

# Curriculum Vitae

## Roberto Danovaro

### 1. PERSONAL INFORMATION

Date of birth: 22 February 1966 (Genova), Italy  
Married, 3 children (7, 9 and 15 years)  
Nationality: Italian

#### Researcher unique identifier(s)

ORCID: 0000-0002-9025-9395  
Research ID: M-9018-2014

**Languages:** Italian (mother language), English (fluent),  
French (fluent), Spanish (medium).



### 2. BIOSKETCH

Roberto Danovaro was born in Genoa (degrees in 1988). PhD in Environmental Sciences at the University of Pisa in 1993. Full Professor in 2001 at the Polytechnic University of Marche. Director of the Department of Marine Sciences (2004 to 2010), Director of the Department of Life and Environmental Sciences (2011 to 2014) at the Polytechnic University of Marche. Pro-Rector (Delegated to the Research) at the Polytechnic University of Marche (2010-2013). President of the Scientific Council of WWF Italy, Steering Board Member of OECD (*Fostering Innovation in Ocean Economy*). Member of the Scientific Council of several research institutions and panels (IUCN, UNEP, EU), editor in chief of international journals and coordinator of several EU and international programs. President of the Italian Society of Ecology (2011-2013), and of the Italian Society of Limnology and Oceanography (2008-2011). President of the *European Federation of Scientific Technological Societies* (2008-2012). Member of the *EU Academy of Sciences*. RD received several Awards, including the World Prize BMC Biology (London, 2010), the Award of French Society of Oceanography (2011), and the ENI Award "Protection of the Environment" (2013). Nominated in 2013 by the Ministry of Education University and Research (MIUR), President of the *Stazione Zoologica Anton Dohrn (National Institute of Marine Biology Ecology and Biotechnology)*. In the 2018 was renewed as President of the *Stazione Zoologica* (2018-2022). In December 2020 Danovaro has been recognized by ExpertScape as the top World Scientist in the Category "Ocean and Seas" for the decade 2010-2020.

### 3. EDUCATIONAL STEPS AND MAIN ACHIEVEMENTS

#### 3.1 Education

1993 - PhD in Marine Environmental Sciences at the Department of Biology University of Pisa (joint PhD activity at the 2 of Ghent, Belgium)

1988 - Master Degree in Biology, University of Genoa

#### 3.2 Positions

2018-2022: Renewed President at the Stazione Zoologica Anton Dohrn, Naples, Italy

2013-2017: President at the Stazione Zoologica Anton Dohrn, Naples, Italy

2011-2014: Director Dept Life & Environmental Sciences - Polytechnic University of Marche.

2010-2013: Pro-rector (Delegated to Research) at the Polytechnic University of Marche.

2004-2010: Director of the Department of Marine Sciences - Polytechnic University of Marche.

2001-Present: Full Professor, Marine Biology and Ecology, Polytechnic University of Marche, Italy

1998-2001 Associate Professor, Department of Biology, University of Bari, Italy

1994-1998 Assistant Professor (*Ricercatore* - University of Ancona), Italy

#### 3.3 International Projects

##### ***Coordinator of International Projects:***

- 2019-2021 EU Project **AFRIMED**: “Algal Forest Restoration in the MEDiterranean Sea”, EU-EASME, 2 M Euros
- 2016-2020 H2020 project **MERCES**: Marine Ecosystem Restoration in changing European Seas, Project coordinator. 6.5 M Euros.
- 2017-2019 Project **IDEM**: Implementation of the MSFD to the Deep Mediterranean Sea (IDEM), Project coordinator, 1.1 M Euros.

**EU**: Participated in more than 20 international research projects (either EU or ESF)

##### ***EU research projects with role as WP Leader (selection):***

2015-2017 JPIO Pilot Action “**Ecological aspects of deep-sea mining**”.

