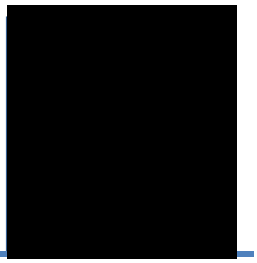
CURRICULUM VITAE

Angelina Lo Giudice, Ph.D.



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Main Research Fields

Research activities are mainly addressed to the study of the prokaryotic communities in polar environments. Particular attention is paid to:

- Microbial ecology (diversity and function) of aquatic and terrestrial systems
- Associations between prokaryotes and marine benthic filter-feeders
- Prokaryotes in the cryosphere
- Astrobiological implications of extremophilic microbes
- Response by prokaryotic communities to anthropogenic stressors
- Biotechnological potentialities of cold-adapted bacteria

Research Projects on *Polar Topics*

ON-GOING projects

- **PUFFIN:** *Prokaryotic commUnities at the southern edge of the Arctic: a Focus on antibiotic resistance in lakes oF the Melrakkaslétta Peninsula (IcelaNd)*, granted by the INTER-ACT (Funded by H2020) (Grant Agreement No. 871120), Project Coordinator (2024-2025).
- **MORPHEUS:** *HuMan fOotprint elucidation in the subarctic region of the Pasvik River by PHarmacEutical and microbial multidrUg resiStance monitoring*, granted by the INTER-ACT (Funded by H2020) (Grant Agreement No. 871120), Project member (2024-2025).
- **Ice2FLUX:** *HydrologIcal changes in ArctiC Environments and water-driven biogeochemical FLUXes*, granted by Italian Arctic Research Program (PRA-MUR, PRA2021/0027), WP leader (2022-2024).
- **CHARCOT:** *An oceanographic snapshot in the CHanging ARctiC passing thrOugh The "North Pole"*, Funding: Fondation PONANT within the Call ARICE, Project member.
- **TEMPLE LIFE:** *The TEMPLE of LIFE in the west Antarctic seas: from microbes to iconic animals*, Funding: Fondation PONANT within the Call ARICE, Project member.
- **ELENO:** *Habitat templatE, microbiaL signaturEs and icoNic life in a changing Arctic Ocean*, Funding: Fondation PONANT within the Call ARICE, Project member.
- **SIGNATURE:** *PhySIcal and bioGeochemical traciNg of wATer masses at source areas and export gates in the Ross Sea and impact on the SoUtheRn OcEan*, Italian Antarctic Research Program (PNRA-MIUR), RU Component (2021-2024).
- **CASSANDRA:** *AdvanCing knowledge on the present Arctic Ocean by chemical-phySical, biogeochemical and biological obServAtioNs to preDict the futuRe chAnges*, Italian Arctic Research Program (PRA-MUR), RU Component (2021-2024).
- **EcoClimate:** *Nutrient cycling, ecosystem functioning and climate change in Arctic lake ecosystems*, granted by Italian Arctic Research Program (PRA-MUR), RU Component (2021-

2024).

