

Curriculum Vitae Prof. Nunziacarla Spanò:

Born in Naples on 22/09/1965.

Department of biomedical, dental and morphological and functional imaging sciences, Via Consolare Valeria 1- University of Messina.

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CURRENT POSITION:

- Full Professor S.S.D. BIO/07 Ecology - University of Messina.
- Representative for Italy in the Scientific Council of the new program “UNESCO International Environmental Experts Network”
- Delegate of the Rector for Scientific initiatives for the Protection of the Environment and Marine Heritage.

AFFILIATIONS:

- Institute for Biological Resources and Marine Biotechnologies (IRBIM - CNR).
- Accademia Peloritana dei Pericolanti - University of Messina
- Stazione Zoologica Anton Dorhn Naples

SCIENTOMETRIC INFORMATIONS

Scopus

<https://www.scopus.com/authid/detail.uri?authorId=55925240700>

Google Scholar

<https://scholar.google.com/citations?hl=it&user=A7TDutIAAAAJ>

ORCID

<https://orcid.org/0000-0002-8360-4795>

INSTITUTIONAL ROLES

- Referee PRIN, REPRISE, SIR, FARE projects and Montalcini prize (MIUR)
- Delegate of the Rector for Scientific initiatives for the Protection of the Environment and Marine Heritage.
- Member of Academic Senate University of Messina.
- Coordinator of the Ph.D course: Applied Biology and Experimental Medicine (June 2020).
- University representative on the Advisory Board of the Centre for Advanced Studies on the Environment and Impacts on Ecosystem and Health (CISAS). CNR Rome.
- Member of Guarantee commission, University of Messina.
- Member of the Board of Directors Marine Protected Area Capo Milazzo.
- Member of Scientific Committee Horcynus orca Foundation.
- Member of ERASMUS commission: mobility of professors and technical staff Career Service Manager, Department of biomedical, dental and morphological and functional imaging sciences.
- Manager of joint research centre University of Messina - Zoological Station Anton Dohrn.
- Member of European Aquaculture Platform "ITAQUA"
- Member of AQ-RTDM Commission Dept. BIOMORF
- Member of Technical table of fishing co-management
- Member of Scientific Community of SZN
- Promoting Committee for Framework Cooperation Agreement UNIME-MIAMI University RSMAS
- Delegate of UNIME in European Marine Biological Resource Centre.

EDUCATION AND TRAINING

- 1996/1999 Research activities, Department of Animal Biology and Marine Ecology University of Messina.
- 1994/1996 Post-Doctoral fellowship, University of Messina.
- Title of PhD in Environmental Sciences: Marine environment and resources - April 15, 1992.
- Degree in Biological Sciences 03/07/1987 University of Messina.

SCIENTIFIC ACTIVITIES

- Study and monitoring of Marine protected areas.
- Study and impact of micro and nano plastics on marine environment.
- Climate change impact.
- Study of Hydrothermal areas.
- Taxonomic identification of decapods based on micro morphological characterization of shell trough Scanning Electron Microscope (SEM).
- Study of extreme or stressed geographical areas and areas with anthropic or natural conditions.
- Study of nekton and benthos organisms, with particular regard to demersal resources, closely related both in trophic networks terms, both for reproductive aspects.
- Study of existing benthic biocenosis based on trawling data, both in relation to sediment edaphic factors, both in relation to the presence of demersal species, in order to better understand patterns of abundance and distribution of bentonektonic and bathypelagic species of considerable commercial interest.
- Study of brackish environments and biodiversity of lagoon environments.
- Study of relations between benthic organisms and demersal fauna.
- Marine Litter and Integrated Multi Trophic Aquaculture.
- Study of the biology of benthic organisms with particular reference to the presence of pollutants.