2013-2016 FPVII project **MIDAS**: *Managing Impacts of Deep-Sea ResourceS exploitation*

2012-2016 FPVII project **DEVOTES**: *DEvelopment Of innovative Tools for understanding marine biodiversity and assessing good Environmental Status*, WP Leader

2009-2012 FPVII project **HERMIONE**: *Hotspot Ecosystem Research and Man's Impact On European Sea*, WP Leader

2010-2011 FPVII project **CLAMER**: *Climate change impacts on the marine environment: research results and public perception*, UNIVPM PI

2005-2008 Responsive Mode Project MARBEF Project **MANUELA**: *Meiobenthic and nematode biodiversity: unravelling ecological and latitudinal aspects*, UNIVPM PI

2004-2009 FPVII project **HERMES**: *Hotspot Ecosystem Research on the Margins of European Seas*, WP leader

- 2007-2009 European Science Foundation project **BIOFUN**: BIOdiversity and ecosystem FUNctioning in contrasting southern European deep-sea environments: from viruses to megafauna, Project co-leader
- 2005-2009: FPVII project **SESAME**: Southern European Seas: Assessing and Modelling Ecosystem Changes, UNIVPM PI
- 2005-2009 FPVI project **CORALZOO**: The development of an SME-friendly European breeding program for hard corals, WP leader
- 2005-2008 FPVI project **REEFRES**: Developing ubiquitous restoration practices for Indo-Pacific reefs, WP leader
- 2005-2009 FPVI project **MAP**: Marine Aerosol Production, UNIVPM PI
- 2001-2004 FPV project **MEDVEG**: Effects of nutrient release from Mediterranean fish farms on benthic vegetation in coastal ecosystems, WP leader
- 2001-2003 FPV project **INTERPOL**: Impact of Natural and Trawling Events on Resuspension, Dispersion and Fate of Pollutants, WP leader
- 2001-2003 FPV project **ADIOS**: Atmospheric Deposition and Impact of Pollutants, key elements and nutrients of the Open Mediterranean Sea, UNIVPM PI
- 1998-2001 project **BENGAL**: High-resolution temporal and spatial study of the BENThic biology and Geochemistry of north-eastern Atlantic abyssal Locality, UNIVPM PI

**EU and World Networks of excellence:** RD is member of the EU Network of Excellence:

- I. **MARBEF** (Marine Biodiversity and ecosystem functioning, acting as PI for UNIVPM).
- II. **EUROCEANS** (European Research on Ocean Ecosystems under Anthropogenic and Natural forcing), acting as PI for CoNISMa
- III. **CAREX** European Life in Extreme Environments.

**World Networks:** RD acted as Coordinator or leader of International programs

- I. **LICO** – Life in a changing Ocean (2011-2013)
- II. **CoML Census of Marine Life**, member of the Executive Board EU (project declared one of the Top Five World Projects in 2010)
- III. **INTECOL** (Singapore)
- IV. **ATIE** (Atacama Trench International Expedition)
- V. **LICO** (*Life in a changing ocean*, Canada)
- VI. **EMBRC** (ERIC EU) *European Marine Biological Resource Centre*

### 3.4 Research expeditions and cruises

RD participated to >30 international cruises and research expeditions, crossing a variety of seas and oceans including:

- Mediterranean Sea,
- Black Sea,
- Atlantic Ocean
- Pacific Ocean
- Indian Ocean
- Antarctica.

RD has been PI/Chief scientist in 12 cruises, among them R/V Mare Nigrum, Black Sea (EU HERMES); R/V *Universitatis*, Eastern Mediterranean Sea (Project on deep-anoxic basins); R/V Abate Molina, South Pacific Ocean, deep-sea investigations in the Juan Fernandez area.

### 3.5 Teaching Activities

2001-present – Full Professor of Ecology

2004-present – Professor of the Doctorate (PhD course - *Marine Biology and Ecology*)

2013-present – Coordinator of the *International Master in Marine Biology* (FUNIBER)

2005-2012 – Coordinator and Professor of *Environmental Ethics, Fundamentals of Ecology*

2005-present Professor - Doctorate school “Marine Biology and Ecology” – Polytechnic Univ. of Marche.