- **CIRCE:** *Sear**Ch**I**ng for eme**R**ging **C**ontaminants in Sub-Arctic riv**E**rs*, granted by the INTER-ACT (Funded by H2020) (Grant Agreement No. 871120), Project Coordinator (2021-2023).
- **SPRYNTT:** *Comparative study on **S**ponge-associated **P**rokar**Y**otic commu**N**ities in Ro**T**hera (Adelaide Island, Antarctic Peninsula) and **T**hetys Bay (Terra Nova Bay, Ross Sea) sub-littoral zones*, Transnational Access (TA) program of ASSEMBLE Plus (project n. 9713), Project Coordinator (2019-2021).
- **BIP:** ***B**enthic filter-feeding **I**nvertebrates from the Arctic as accumulators of **P**ollutants and tolerant bacterial communities*, granted by the INTER-ACT (Funded by H2020) (Grant Agreement No. 730938), Project Coordinator (2020-2022).
- **DROP:** *"**D**iversity of bacte**R**ial communities ass**O**ciated with s**P**onges from wild populations and in coupling with fish aquaculture systems*, Transnational Access (TA) program of ASSEMBLE Plus (project n. 13490), Member of the Proposal Team (2020-2021).
- **Sym(b)^{2}iosis:** *As**S**a**Y**ing **M**arine **B**enthic invertebrates in the Arctic for the associated **B**acter**I**al c**O**mmunitie**S**: d**I**versity and biotechnological potential**S***, Transnational Access (TA) program of ASSEMBLE Plus (project n. 11142), Member of the Proposal Team (2020-2021).
- **POLAR SLIMY:** ***PO**tentia**L** of **A**nta**R**ctic **S**ponges Myca**L**e acerata and Dendr**I**lla antarctica **M**ucus **layer*****,*** Transnational Access (TA) program of ASSEMBLE Plus (project n. 11145), Member of the Proposal Team (2020-2021).
- **CryoCarb** (PNRA18_00007): *Bacterial LPSs and EPSs structural features in response to temperature fluctuations in the Antarctic Sea*, Italian Antarctic Research Program (PNRA-MIUR), RU Responsible (2021-2024).
- **HABEAS** (PNRA18_00075): ***H**arnessing **A**ntarctic **B**act**E**ria by systems biology **A**pproache**S***, Italian Antarctic Research Program (PNRA-MIUR), RU Component (2020-2022).
- **RESTORE** (PNRA18_00137): ***R**obotic-based inv**EST**igation and m**O**nitoring **R**oss s**E**a*, Italian Antarctic Research Program (PNRA-MIUR), RU Component (2019-2023).

PAST projects

- ***P^3*** (PNRA2016/AZ1.08): *Antarctic **P**orifera: Hot-spots of **P**rokaryotic diversity and biotechnological **P**otentialities*, Italian Antarctic Research Program (PNRA-MIUR), Project Coordinator (2017-2021).
- ***ANT-Biofilm*** (PNRA2016/AZ1.01): *Microbial Colonization of Antarctic benthic environments*, Italian Antarctic Research Program (PNRA-MIUR), RU Responsible (2017-2021).
- **CliC-PerEco** (PNRA2016/AZ1.07): *Change and permafrost ecosystems in Continental Antarctica*, RU Component (2017-2019).
- **ARCA Project**: *ARctic present Climate change and pAst extreme events*, Project participant.
- **PNRA2013/AZ1.04**: *New drugs for Cystic Fibrosis opportunistic pathogens from Antarctic microbiota*, RU Responsible (2014-2016).
- **PNRA2013/B4.02**: *Exploiting the biotechnological potential of Antarctica: metabolic modelling for the optimization of bioactive molecule production by bacteria*, RU Responsible (2014-2016).
- **PNRA2013/AZ1.05**: *Permafrost ecology at Victoria Land: past, present and future evolution in a global change context*, Project Participant (2014-2016).
- **SpongePOP**: ***Sponge** associated culturable microbiome able to degrade **P**ersistent **O**rganic **P**ollutants along the Pasvik River and the Bokfjorden (Norway)* granted by the European Project INTER-ACT (FP7), Project participant (2014-2015).
- **SedMicro**: ***Sed**imentary **Micro**bial communities along the Pasvik River (Norway) and Varanger Fjord system in relation to heavy metal and polychlorinated biphenyl contamination* granted by the European Project INTER-ACT (FP7), Project participant (2013-2015).
- **MicroRem**: ***Micro**bial communities along Arctic Fjords: biodiversity and **Rem**oval of polychlorinated biphenyls* granted by the European Project INTER-ACT (FP7), Project participant (2012-2013).
- **PolyArc**: *Occurrence of PCB-degrading bacteria in relation to PCB contamination in coastal marine environments in Ny-Ålesund (Svalbard, Spitsbergen)* granted by the European Centre for

Arctic Environmental Research in Ny-Ålesund (ARCFAC V; FP6; Grant agreement ID: ARCFAC-26129-2008-70). Project participant (2008-2009).

