

Curriculum Vitae

Gian Marco Luna

Born 2 January 1976 in Ascoli Piceno (Italy)

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Current Position

Research Scientist and Coordinator
of the Marine Microbiology Laboratory
at the National Research Council of Italy
Institute of Marine Science (ISMAR – CNR)
Venezia and Ancona (Italy)



Career

Laurea (110 /110) in Marine Biology and Oceanography (2001), University of Ancona
Scholarship (2004) at the Marine Biological Laboratory, Woods Hole, USA
PhD in Marine Biology and Ecology (2005), Polytechnic University of Marche
Post-doc in Marine Microbial Ecology (2005-2010), Polytechnic University of Marche
FIRB Junior Researcher (2010-2011)
Research Scientist at the CNR-ISMAR, Venice (November 2011 - present)

Websites

<https://scholar.google.it/citations?user=RZ3P1YYAAAAJ&hl=it>

<http://www.ismar.cnr.it/personale/luna-gian-marco>

<https://lunalab.jimdo.com/>

Research interests

His research focuses on marine microbiology and microbial ecology in coastal and deep-sea ecosystems, with main focus on the biodiversity, biogeochemical and ecological role of marine microbes (Bacteria and Archaea). He is interested in understanding how microbial diversity and function change in relation to the main physical, chemical and biological drivers, and to explore the potential of metagenomics to study marine microbial communities. Other research interests address the ecology and evolution of pathogenic bacteria of fecal origin in aquatic ecosystems, including mechanisms of antibiotic resistance.

Memberships

Since 2005 Member of SIe (Società Italiana di Ecologia), where he has founded in 2008 the section of Microbial Ecology.

Since 2003 Member of AIOL (Associazione Italiana di Oceanologia e Limnologia), where he is member of the Board of Presidency (2016 - 2018).

Research activity

Participated (in some instances as Research Unit Responsible) to several EU-funded research projects (ADIOS, INTERPOL , MEDVEG, REEFRES, HERMES, CORALZOO, VECTOR, HERMIONE, Deep Sea & Sub-Seafloor Frontiers, PNRA, EXPLODIVE, OCEAN-CERTAIN, BALMAS), to national projects (RITMARE, PRIN projects and projects funded by INAIL-ex ISPESL and ISPRA).

Participated to 13 oceanographic cruises in the Mediterranean Sea, the Atlantic and the Arctic Ocean onboard Italian and European research vessels (Dallaporta, Urania, Universitatis, Minerva Uno, Aegaeo, Discovery, Pelagia, L'Europe, Jan Mayen). He has carried out field activities in

several coastal sites in Italy, Greece, Spain and Israeli. He has coordinated (as chief scientist) a multidisciplinary oceanographic cruise to study the biology and ecology of deep-sea submarine canyons in the Ligurian Sea (May 2013).

Visiting scientist at the Laboratory of Public Health Microbiology at CSIRO, Land and Water, Ecosciences Precinct, Brisbane, Australia (2014)

Reviewing activity

Since 2006, he has been referee for: The ISME Journal, Trends in Microbiology, FEMS Microbiology Ecology, Microbial Ecology, Aquatic Microbial Ecology, Scientific Reports, Environmental Microbiology, Environmental Science & Technology, Water Research, Environmental Microbiology Reports, PLOS One, Deep-Sea Research, Hydrobiologia, Journal of Marine Biology Association UK, Water, Soil and Air Pollution, Ocean Science, Chemistry and Ecology, Letters in Applied Microbiology, Marine Environmental Research, Environmental Monitoring and Assessment, Microbial Drug Resistance, Journal of Environmental Monitoring, Journal of Hydrology, Environmental Pollution, Advances in Oceanography and Limnology, Microbial Biotechnology, Frontiers in Microbiology, Frontiers in Environmental Health, Annals in Microbiology, Marine Drugs, Coral Reefs, Environmental Science: Processes and Impacts (formerly Journal of Environmental Monitoring), Polar Biology, Journal of Industrial Microbiology and Biotechnology, Research in Microbiology, Journals of Soils and Sediments, International Journal of Environmental Science and Technology, Science of the Total Environment.

Reviewer of research proposals for the Austrian Science Fund – FWF (2011), for the Executive Agency for Higher Education, Research, Development & Innovation Funding (Romania, 2012-2017), for the University of Southern California's (USC) Sea Grant Program (2015) and for the joint EU call BiodivERsA3 ERA-NET (2016).

Editorial Board Membership

Member of the Editorial Board of the Journal of Limnology

Member of the Editorial Board (Review Editor) of Frontiers in Environmental Science

Member of the Editorial Board (Review Editor) of Frontiers in Public Health

Member of the Editorial Board (Review Editor) of Frontiers in Ecology and Evolution

Member of the Editorial Board (Review Editor) of Frontiers in Marine Science

Tutorship activity

Scientific Responsible for a Marie-Curie Fellowship at ISMAR-CNR

Co-tutor of 13 master degree theses at the Universities of Ancona, Venice and Padova

Publications

He wrote 46 papers onto ISI journals with impact factor, 6 book chapters, a number of articles published on non-ISI journals and several abstracts published within Conferences proceedings. H index = 22, total cites = 1700 (Google Scholar Citations).