RD has served as teacher/professor in a number of International courses including:

- UNESCO
- Venice International University
- Open University PhD courses
- Association for Sustainable Development (AVISV)
- National Oceanographic Centre – UK
- University of Southampton - UK
- Collège de France (Parigi)

### 3.6 Educational responsibilities

2011-2014 Dean (act.) of Faculty of Science at the Polytechnic University of Marche

2007-2012 Founder and Coordinator of the *Master Degree in Marine Biology and Ecology* (UNIVPM)

2007-2012 Founder and Coordinator of the *Master Degree in Environmental Sustainability and Civil Protection* (UNIVPM)

2009-2012 Founder and Coordinator of the *Master Degree in Marine Biology and Ecology* (UNIVPM)

### 3.7 Scientific Commissions and Councils

2019- present Member of the Scientific Council of Slow Food International

2018- present Member Internat. Scientific Committee of the Holy Shroud (*Sacra Sindone*, Tourin)

2018-present Member of the EU - Academy of Science

2017-present Member of the Steering Board OECD

2016 – present member of the “Osservatorio Nazionale per la Strategia Nazionale della Biodiversità” (National observatory for the Biodiversity strategy”)

2016- present Member of the Scientific and Technical Commission - selection of the ENI Awards

2014-present Member of the Faculty of 1000 Biology

2014-present President of the Scientific Council of the WWF Italy

2013-present Member of the Scientific Committee of ENI

2011-2013 Member of the Scientific Council of the *Stazione Zoologica “Anton Dohrn”*

2006-2014 Member of the Scientific Council of the WWF Italy

2010-2012 Member of the Scientific Board of the *Reef check Italy*

2008-2010 Member of the *Forum of oceans & Islands beyond national jurisdiction.*

2005-2010 Member of the Scientific Council of the *Census of Marine Life* (CoML)

2006-2008 Member and coordinator of the “*Task force Deep Sea*” of the *CIESM International*

*commission for exploration of the Mediterranean.*

- 2007-2009 Member of the Scientific Council of the Istituto Nazionale di Oceanografia e di Geofisica Sperimentale – IN-OGS (Trieste).
- 2005-2010 Member of the Scientific Council of the CoNISMa (Consorzio Interuniversitario Science del Mare, Roma).
- 2005-2008 Member of the SCOR WG 126 on The Role of Viruses in Marine Ecosystems

### **Seminal Activity (*Plenary Invited Speaker*)**

RD has been invited as plenary speaker by a several Scientific Institutions (selected list):

- COP26 UK-Italy
- Royal Society of London (UK)
- College de France (Paris)
- National Oceanographic Centre (UK)
- CIESM: Monaco, France.
- Mediterranean Targeted Projects (MTP), Perpignan, France.
- 15EU DGXII, EU-MTP: “Progress in Oceanography of the Mediterranean Sea”.
- EUROCEANS.
- CIESM, Barcellona.
- ICZGAR, Greece.
- 222AGU (America Geophysical Union, S. Francisco)
- Marine Biology Society of Latin America (Cuba)
- LifeWatch ERIC
- IUCN working group (Marseille France)
- International conference Environmental Survival and Sustainability, Cyprus
- Venice International University (Venice)
- *Advanced Study Courses of the European Commission,*
- *UNESCO-Intergovernmental Oceanographic Commission (IOC)*

### **Editorial Activity**

- Since 2002 RD is Editor in Chief of the international journal Chemistry and Ecology (Taylor & Francis, London) an ISI journal - Web of Science.
- Since 2013 is Member of the Editorial Board, Scientific Reports (Nature).
- Member of the editorial board of many other international ISI (Web of Science) journals:
  - *Open Journal of Ecology (till 2009), Oceanologica Acta (till 2005),*
  - *Open Journal of Marine Biology; Transitional Water Bulletin;*
  - *Animals; Diversity; International Journal of Oceanography.*
- Founder and Editor of the international journal Advances in Oceanography and Limnology.
- Honorary member of the Board of Research and Reports in Biodiversity Studies.