- **EXANAM**: *Gene exchange between anthropogenic and native microbial communities at Concordia, role in biosafety and environmental protection* granted by the European Space Agency (ESA-PRODEX), Project participant (2008-2010). Grant n. C90359.
- **PNRA2004/1.6**: *Antarctic Bacteria and Cyanobacteria: biodiversity and production of bioactive molecules*, RU Component (2004-2006).
- **PNRA 2002/1.5**: *Marine bacteria from Antarctica: diversity and potentialities*, RU Component (2002-2003).
- Academic Research Programme (University of Messina): *Biotechnological applications of cold-adapted bacteria from lakes of the Byers Peninsula (Livingston Island, Antarctica)*, RU Component (2006-2007).
- Academic Research Programme (University of Messina): *Marine sponge-associated Antarctic bacteria able to produce antimicrobials*, RU Component (2005).
- Academic Research Programme (University of Messina): *Exopolysaccharide production by Antarctic marine bacteria: exploring their potential applications*, RU Component (2003).
- Academic Research Programme (University of Messina): *Lipolytic activity of Antarctic marine bacteria*, RU Component (2002).
- Academic Research Programme (University of Messina): *Studio di batteri psicrofili marini antartici idrocarburo-degradanti ed analisi in microcosmo della loro capacità di degradare il petrolio grezzo*, RU Component (2000).

In the framework of several national and international research projects, Angelina Lo Giudice participated to sampling campaigns in Antarctic and Arctic (e.g., Arctic Norway, Lapland, Iceland and Svalbard Islands) areas, as well as to oceanographic cruises in the Mediterranean Sea.

Research Projects on other topics

ONGOING

- BlueHealthy: BacteriaL and virUsEs as contaminants of Emerging concern in CALabrian marine environmenTs: new tools for tHeir occurrence, distribution and dYnamics, CRIMAC project, WP leader (2021-2024).
- NBFC “National Biodiversity Future Centre”, granted by the Piano Nazionale di Ripresa e Resilienza-PNRR (2022-2025).

PAST

- RITMARE project (University of Messina), Progetto Bandiera MIUR (2012-2013), Project Participant (2008-2009).
- Academic Research Programme (University of Messina): *Comunità micro- e macro-epibionti associate a Pennatulacei (Anthozoa Octocorallia) nello Stretto di Messina*, RU Component (2008-2009).
- Academic Research Programme (University of Messina): *Relazioni tra masse d'acqua e comunità microbiche in Mar Mediterraneo, RU Component (2004).*
- 2003-2004, Programma di Ricerca Europeo ASEFAF “Characterization of the microbial communities within a Recycled Aquaculture System (R.A.S.): an applied microbial ecology study”; Responsabile di Progetto.
- 2003, Programma di Ricerca Europeo ASEFAF “C/N ratio influence on bacterial population in biological filters in a european sea bass (*Dichentrarchus labrax*) recycled system”. Componente di Unità di Ricerca.

Project Evaluator

Angelina Lo Giudice has been scientific evaluator of research proposals submitted to several international agencies, such as the National Science Foundation (NSF, USA), the Instituto Antártico Chileno (INACH, Chile) and the Narodowe Centrum Nauki (NCN, Poland).