SCIENTIFIC RESPONSIBILITY FOR RESEARCH PROJECTS

- Principal Investigator UNIME PNRR Project EMBRC – UP: Unlocking the Potential for Health and Food from the Seas (EMBRC-UP). NextGenerationEU 3.1. – 2023
- Principal investigator UNISG POLLENZO Environmental survey Sardinia Channel for offshore wind farms – 2023.
 - Principal investigator UNISG POLLENZO Environmental survey Calabria and Puglia Channel for offshore wind farms – 2022.
 - Principal Investigator, Città Metropolitana: Agenda 2030 Environmental sustainability – 2022
 - MoSiC. Monitoring SIC in Calabria. PO FEAM CALABRIA mis. 1.40 - 2022
 - UNderwater cuLTural hERitage conservation by means Antifouling Ecofriendly products (UNALTERABLE) SZN 2021 CRIMAC – 2022
 - National Research Program in Antarctica – Study of bacteria resistant to antibiotics and heavy metals (water, sediment and Trepatomus bernacchii) and detection of heavy metals. PNRA - 2022
 - Principal investigator RENEXIA Environmental survey Sicily Channel for offshore wind farms – 2022.
 - Principal investigator, Comune di Messina: Progetto MASTER. PO FEAMP 2014-2020 misura 1.04 lettera b - Regione Sicilia – 2021.
 - FISH PATH NET : Potenziamento dei centri di Ittiopatologia siciliani PO FEAMP mis. 2.56 Regione Sicilia - 2022
 - Principal investigator, INTERREG ITALY-MALTA: Robotic Bioremediation for coastal debris in blue flag beach and in a maritime protected area (cod. C23.1-129) – 2022.
 - Principal investigator, Capitaneria di Porto MESSINA: Survey and seabeds maps of “Capo Peloro” for SCI set up -2018.
 - PRIN 2017: Identification of New Biomarkers and Clinical Determinants for Management Improvement of Patients with Pituitary Tumor Related Syndromes. Prot.2017S55RXB. Resposinble U.O. – 2017.

- Principal investigator PON Progetto INNOVAQUA PON02_00451_3362185 (Codice CUP B71C1100091005) e FOR INNOVAQUA PON02_00451_3362185/F1 (codice CUP B68/12000330007) dal 2016 2021.
- Principal investigator AR.BIO.ME.: Archeology and Biology in the Strait of Messina PEDESTAL FOUNDATION; University of Malta - 2015/2020.
- Principal investigator Progetto P.R.I.A.M.O: ASSESSORATO DELLE ATTIVITÀ PRODUTTIVE - 4.1.1.2 del P.O. F.E.S.R. 2007/2013 – 2014.
- Principal investigator P.O.R. CALABRIA 2000-2006 PROGETTO “M.A.P.” Survey and mapping fishing obstacles- Misura 4.21: (30.06.2008-05.05.2009). - Principal investigator: Progetto “Integrated management of the coastal strip” of Giardini Naxos” (COMUNE DI GIARDINI NAXOS) misura 4.17b finanziato dalla Regione Sicilia (12.10.2005 - 20.07.2007).
- Principal investigator: REGIONE SICILIA - Progetto “La Torre – Integrated management of the coastal strip of Brolo” (COMUNE DI BROLO) misura 4.17b (12.10.2005 - 13.10.2009).
- Principal investigator: REGIONE SICILIA - Progetto Commercial fishing support and coastal area enhancement of Messina (09.03.2005 - attuale)

**RESPONSIBILITY FOR SCIENTIFIC STUDIES AND RESEARCH
CARRIED OUT BY QUALIFIED PUBLIC INSTITUTIONS AS
PRINCIPAL INVESTIGATOR:**

- INFRATEL Survey interconnection Isole Minori - 2023
- MALTA INTERCONNECTOR Survey interconnessione Sicilia - Malta – 2022
- TERNA Environmental Survey Rete Italia interconnection HDVC Campania Sicilia – 2021.
- Environmental survey: L.A.B. Dragaggio del Porto di Ortona (Pescara) (10.02.2017 - 01.06.2017).
- Environmental survey: OCEANIX - TERNA S.p.A. SACOI.
- ToscanaCorsica- Sardegna power line (04.12.2013 - 23.11.2014).
- Environmental survey: OCEANIX - TERNA S.p.A. HVDC 500 kVcc
- ItaliaMontenegro power line (20.11.2010 - 30.04.2011).
- Environmental survey: OCEANIX - TERNA S.p.A.
- Environmental survey: AUTORITA' PORTUALE MESSINA - SIN Milazzo
- (ME) (15.03.2009 - 10.05.2009).
- Environmental survey: GEOLAB - SNAM Progetti – Pipeline Monforte S. Giorgio (ME), Policastro Bussentino (SA) (01.02.2008 - 26.09.2008).
- Environmental survey: AUTORITA' PORTUALE MESSINA - (SIN)
- (21.11.2007 - 18.12.2008; 15.03.2009 - 10.05.2009).
- Environmental survey: OCEANIX - Adria Power Link. "Italy-Croatia HVDC Interconnector" (09.02.2007 - 30.06.2008).
- Environmental survey: PREFETTURA MESSINA - AUTORITA' PORTUALE MESSINA – Tremestieri Harbour (21.11.2007 - 18.12.2008).
- Environmental survey: GEOLAB - TERNA S.p.A. Favazzina (Rc) - Villafranca (ME) – power line (12.07.2006 - 12.10.2006).
- Environmental survey AUTORITA' PORTUALE GIOIA TAURO (RC)
- Environmental survey SNAM Pipeline Mortelle (ME) – Palmi (RC) (09.09.1992 - 30.09.1994)