RD collaborates as member of the evaluation board or reviewer for >50 international journals, including: *Nature, Nature Reviews Microbiology, Nature Ecology and Evolution, Science, Science Advances, Current Biology, Proceedings National Academy of Sciences (PNAS)*

## 4. EXPERIENCES IN THE MANAGEMENT OF RESEARCH INSTITUTIONS

### Management of international bodies and institutions

- 2020 – Member (Italian representative) of the **Joint Program Initiative Healthy and Productive Oceans and Seas** (JPI Oceans)
- 2019 – present **Member of the European Marine Board** (*European think tank in marine science policy*)
- 2017 – Present Member of the **Steering Board of OECD - Programme Fostering Innovation in Ocean Economy**
- 2014 – Present Member of the **European Implementation Board EU Research Infrastructure ERIC-EMBRC** (European Marine Biology Resource Centre - seat Paris, Seat of the Italian Node: Naples)
- 2010-2013 – Management of the **Board of the International Network LICO** (*Life in a Changing Ocean*, Montreal, Canada)
- 2008-2012 – President of the **European Federation of Marine Science and Technology Societies** (seat Paris)
- 2005-2010 Member of the **Management Board of the International Census of Marine Life** (EuroCoML) [more than 80 nations engaged in a 10-year scientific initiative].

### Management of Foreign Research Bodies and Institutions

- 2018 - 2022 Re-nominated **President of the Stazione Zoologica**, Anton Dohrn, Naples, Italy
- 2016 - 2018 **President of Dohrn Foundation**, Naples, Italy
- 2013 – present Member of the **Council of Presidents of Public Research Institutions** (ConPER)
- 2013 - 2017 **President of the Stazione Zoologica**, Anton Dohrn, Naples, Italy
- 2013 - present Member of the **Administration Council** (Board of Directors) of **WWF**
- 2010-2013 **Pro-Rector of Polytechnic University of Marche** (delegated to Research).
- 2011-2014 **CEO of Academic Spin Off** and Startup companies (founder of 2 Startups)
- 2011-2014 **Director** of the Dept. Life Environmental Sciences (Polytechnic University of Marche)
- 2011-2014 **Member of the Senate** of the Polytechnic University of Marche
- 2011-2014 **Dean of the Faculty** of Science at the Polytechnic University of Marche (ff).
- 2011-2013 **President of the Italian Society of Ecology** (SIte)
- 2008-2011 **President-elect** of the *Italian Society of Ecology* (SIte)
- 2008-2011 **President of the Italian Association of Oceanography and Limnology** (AIOL).
- 2008-2009 **Member of the Administration Council of ICRAM** (Institute for Research Applied to the Sea) of the Ministry of Environment (Nominated by the Minister of MIUR)
- 2005-2011 **Director of the Department of Marine Sciences** (Polytechnic University of Marche)
- 2004-2010 **President of the Italian Chapter of EEIU** (Eco-Ethic International Union)

## Institutional and Governmental Boards and Panels

- 2019 – MIUR: Nominated by the Minister Marco Bussetti, Ministry of the Education University and Research (MIUR), member of the **National Scientific Committee for the Divulcation of the Scientific Research** (Art.2 quater L. 113/1991)
- 2019 – MATTM: Nominated by the Minister Sergio Costa, Ministry of the Environment Territory and Sea (MATTM), member of the **National Committee VIA – VAS** (Art 6. Dlgs n. 104, 2017).
- 2019 – MIUR: Nominated by the Minister Sergio Costa, Ministry of Environment Territory and Sea (MATTM) Member of the **National Committee on Natural Capital** (Art. 67, L. 221, 2015).
- 2019 – MIUR: Nominated for the second time member for the evaluation **National committee DM44/2008**
- 2017 – 2018 MIUR: Nominated by the Ministry of University and Research (MIUR) as member for the evaluation panel for funding the research activity of Italian private research institutions DM44.
- 2015 – ANVUR: Nominated member of the **Group of Experts ANVUR** (National Agency for Evaluation of University and Research)
- 2012-2016 ISTAT: **Coordinator of the Commission 1 ISTAT** for statistics on the Environment, National Institute for Statistics (BES Benessere Equo e Solidale)

## 5. RESEARCH INTERESTS

RD is an Ecologist, with research focused on the sustainable development and identification of new approach to make eco-compatible the human presence on Earth.