Institutional Responsibilities

- 2024-present, member of the advisory board of CNR-ISP.
- 2023-2025, member of the CNR-Department of Earth System Sciences and Environmental Technologies (CNR-DSSTTA) working group for Seabeds (*first mandate*).
- 2023-present, referent of the CNR-ISP thematic area "Biosciences".
- 2023-present, member of the Executive Committee of the *Centro Universitario di Ricerca per lo Studio degli Ambienti Estremi e degli Estremofili "Francesco Maria Faranda"* of the Dept. of Chemical, Biological, Pharmaceutical and Environmental Sciences of the University of Messina (*second mandate*).
- 2023-2025, member of the CNR-DSSTTA working group for Biodiversity (*second mandate*).
- 2023-2024, member of the CNR-ISP working group for OUTREACH and COMMUNICATION(*) (*second mandate*).
- 2022-present, member of the Committee for the Collection and Management of Antarctic samples of the PNRA-MIUR (*second mandate*).
- 2021-present, Scientific Responsible for the Italian Collection of Antarctic Bacteria of the National Antarctic Museum (CIBAN-MNA)(*), kept at the University of Messina.
- 2021-present, Nominated expert of the Polar Expert Group (PEG) in Polar Biology, Ecology and Biodiversity for the prioritization of relevant Polar Research themes within the Horizon 2020 EU PolarNet-2 project.
- 2021-present, member of the CNR working group for INTERACT III(*) Program management at the Italian Station "Dirigibile Italia" (Ny-Ålesund, Svalbard Islands).
- 2019-present, Responsible for the Laboratory "Microbial Ecology and Biotechnology" (EcoBiM)(*) at the CNR-ISP, Messina.
- 2021-2023, member of the CNR-Department of Earth System Sciences and Environmental Technologies (CNR-DSSTTA) working group for Biodiversity (*first mandate*).
- 2020-present, member of the CNR-ISP working group for INTERNATIONAL COOPERATION (Prot. 0000552/2021)(*).
- 2019-2022, member of the CNR-ISP working group for OUTREACH and COMMUNICATION(*) (*first mandate*).
- 2019-2022, member of the Executive Committee of the *Centro Universitario di Ricerca per lo Studio degli Ambienti Estremi e degli Estremofili "Francesco Maria Faranda"* of the Dept. of Chemical, Biological, Pharmaceutical and Environmental Sciences of the University of Messina (*first mandate*).
- 2018-2022, member of the Committee for the Collection and Management of Antarctic samples of the PNRA-MIUR (*first mandate*).
- 1996-2020 Angelina Lo Giudice collaborated with the Dept. of Chemical, Biological, Pharmaceutical and Environmental Sciences of the University of Messina for the maintenance in pure culture of Antarctic bacteria belonging to the CIBAN-MNA.

Editorial Activity

Editorial and Review Boards:

- 2022-2024, Associate Editor (AE) of *Polar Biology*
- 2021-present, Associate Editor (AE) of *Frontiers in Marine Science:* Section *Marine Biotechnology and Bioproducts*
- 2019-present, Editorial Board Member (EBM) of *Diversity - Section Microbial Diversity and Culture Collections* (*)
- 2019-present, Editorial Board Member (EBM) of *Microorganisms - Section Microbial*

Biotechnology[(*)]
- 2022-present, Review Editor (RE) of *Frontiers in Microbiology:* Section *Extreme Microbiology*
- 2020-present, Reviewer Board Member (RBM) of *Marine Drugs*[(*)]
- 2013-2021, Review Editor (RE) of *Frontiers in Marine Science:* Section *Marine Biotechnology*

Guest Editors for:

Open for submission
- 2024, Guest Editor of Polar Biology (other Eds.: Dr. Maria Papale, Dr. Carmen Rizzo) for the Special Issue *Recent advancements of the microbial ecology of the changing polar regions*.