NATIONAL AND INTERNATIONAL PARTNERSHIPS

- CNR IAMC Messina - REGIONE CALABRIA POR 2000-2006 SFOP -
- Asse IV, misura 4.21 sub- misura 4.21f – Identification of fishing areas (01.01.2008 - 30.06.2009).
- CNR IAMC Messina - REGIONE SICILIA POR 2000-2006 SFOP - mis.4.17. "Influence of environmental contaminants on biological resources". BIOS (30.06.2007 - 30.12.2008)
- Ministero Politiche Agricole Alimentari e Forestali - EU - ex reg. CE 1543/2000 e 1693/2001. MEDITS (Mediterranean Trawl Survey) - GSA10b - CNR IAMC Messina (01.01.2004 - 01.01.2010).
- Ministero Politiche Agricole Alimentari e Forestali - EU - ex reg. CE 1543/2000 e 1693/2001. GRUND – Evaluation of demersal resources of the Italian seas - GSA10b - CNR IAMC Messina (01.01.2004 - 30.12.2008).
- Ministero Politiche Agricole Forestali e Alimentari - CoNISMa. "Spill-over effects in the Marine Protected Areas Cod. progetto GA80 Coordination of the visual census study group in Capo Rizzuto (Kr) MPA (30.06.2004 - 29.06.2007).
- CNR IAMC Messina - REGIONE CALABRIA POR 2000-2006 SFOP - Asse IV, misura 4.21 sub- misura 4.21f -. "Distribution of larvae and juveniles of the main demersal species C.po Suvero e P.ta Pezzo" (30.09.2004 - 01.06.2006).
- CNR IAMC Messina - REGIONE SICILIA POR 2000-2006 SFOP - mis. 4.17. "Integrated management of the coastal strip". MARE (30.06.2003 - 30.06.2007).
- CoNISMa - Progetto Afrodite - Venere. "Marine Protected Areas study. Coordination of the visual census study group Capo Rizzuto (Kr) and Ciclopi Island (Ct) (04.07.2001 - 30.04.2003).
- MIUR – CoNISMa. PRISMA 2 (Sottoprogetto 3) "Macrozoobenthonic community in the Adriatic Sea" (01.01.1997 - 01.01.1998).
- Dipartimento di Biologia Animale ed Ecologia Marina - Università di Messina. Ecologic and hydrodynamic characterization of the Strait of Messina (POP Regione Sicilia) (01.01.1995/01.01.1996).

- CoNISMa – Environmental survey of Eolian island Tyrrhenian Sea (EOCUMM) (01.01.1994 - 01.06.1996).

PARTICIPATION IN RESEARCH PROGRAMMES

- Environmental survey in calabrian seas. (REGIONE CALABRIA).
- Synthèse des connaissances sur les ressources de fond en Méditerranée centrale (Comunità Europea).
- Feasibility study for the exploitation of the natural banks of the clams (CNR Mazara del Vallo - Regione Siciliana).
- Feasibility study of the exploitation of the clams - Le Castella – Soverato (MIPAF).
- Ecological role of FADs in the Tyrrhenian Sea (ICRAM).
- Atlantic and Lessepsian Immigrant Environment Noisess A.L.I.E.N. (ICRAM).
- Ecosystem approach to fishery management and resources conservation in eolian system EOLIDE (ICRAM).
- Evaluation of demersal resources of the Italian seas - U.O. n° 6 (IV e V Piano Triennale Ministero delle Politiche Agricole e Forestali).
- Study on lessepsian species *Caulerpa taxifolia* (PRA Ateneo 2000).
- Impact of aquaculture on the environment (SFOP Regione Sicilia). NEMO in collaboration with Istituto Nazionale di Fisica Nucleare (Laboratori Nazionali del Sud).
- Geological characters and genesis of brackish environments with Osservatorio Sismologico – Di.C.T.A. University of Messina.
- Study on impact of offshore cages (VI Piano Triennale Ministero delle Politiche Agricole e Forestali).