His ecological background is oriented to inter- and multidisciplinary approaches, data analysis, experimental – field science.

His approach to problem solving is based on the establishment of teamwork and interactions with different methodologies, evaluation and exploitation of available knowledge and analysis of complex systems.

Multidisciplinary studies linking different disciplines, such as *Biology, Ecology, Environmental Sciences, Physics, Socio-Economy, Medicine, with a strong link to Technology and technological development.*

**Research focus:** Impact of global change on life on Earth (and on marine ecosystems in particular). Functional analysis of ecosystems and Ocean health. Multidisciplinary research on deep-sea ecosystems.

### **Research collaborations**

Ongoing long-term research collaborations with:

- IFREMER, UPMC, CNRS (France),
- Scripps, North Carolina University (USA),
- JAMSTEC (Japan),
- Newfoundland University (Canada);
- National Oceanography Centre (UK).

Within the frame of past and present researches additional direct collaborations include continuous links with: France, Belgium, The Netherlands, Germany, Austria, Denmark, Sweden, Norway, Spain, Greece, USA, Cuba, Canada, Israel, Romania, Ukraine, Indonesia, Thailand, Australia, New Zealand and Japan.

**Visiting scientist** at:

- UPMC - Roscoff (France)
- University of Galway
- College de France (France)
- Institute of Marine Biology of Crete (Greece).

## 6. SCIENTOMETRIC DATA

Here below a list of the main scientometric indicators:

- H (Hirsch) index - **88**
- **450+** articles on ISI journals with IF (WoS)
- **>26,000** citations (GS).
- **>3200 citations** per year
- i-10 Index: **>300** (GS)
- **>60** different Q1 ISI Journals

- Has published as leading Author, last or corresponding Author: 2 *Nature*, 2 *Science*, 2 *Science Advances*, 2 *Nature Communications*, 1 *Nature Microbiol Reviews*, 2 PNAS, 2 *Nature Ecology Evolution*, 3 *Trends Ecology Evolution*.
- Top Cited Scientist** - Aug 2019 (*Public Library of Science* - [doi.org/10.1371/journal.pbio.3000384](https://doi.org/10.1371/journal.pbio.3000384))
- Top Expert in World Oceans and Seas** (Ranked first in Europe and N. 1 in the World) from Expert Scape for the decade 2010-2020.
- Top Italian Scientist of the Faculty of 1000 Biology** for the number of papers recommended in Ecology/Environmental Science (**8 ranked as exceptional**)
- Top cited Scholar scientist** in “Deep-sea Biology”:  
[https://scholar.google.com/citations?view\\_op=search\\_authors&hl=en&mauthors=label:deep\\_sea\\_biology](https://scholar.google.com/citations?view_op=search_authors&hl=en&mauthors=label:deep_sea_biology)
- Top Cited Scientist** in the field of “Marine Biodiversity” (Scholar Citations):  
[https://scholar.google.com/citations?view\\_op=search\\_authors&hl=en&mauthors=label:marine\\_biodiversity](https://scholar.google.com/citations?view_op=search_authors&hl=en&mauthors=label:marine_biodiversity)
- The most influential scientist** worldwide on the “Mediterranean Sea” (source Web of Science)

## 7. Publications on Top Journals

List of top journals on which the research of RD has been published.