Closed
- 2022, Guest Associate Editor of *Frontiers in Microbiology, Section: Extreme Microbiology* (other Eds.: Dr. Leticia Barrientos, University of La Frontera, Temuco, Chile; Zeinab G Khalil, The University of Queensland, Brisbane, Australia) for the Research Topic *Advances in Biotechnological Applications of Extreme Microorganisms*.
- 2020-23, Guest Co-Editor (other Ed.: Dr. Carmen Rizzo, SZN. Italy) of *Diversity* for the Special Issue in *Culture Collections as Hidden Sources of Microbial Biomolecules and Biodiversity.*
- 2021-22, Guest Co-Editor of *Microorganisms* (other Ed.: Dr. Amedea Perfumo, AWI, Germany) for the Special Issue *Low Temperature Microbiology Meets the Global Challenges of Our Time.*
- 2020-22, Guest Co-Editor of *Water* (other Ed.: Dr. Maurizio Azzaro, CNR-ISP, Italy) for the Special Issue *Microbial Life in the Cold: A Focus on Extreme Aquatic Environments.*
- 2019-20, Guest Co-Editor of *Microorganisms* for the Special Issue in *Polar microbial ecology: the role of microbes in the functioning of extremely cold ecosystems*.
- 2018-2019, Guest Co-Editor of *Diversity* for the Special Issue in *Microbial Diversity in Extreme Environments: Implications for Ecological and Applicative Perspectives*.
- 2020-22, Guest Co-Editor (other Ed.: Dr. Carmen Rizzo, SZN, Italy) of *Crystals* for the Special Issue *Linking Two Apparently Distant Worlds: Crystals and Microorganisms.*

EDITORIALS
1. Perfumo, A., **Lo Giudice, A.** (**2023**) Low-Temperature Microbiology Meets the Global Challenges of Our Time. *Microorganisms* 11: 1217. doi: 10.3390/ microorganisms11051217
2. Núñez-Montero K., Barrientos L., Khalil Z.G., **Lo Giudice A.** (**2023**) Advances in Biotechnological Applications of Extreme Microorganisms. *Frontiers in Microbiology: section Extreme Microbiology.* doi: 10.3389/fmicb.2023.1276435
3. Piepenburg D., **Lo Giudice, A.**, Mataloni, G., Wienecke B., Høye T.T., La Mesa M., Reisinger R., Sukhotin A., Mütze H. (**2022**). Understanding the biology of polar regions is more important than ever: Introducing associate editors to strengthen polar biology. *Polar Biology* 45: 533–535; doi: 10.1007/s00300-022-03026-3
4. **Lo Giudice A.**, Rizzo C. **(2020**). Culture Collections as Hidden Sources of Microbial Biomolecules and Biodiversity. *Diversity* 12: 264; doi: 10.3390/d12070264
5. **Lo Giudice A.**, Gugliandolo C. **(2020**). A special issue on microorganisms from extreme environments in memory of Luigi Michaud (1974-2014). *Diversity* 12(1): 2; doi: 10.3390/d12010002

Angelina Lo Giudice is peer-reviewer for several international scientific journals, including *Polar Biology*, *Antarctic Science*, *Polar Research*, *Microbial Ecology*, *Extremophiles*, *Science of the Total Environment*, *Antonie van Leeuwenhoek*, *Archives of Microbiology*, *Biodegradation*, *BMC Genomics*, *Environmental Science and Pollution Research*, *Enzyme and Microbial Technology*, *Folia Microbiologica*, *International Microbiology*, *Marine Drugs, Scientific Reports*.

Honours, Awards, Qualification

- 2021, Qualification for Supervisor on research vessels and activities in the fields at the National Research Council (CNR, Italy)
- 2020, Qualification for Laboratory Supervisor at the National Research Council (CNR, Italy)
- 2020-present, Qualification for Italian Red Cross (CRI) Volunteer
- 2014-2025, Eligible for Associate Professor position in Ecology at Italian Universities
- 2016-2020, Associated Researcher at the Dept. of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Messina, Italy
- 2015-2019, member of the *Comunità Scientifica di Riferimento* of the Stazione Zoologica *Anton Dohrn* in Naples, Italy
- 2015, Docufilm for *Rai Storia* to be presented at the Quirinale for the International Woman Day: "*Terra, Aria, Fuoco e Acqua: storie di quattro donne che lavorano con gli elementi della Natura per difendere il pianeta*"
- 2014, *Vivia Bruni Award* of the SOROPTIMIST INTERNATIONAL CLUB in Messina (Italy)
- 2010, *Young Researcher Award* of the University of Messina (Italy) for the scientific production of highly ranked publications
- 2006-present, Expert in Microbial Ecology at the University of Messina (Italy)
- 2001-present, Qualification for Biologist, University of Messina (Italy)

