture European Conference of Marine Biotechnology Malaga (Spain)

ESMB

2025

Beached *Verella verella*: from waste to potential source of bioactives compounds

Oral presentation 13th International Marine Biotechnology Conference Brest (France)

#### PRIZES AND ACCOLADES FOR SCIENTIFIC ACTIVITY, INCLUDING MEMBERSHIP OF ACADEMIES

2005

Young researcher award "CIB 2005"

For the research results titled: "Proteins involved in biosilicification processes in porifera: structural organization and prospects for biotechnological use"

CIB-Interuniversity Consortium of Biotechnologies

2019

Paul-J.-Scheuer-Preis on marine biotechnology

For the research activity on marine biotechnology

Akademie gemeinnütziger Wissenschaften zu Erfurt (Erfurt Academy of Useful Sciences)

#### PARTICIPATION IN THE CREATION OF NEW BUSINESS ENTITIES (SPIN-OFFS), DEVELOPMENT, USE AND COMMERCIALISATION OF ACADEMIC PATENTS

2011

MICAMO s.r.l.

Funding of the U.NI.TI project aimed at launching university spin-offs and start-ups. Co-founder of the company. Company still active under the name MICAMOLab srl  
MICAMOLab s.r.l.

**2012**

MUDS s.r.l.

Co-founder of a university spin-off pursuant to the Gelmini Law, aimed at developing an industrial patent for underwater wastewater treatment. Company still active  
MUDS srl

**1994-2024**

Co-inventor in various national and international patents in the field of biotechnologies  
CNR and University of Genova

## **OTHER MANAGEMENT, ORIENTATION OR THIRD MISSION ACTIVITIES**

**2005-2008**

Scientific manager and coordinator of activities of the Marine Biotechnology Laboratory of the Advanced Biotechnology Center-Genova

Activities under an agreement between CNR and Advanced Biotechnology Center and between UniGe (DIBIO) and Advanced Biotechnology Center  
Advanced Biotechnology Center-Genova

**2015-2017**

Coordinator of "schools portal" and "internships and theses portal" projects

Creation of web portal systems for qualitative-quantitative monitoring of inbound and outbound orientation activities

University of Genova

**2014-2019**

UniGE coordinator of the "Managerial Talents" project

Orientation project involving students and companies for mentoring activities with managers, carried out in collaboration with Manageritalia

University of Genova

**2023-2025**

Project coordinator "Scientific activity and science diplomacy activity" on board the Amerigo Vespucci training ship during the 2023-2025 world tour.

Project carried out in collaboration with the Italian Navy and the Hydrographic Institute of the Navy

Sea Study Centre University of Genova

## **LANGUAGE SKILLS**

English