- *Nature* (with cover in 2008),
- *Science*
- *Nature communications*
- *Nature protocols*
- *Nature Ecology & Evolution*



- *Nature Microbiology Reviews*
- *Science Advances*
- *Proceeding National Academy of Science USA (PNAS)*
- *Trends in Ecology and Evolution* (cover in 2017)
- *Plos Biology*
- *Current Biology*
- *Ecology Letters*
- *Biological Reviews*

### List of Selected Publications

1. **Danovaro R.** et al., (2019) Ecological indicators for a global deep-ocean monitoring and conservation strategy. *Nature Ecol & Evol*. [Article featured in Faculty Opinions](#)
2. Cavicchioli R, **Danovaro R.**, et al. (2019) Scientists' warning to humanity: microorganisms and climate change. *Nature Microbiology Reviews*. [Global warning for the impact of climate change on microbes and their functions.](#)
3. **Danovaro R.**, et al. (2017) A submarine volcanic eruption leads to a novel microbial habitat. *Nature Ecol & Evol*. [Feature Article with request of Blog from Nature.](#) [Article awarded of the Top 10 species discovered in 2018.](#)
4. **Danovaro, R.** et al. (2017) An ecosystem-based deep-ocean strategy. *Science*, 355 (6324), pp. 452-454. [Presented at the UN conference in New York in 2017.](#)
5. **Danovaro R.**, et al. (2016) Virus-mediated archaeal hecatomb in the deep seafloor. *Science advances* 2 (10), e1600492
6. **Danovaro R.**, et al. (2016) Macroecological drivers of archaea and bacteria in benthic deep-sea ecosystems. *Science advances* 2 (4), e1500961
7. Dell'Anno, A., Corinaldesi, C., **Danovaro, R.** (2015) Virus decomposition provides an important contribution to benthic deep-sea ecosystem functioning. *Proceedings of the National Academy of Sciences of the United States of America PNAS*, 112 (16), pp. E2014-E2019.
8. Barbier, E.B., ... **Danovaro R. et al.** (2014) Protect the deep sea. *Nature*, 505 (7484), 475-477. [This paper was a starter of the strategy of the Marine restoration agenda in EU.](#)
9. Pusceddu, A., Bianchelli, S., Martín, J., Puig, P., Palanques, A., Masqué, P., **Danovaro, R.** Chronic and intensive bottom trawling impairs deep-sea biodiversity and ecosystem functioning (2014) *PNAS Proceedings of the National Academy of Sciences of the United States of America*, 111, 8861-66. [Contribution to EU policy for the ban of deep-sea fisheries.](#)
10. **Danovaro, R.** et al. (2008) Major viral impact on the functioning of benthic deep-sea ecosystems (2008) *Nature*, 454,1084-1087. [Cover of Nature and highlight of the 20 top articles of Nature in 2008.](#)
11. Dell'Anno, A., **Danovaro, R.** Ecology: Extracellular DNA plays a key role in deep-sea ecosystem functioning (2005) *Science*, 309 (5744), p. 2179. [This manuscript set up the bases for the development of the Environmental DNA approach.](#)

### Selected reviews and Primers

- I. **Danovaro R.**, Corinaldesi C., Dell'Anno A., Snelgrove P.V.R. (2017) Deep-sea biology under global change. *Current Biology*, Invited *Primer*.
- II. M Yasuhara, R Danovaro (2015) Temperature impacts on deep sea biodiversity. *Biological Reviews* 91 (2), 275-287

- III. **Danovaro, R.**, Snelgrove, P.V.R., Tyler, P. (2014) Challenging the paradigms of deep-sea ecology *Trends in Ecology and Evolution*, 29 (8), pp. 465-475.
- IV. **Danovaro R.**, C Corinaldesi, A Dell'Anno, JA Fuhrman, JJ Middelburg (2011) Marine viruses and global climate change. *FEMS microbiology reviews* 35 (6), 993-1034
- V. **Danovaro, R.**, Dell'Anno, A., Fabiano, M., Pusceddu, A., Tselepidis, (2001) A. Deep-sea ecosystem response to climate changes: The eastern Mediterranean case study *Trends in Ecology and Evolution*, 16 (9), pp. 505-510.