Memberships

Angelina Lo Giudice is member of several Scientific Associations/Societies, including the Italian Society of Ecology (SItE), Italian Association of Astrobiology (SIA; since 2024), Italian Association of Oceanography and Limnology (AIOL), Italian Society of Experimental Biology (SIBS; since 2017), National Interuniversity Consortium on Marine Sciences (CoNISMa), the Freshwater Biological Association (FBA; since 2023), the International Association of Cryospheric Sciences (IACS).

Within the Microb&Co Association (since 2016), Angelina Lo Giudice is member of the Organizing Committee for the ICME (*International Course in Microbial Ecology*) courses.

Working Experiences in scientific fields

- 2014-2019, Researcher at the Institute for Marine Biological Resources and Biotechnology of the National Research Council (CNR-IRBIM; ex IAMC), from 1st may 2014 to 31st July 2019
- 2010-2011, Term-Contract worker (12 months) at the Dept. of Chemical, Biological, Pharmaceutical and Environmental Sciences of the University of Messina for the maintenance in pure culture of Antarctic bacteria belonging to the CIBAN-MNA
- 2004-2007, Term-Contract worker (24 months, not continuously) at the Dept. of Chemical, Biological, Pharmaceutical and Environmental Sciences of the University of Messina within the Project PNRA 2004/1.6
- 2004-2005, Term-Contract worker (2 months) at the PNRA Scrl to participate to the XX Italian Antarctic Expedition
- 2001, Term-Contract worker at the Istituto Sperimentale Talassografico of Messina, Italy (now CNR-ISP)

Education

- 2007-2009, Post-Doc Research grant in *Environmental Sciences: Marine Environment and Resources*, University of Messina
- 2006, Ph.D. in *Environmental Sciences: Marine Environment and Resources* (XVII cycle), University of Messina
- 2001, Master Degree in Biology, University of Messina, 110 *cum laude*
- 1993, High School Diploma in Scientific Studies, Messina

Organization of Workshops

- 2024, International Workshop on Microplastic emergency and the associated plastisphere in freshwater habitats of the Arctic, 10-11 October, Messina (Italy); member of the Scientific Committee.
- 2024, 1st International Workshop on Biodiversity in Svalbard Archipelago: state of the art and perspectives, 28-30 October, Messina (Italy); member of the Organizing Committee.
- 2023, International Workshop on Extremophiles: From adaptative strategies to biotechnological applications, 19 December, Messina (Italy); member of the Scientific Committee.
- 2017, 8th International Course in Microbial Ecology (ICME8): *Microbial metagenome analysis: hands on training Sequencing*, 12-16 June 2017, Verbania (Italy); member of the Organizing Committee.

Scientific Production

To date, Angelina Lo Giudice has published 120 papers **(listed in section A)** in highly ranked scientific journals, including *Physics of Life Reviews*, *Scientific Reports*, *Biotechnology Advances*, *Applied Microbiology and Biotechnology*, *Science of the Total Environment, Soil Biology and Biochemistry*, *PLOS One*, *Applied and Environmental Microbiology*, *Microbial Ecology*, more than 110 communications at national and international conferences/workshops/congresses, and 10 chapters on scientific monographs **(listed in section B)**.
Angelina Lo Giudice has a Hirsch factor (H-index) of 33 and over 2800 citations (*source: Scopus*).