CONSULTANCY AND ACTIVITIES FOR ENVIRONMENTAL SURVEY

- OLOTURIA SUB (20.04.2015 - 20.06.2015).
- COMUNE DI S. MARINA SALINA (Me) (12.06.2013 - 19.10.2013).
- OLOTURIA SUB - (08.08.2012/ 18.10.2012).
- OLOTURIA SUB - (20.01.2011 - 03.04.2011).
- TARANTO NAVIGAZIONE - (05.11.2010 - 01.05.2011).
- OLOTURIA SUB - (09.08.2010 - 15.11.2010).
- OLOTURIA SUB - (10.06.2009 - 20.07.2009).
- PROGECO - (09.10.2008 - 26.10.2009).
- COMUNE DI S. MARINA SALINA - (09.06.2008 - 18.07.2008).
- OLOTURIA SUB - CNR Messina - (loc. Acquacalda) (13.07.2007 - 07.08.2008).
- PROGECO - COMUNE DI LIPARI. (26.04.2007 - 09.07.2007).
- SINTESI - VI, VIA GIS of biocoenotic maps S. Marina Salina e Lipari. (Oloturia Sub Messina) (04.05.2006 - 23.02.2007).
- SINTESI "Reporting e Visual Census in Marine Protected Area - Comune di Lampedusa e Linosa (20.06.2005 - 01.01.2006).
- PROMETEO - VI, VIA GIS cof biocoenotic maps. (Oloturia Sub Messina) (05.09.2004 - 30.10.2004).
- ERM ITALIA – GIS biocoenotic maps of Zosteracee - Milazzo. (Oloturia Sub Messina) (01.10.2004 - 20.12.2004)

REWIEVER

Intech Open Access Book - Author of chapter for a new Open Access book on "The Mediterranean Region," edited by Dr. Borna Fuerst-Bjeliš.

Referee per il volume "Crustaceans and The Biodiversity Crisis" edito da BRILL Leiden; del volume 8° International Colloquium Crustacea Decapoda Mediterranea; della Società Italiana di Biologia Marina.

Membro di Editorial/Reviewer board

The Scientific Pages of Marine Biology and Aquaculture.

Guest Editor Special Issue "Microplastics in the Mediterranean Sea" in Frontiers in Marine Science

Reviewer:

Marine Pollution Bulletin

Marine Biology Research

Crustaceana

Science of the Total Environment

Aquaculture

Aquaculture Research

Frontiers in Marine Science

Chemosphere

Ecotoxicology and Environmental Safety

TEACHING ACTIVITIES

- Teaching of ecology since the year 2000.
- Component of the examination committees of ecology.

SUPERVISOR ACTIVITIES

- Over 65 theses of bachelor's and master's degree, and 8 theses of PhD.

TUTOR ACTIVITIES

- Currently tutor of 13 doctoral students.
- Supervisor at the sending Institution for 6 Erasmus students.

PARTICIPATION IN SELECTION BOARDS

- Members of selection board for a Reseacher - III level. Stazione Zoologica Anton Dorhn, sede Calabria - Call N° 8/2020, Decree of President N° 7 del 20.01.2021.
- President – selection board for a technical assistant - VI level. Stazione Zoologica Anton Dorhn, Call N° 33/2019, Decree of President N°93 del 11.09.2020.
- President – selection board for a technical assistant - VI level. Stazione Zoologica Anton Dorhn. Call N° 22/2019, Decree of President N°69 del 07.07.2020.
- Members of selection board for a technical assistant. Stazione Zoologica Anton Dorhn. - Call N° 32/2019, Decree of President N° 75 del 09.07.2020.
- Members of selection board for a technologist - III level. Stazione Zoologica Anton Dorhn, - Call N° 37/2019, Decree of President N° 53 del 19.05.2020.
- President – PhD committee Biologia Applicata e Medicina Sperimentale XXXV Cycle - Prot. N° 0078573 (30.08.2019 - 15.09.2019).
- President - selection board for a Reseacher - III level. Stazione Zoologica Anton Dorhn, - Call N° 10/2019, Decree of President N° 99 del 20.11.2019.
- Member - PhD committee Biologia Applicata e Medicina Sperimentale XXXIII Cycle - Prot. N° 0060684 (05.09.2017 - 30.09.2017).

PARTNERSHIPS

- CNR IAMC Messina CNR.
- CNR IRBIM
- IAMC Mazara del Vallo - University of MALTA.
- University of Reykjavík ISLANDA.
- University of Zagabria CROATIA.
- University of MALTA
- Dipartimento di Scienze Veterinarie MESSINA.

- Osservatorio Sismologico – Di.C.T.A. University of MESSINA.
- Istituto Nazionale di Fisica Nucleare (Laboratori nazionali del Sud).
- Istituto Nazionale di Geofisica e Vulcanologia (INGV Roma).
- ISPRA Roma Dipartimento di Scienze del Mare.
- University Politecnica delle Marche, Ancona.
- Stazione Zoologica Anton Dorhn Napoli.

DIVING LICENCE

- OWD SSI able to dive autonomous to 18mt depth.
- AOWD SSI able to special dive: Night – Boat – Navigation – Deep (40mt).
- NITROX SSI Able to dive using Hyperoxigen mixed gas: Nitrox I (O2 32% - N2 68%) e Nitrox II (O2 36% - N2 64%).
- DECOMPRESSION SSI Able to conduct decompression deep dive (–61 mt) using trimix gas and Hyperoxygen decompression mix gas.
- CPR SSI/AHA Cardiopulmonary resuscitation.