### Books and Dissemination Activities

Roberto Danovaro together with the Economist Mauro Gallegati has published the book **Condominio Terra** for the (Press Giunti) ranked second for the *Award for Scientific Dissemination (Premio Nazionale di Divulgazione Scientifica, Section Economy, 2019)*.



Roberto Danovaro has published the following **Scientific Books**:

- Danovaro R. (2019). *Marine Biology* (Biologia Marina – 2nd Edition. UTET - De Agostini (Italy), 460 pp.
- Danovaro R. (2013). *Marine Biology: Biodiversity and functioning of marine ecosystems* (Biologia Marina, biodiversità e funzionamento degli ecosistemi marini). CittàStudi Edizioni De Agostini Scuola SpA –Novara (Italy), 451pp.
- Danovaro R. (2010). *Methods for the study of deep-sea sediments, their functioning and biodiversity*. CRC Press, Taylor & Francis (London), 456 pp. in English for CRC Press, USA.
- Danovaro R. (2001). *Environmental recovery: technologies, bioremediation and biotechnologies* (Recupero Ambientale: Tecnologie, bioremediation e biotecnologie. UTET Libreria Srl (Italy), 581pp.
- Della Croce N, Cattaneo-Vietti R, Danovaro R. (1997). *Ecology and protection of the coastal marine environment* (Ecologia e protezione dell'ambiente marino costiero) UTET 426 pp.

### International Position papers and reports (selected):

- Danovaro in coll. 2017. **Food from the Oceans**. Science Advices for Policy from European Academies. High-Level Group of Scientific Advisors. Scientific Opinion No. 3/2017n.1, 154 pp.
- Danovaro in coll. 2016. **Explaining Ocean Warming: Causes, scale, effects and consequences**. IUCN: Edited by D. Laffoley and J. M. Baxter.
- Rogers, A.D., Brierley, A., Croot, P., Cunha, M.R., **Danovaro, R.**, et al., (2015) **Critical challenges for 21st century deep-sea research**. Larkin, K.E., Donaldson, K. and McDonough, N. (Eds.) Position Paper 22 of the European Marine Board, Ostend, Belgium. 224 pp.
- Danovaro R., et al. 2003. Deep-sea Biodiversity in the Mediterranean Sea: a comparison at different spatial scales. *Mare Incognitum? Exploring Mediterranean deep-sea biology*. CIESM Workshop Monographs 23, 43-54.

## 8. HONORS AND AWARDS

### International awards

1. **Award ExpertEscape** top world scientist in the “Oceans and Seas for the decade 2010-2020”
2. Invited Member of the **International advisory board** - Lorand Eotvos Research Network
3. **Award Top Cited Italian Scientists – Public Library of Science** - August 2019
4. **Award Top Expert in World Oceans and Seas** (First in EU and N.2 in the World) 2019
5. **Award top 10 New Species discovered** - 2018 - *New York University* (ESF top ten)
6. Invited Member of the **EU Academy of Sciences** – 2018
7. Member of the **High-Level Group of Scientific Advisors** of the European Commission, Directorate-General for Research and Innovation - 2017.
8. **Award ENI** (FEEM) “*Protection of the Environment*” conferred by the President Giorgio Napolitano - 2013.
9. **Award Faculty of 1000 Biology**: nominated Member of the Faculty (Section Ecology 2013)
10. **Award Médaille de la Société Océanographique de France** - 2010 *Institute Oceanographique de Paris* (conferred in Paris by the Prince of Monaco in 2011).
11. **Award Biology Prize** – Top Biologist - BioMedCentral, 2010 (London, June, 2011).
12. **Award Top 20 papers published in Nature** - 2008 (with cover of the issue of Nature).
13. **Highly cited scientist** - Environmental Microbiology (2008)
14. **Nominated President of the European Federation of Marine Science and Technology Societies** (seat Paris, 2008-2012)

### National awards

1. **Award Slow Food** for the Environment (“*Gold mussel*”) - 2017.
2. **Award Premio Amendolara per la Ricerca** - 2018
3. **Member of Top Italian Scientists** - VIA Academy (since 2010).