A) Publications on ISI International Journals

Research and Review papers on Polar topics

[1] AZZARO M., RIZZO C., MAIMONE G., PAPALE M., RAPPAZZO A.C., **LO GIUDICE A.**, COSENZA A., FELTRACCO M., PETRICCIUOLO M., FEDERICI E., VITALE V. (**2024**) First observations on airborne prokaryotes in a subArctic Atlantic marine area. *Polar Science* 41, 101104, doi: 10.1016/j.polar.2024.101104.

[2] CARUSO G., AZZARO M., DELL'ACQUA O., PAPALE M., **LO GIUDICE A.**, LAGANÀ P. (**2024**) Plastic polymers and antibiotic resistance in an Antarctic environment (Ross Sea): Are we revealing the tip of an iceberg? *Microorganisms*, 12, 2083. https://doi.org/10.3390/ microorganisms12102083.

[3] PAPALE M., FAZI S., SEVERINI M., SCARINCI R., DELL'ACQUA O., AZZARO M., VENUTI V., FAZIO B., FAZIO E., CRUPI V., IRRERA A., RIZZO C., **LO GIUDICE A.**, CARUSO G. (**2024**). Structural properties and microbial diversity of the biofilm colonizing plastic substrates in Terra Nova Bay (Antarctica). *Science of the Total Environment* 943, 173773, doi: 10.1016/j.scitotenv.2024.173773.

[4] **LO GIUDICE A.**, PAPALE M., AZZARO M., RIZZO C. (**2024**) Prokaryotic diversity in the sponges *Mycale* (*Oxymycale*) *acerata* (Kirkpatrick, 1907) and *Dendrilla antarctica* (Topsent, 1905) from two distant Antarctic marine areas: South Cove at Rothera Point (Adelaide Island, Western Antarctic Peninsula) and Thetys Bay (Terra Nova Bay, Ross Sea). *Deep Sea Research: Part II* 216, 105391.

[5] **LO GIUDICE A.**, PAPALE M., RIZZO C., GIANNARELLI S., CARUSO G., ASPHOLM P.E., MAIMONE G., AZZARO M. (**2024**) First report on pollutant accumulation and associated microbial communities in the freshwater sponge *Spongilla lacustris* (Linnaeus, 1759) from the sub-Arctic Pasvik River (Norway). *Water Environment Research* 96(5):e11039. doi: 10.1002/wer.11039.

[6] GIOVANNINI M., VIERI W., BOSI E., RICCARDI C., **LO GIUDICE A.**, FANI R., FONDI R., PERRIN E. (**2024**) Microbial adaptation signatures in a collection of Antarctic bacteria. *Marine Drugs* 22, 238, doi: 10.3390/ md22060238.

[7] PAPALE M., GIANNARELLI S., AZZARO M., GHEZZI L., **LO GIUDICE A.**, RIZZO C. (**2024**) Chemical and microbiological insight into two littoral Antarctic demosponge species: *Haliclona*

(*Rhizoniera*) *dancoi* (Topsent 1901) and *Haliclona* (*Rhizoniera*) *scotti* (Kirkpatrick 1907). *Frontiers in Microbiology: Section Microbial Symbioses* 15, doi: 10.3389/fmicb.2024.1341641.

[8] CORTI A., PAGANO G., **LO GIUDICE A.**, PAPALE M., RIZZO C., AZZARO M., VINCIGUERRA V., CASTELVETRO V., GIANNARELLI S. (**2023**) Marine sponges as bioindicators of pollution by synthetic microfibers in Antarctica. *Science of the Total Environment* 902:166043.

[9] MARCHETTA A., PAPALE M., RAPPAZZO A.C., RIZZO C., CAMACHO A., ROCHERA C., AZZARO M., URZÌ C., **LO GIUDICE A.**, DE LEO F. (**2023**) A deep insight into the diversity of microfungal communities in Arctic and Antarctic Lakes. *Journal of Fungi* 9, 1095. https://doi.org/10.3390/jof9111095.