Selected publications

Luna G.M., Manini E., Danovaro R. (2002) Large fraction of dead and inactive bacteria in coastal marine sediments: comparison of protocols for determination and ecological significance. *Applied and Environmental Microbiology* 68: 3509-3513

Luna G.M., Dell'Anno A., Giuliano L., Danovaro R. (2004) Bacterial diversity in deep Mediterranean sediments: relationship with the active bacterial fraction and substrate availability. *Environmental Microbiology* 6: 745-753

- Manini E., **Luna G.M.**, Danovaro R. (2004) Benthic bacterial response to variable estuarine inputs. *FEMS Microbiology Ecology* 50: 185-194
- Luna G.M.**, Dell'Anno A., Danovaro R. (2006) DNA extraction procedure: a critical issue for bacterial diversity assessment in marine sediments. *Environmental Microbiology* 8: 308-320
- Danovaro R., **Luna G.M.**, Dell'Anno A., Pietrangeli B. (2006) Comparison of two fingerprinting techniques, terminal restriction fragment length polymorphism and automated ribosomal intergenic spacer analysis, for determination of bacterial diversity in aquatic environments. *Applied Environmental Microbiology* 72:5982-5989
- Luna G.M.**, Stumm K., Pusceddu A., Danovaro R. (2009) Archaeal diversity in deep-sea sediments estimated by means of different Terminal-Restriction Fragment Length Polymorphisms (T-RFLP) protocols. *Current Microbiology* 59:356–361
- Danovaro R., Corinaldesi C., **Luna G.M.**, Magagnini M, Manini E, PUSceddu A. (2009) Prokaryote diversity and viral production in deep-sea sediments and seamounts. *Deep Sea Research Part II*: 56: 738-747
- Danovaro R., Company J.B., Corinaldesi C., D'Onghia G., Galil B., Gambi C., Gooday A.J., Lampadariou N., **Luna G.M.**, Morigi C., Olu K., Polymenakou P., Ramirez-Llodra E., Sabbatini A., Sardà F., Sibuet M., Tselepidis A. (2010) Deep-Sea biodiversity in the Mediterranean Sea: the known, the unknown and the unknowable. *Plos One* 5: e11832
- Corinaldesi C., Barucca M., **Luna G.M.**, Dell'Anno A. (2011) Diagenesis, origin and genetic imprint of extracellular DNA in permanently anoxic deep-sea sediments. *Molecular Ecology* 20: 642–654
- Amaro T., **Luna G.M.**, Danovaro R., Billett D.S.M., Cunha M.R. (2012) High prokaryotic biodiversity associated with gut contents of the holothurian *Molpadia musculus* from the Nazaré Canyon (NE Atlantic). *Deep-Sea Research I* 63: 82–90
- Luna G.M.**, Bianchelli S., Decembrini F., De Domenico E., Danovaro R., Dell'Anno A. (2012) The dark portion of the Mediterranean Sea is a bioreactor of organic matter cycling. *Global Biogeochemical Cycles* 26:2
- Luna G.M.**, Corinaldesi C, Rastelli E, Danovaro R (2013) Patterns and drivers of bacterial α - and β -diversity across vertical profiles from surface to subsurface sediments. *Environmental Microbiology Reports* 5: 731-739
- Corinaldesi C., Tangherlini M., **Luna G.M.**, Dell'Anno A. (2014) Extracellular DNA can preserve the genetic signatures of present and past viral infection events in deep hypersaline anoxic basins. *Proceedings of the Royal Society B: Biological Sciences* 281 (1780), 20133299
- Luna G.M.**, Corinaldesi C., Dell'Anno A., Pusceddu A., Danovaro R. (2013) Impact of aquaculture on benthic virus-prokaryote interactions in the Mediterranean Sea. *Water Research* 47: 1156-1168
- Quero G.M., Fasolato L., Vignaroli C., **Luna GM.** (2015) Understanding the association of *Escherichia coli* with diverse macroalgae in the lagoon of Venice. *Scientific Reports* 5: 10969
- Quero G.M., Cassin D., Botter M., Perini L., **Luna G.M.** (2015) Patterns of benthic bacterial diversity in coastal areas contaminated by heavy metals, polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs). *Frontiers in Microbiology* 6, 1053
- Luna G.M.**, Chiggiato J., Quero G.M., Schroeder K., Bongiorno L., Kalenitchenko D., Galand P.E. (2016) Dense water plumes modulate richness and productivity of deep sea microbes. *Environmental Microbiology* 18: 4537-4548