## 9. EVALUATION OF THE NATIONAL AND INTERNATIONAL RESEARCH

### *Evaluation of International Research*

2019 – present Intelligence Unit QS Global Academic Survey  
2019 – present ISF – Evaluator for the Israel Science Foundation  
2019- present Evaluator proposal Croatian Research Agency  
2018- present Evaluator proposal Germany  
2018- present Evaluator proposal ERC– Synergy (EU)  
2016- present Evaluator proposal ERC Slovenia (Slovenian Research Agency)  
2015- present Evaluator proposal Private Foundation Cousteau  
2010-present Evaluator of proposals for the *National Science Foundation* (NSF), USA  
2010-present Evaluator of proposals for the NOAA, USA  
2012-present Evaluator of the proposals of the ANR (*Agence Nationale Recherche*) France  
2010-present Evaluator of proposals for National Research Proposals, New Zealand  
2010-present Evaluator of proposals for National Research Proposals, Australia.  
2010-present Evaluator of proposals for the National Iceland Research Programs.  
2013-present Evaluator of proposals for National Research Proposals, Slovenia.

2010-2012 Evaluator of proposals for the National Research Funds, Austria  
2010-2012 Evaluator of proposals for the NERC, UK  
2009-2010 Evaluator of proposals for the National Research Funds, Belgium  
2009-2010 Evaluator of proposals for National Research Proposals, The Netherlands

### ***Evaluation of Institutional Italian and EU Research Bodies***

2017 Member of the Evaluation panel for financial support to private research institutions (DM 44).  
2004-2012 Evaluator for the EU in VI and VII Framework Programs.  
2011-2013 Review Panel Member ERC Advanced Grants  
2011-2013 Review Panel Member Marie Curie Fellowships, EU  
2010-2012 Review Panel Member ERC Starter and consolidator Grants  
2011 Member of the Board of the GEV (*Group Expert Evaluators*) ANVUR (Area 05)

### ***Evaluation of Career – Position upgrade / Recruitment of Scientists***

Evaluator full professorship USA (California Scripps, Stony Book)  
Evaluator full professorship UK (California Scripps, Stony Book)  
Evaluator full professorship Singapore University.  
Evaluator full professorship Canada (Dalhousie University, NewFoundLand University)  
Evaluator Dean of the Faculty of Science (*Rhode Island University*)  
Evaluator full professorship Israel (Institute of Science)  
Evaluator full professorship and Research Director in France (Perpignan).  
Evaluator full professorship Greece (Crete University).

### ***Evaluation of Research Institutions***

Member of the Evaluation board of CNR (evaluation of 14 Institutes belonging to 2 Departments)  
Member of the evaluation board of CNRS (with visits and interview of several French institutions)  
Member of the evaluation board of HCMR Hellenic Centre of Marine Research (Greece)  
Member (invited) of the Evaluation board of Leibniz Institute (Germany).  
Member of the Evaluation Board of Slovenian Research Institutes (Slovenia).  
Member of the international advisory board the Lorand Eotvos Research Network (newly formed, large network of institutes with ca 5000 researchers in 15 institutes, Hungary).

## **10. INCENTIVATION & TRANSFER OF KNOWLEDGE OF RESEARCH RESULTS**

2010-2018 Co-Founder of the *Going Blue Too Foundation* (Charitable organization UK) for promoting Eco-friendly personal care products with no impacts on the Oceans.  
2004-2014: Founder of two start up (*Spin Off*) participated by the Polytechnic University of Marche.  
2003 – 2010 Inventor of 2 international Patents in collaboration with industries (oil companies, personal care companies).  
- *Method and plant for controlling the colonization of submerged structure surfaces by aquatic filtering organisms* US20050232960A1  
- *Sunscreen compositions* US20140170096A1  
2008—2011 Member of the Evaluation Committee of International Patents (UNIVPM and SZN).  
2016 Founder of the Grant Innovation Office at Stazione Zoologica Anton Dohrn  
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