[10] COSTA G., **LO GIUDICE A.**, PAPALE M., RIZZO C., AZZARO M., GUZZI A., GRILLO M., BERTOLINO M. (**2023**) Sponges (Porifera) from the Ross Sea (Southern Ocean) with taxonomic and molecular re-description of two uncommon species. *Polar Biology*. doi: 10.1007/s00300-023-03205-w

[11] CITTERICK F., **LO GIUDICE A.**, AZZARO M. (**2023**) A plastic world: a review of microplastic pollution in the freshwaters of the Earth's poles. *Science of the Total Environment* 8691:161847.

[12] PAPALE M., CARUSO G., MAIMONE G., LA FERLA R., **LO GIUDICE A.**, RAPPAZZO A.C., COSENZA A., AZZARO A., FERRETTI R., PARANHOS R., CABRAL A.S., CACCIA M., ODETTI A., ZAPPALÀ G., BRUZZONE G., AZZARO M. (**2023**) Microbial community abundance and metabolism close to the ice-water interface of the Blomstrandbreen glacier (Kongsfjorden, Svalbard): a sampling survey using an Unmanned Autonomous Vehicle. *Water* 15:556; doi: 10.3390/w15030556.

[13] GUGLIELMIN M., AZZARO M., BUZZINI P., BATTISTEL D., ROMAN M., PONTI S., TURCHETTI B., SANNINO C., BORRUSO L., PAPALE M., **LO GIUDICE A.** (**2023**) A possible unique ecosystem in the endoglacial hypersaline brines in Antarctica. *Scientific Reports* 13:177; doi: 10.1038/s41598-022-27219-2.

[14] RIZZO C., PERRIN E., POLI A., FINORE I., FANI R., **LO GIUDICE A.** (**2022**) Characterization of the exopolymer-producing *Pseudoalteromonas* sp. S8-8 from Antarctic sediment. *Applied Microbiology and Biotechnology*, 106:7173–7185; doi:10.1007/s00253-022-12180-x.

[15] AZZARO M., SPECCHIULLI A., MAIMONE G., AZZARO F., **LO GIUDICE A.**, PAPALE M., LA FERLA R., PARANHOS R. CABRAL A.S., RAPPAZZO A.C., RENZI M., CASTAGNO P., FALCO P., RIVARO P., CARUSO G. (**2022**) Trophic and microbial patterns in the Ross Sea area (Antarctica): spatial variability during the summer season. *Journal of Marine Science and Engineering* 10: 1666; https://doi.org/ 10.3390/jmse10111666.

[16] **LO GIUDICE A.**, RIZZO C. (**2022**) Bacteria associated with benthic invertebrates from extreme marine environments: promising but underexplored sources of biotechnologically relevant molecules. *Marine Drugs* 20:617; https://doi.org/10.3390/md20100617.

[17] AZZARO M., PAPALE M., RIZZO C., FORTE E., LENAZ D., GUGLIELMIN M., **LO GIUDICE A.** (**2022**) Antarctic salt-cones: an oasis of microbial life? The example of Boulder Clay Glacier (Northern Victoria Land). *Microorganisms* 10:1753.

[18] RIZZO C., PAPALE M., **LO GIUDICE A. (2022)** *Idiomarina* sp. isolates from cold and temperate environments as biosurfactant producers. *Journal of Marine Science and Engineering* 10: 1135.

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C) REPORTS

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(*) Useful links/notes

- CIBAN-MNA, www.mna.it
- EBM "Diversity" https://www.mdpi.com/journal/diversity/sectioneditors/microbial_diversity
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- EcoBiM LAB, https://www.isp.cnr.it/index.php/en/infrastructures/laboratories/item/359-microbial-ecology-and-biotechnology-lab-ecobim
- RBM "Marine Drugs" https://www.mdpi.com/journal/marinedrugs/submission_reviewers
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