Curriculum Vitae Dr. Danilo Malara



PERSONAL INFORMATION

Danilo Malara

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✓ danilo.malara83@gmail.com; danilo.malara@szn.it PEC: danilo.malara83@postecert.it

danilo.malara (Skype)

Sex Male | Date of birth 17/06/1983 | Nationality Italian, Australian Permanent Resident

EDUCATION EXPERIENCE

July 2013 -December 2017

PhD in Dep. Aquaculture and Fisheries, College of Science and Engineering

Place

James Cook University and Australian Institute of Marine Science (Townsville, Australia)

Project title

Photodynamic antimicrobial chemotherapy for pathogenic vibrio control in prawn hatcheries

Awards and communication

- Awarded highly competitive 3.5 years scholarship (tuition fees and stipend)
- Awarded highly competitive 6 months Special Stipend Scholarship (tuition fees and stipend)
- Awarded competitive grants worth total of AUD 4500 to cover experimental costs
- Participated to 1 international conference and 3 national conferences
- Awarded two posters and one photography conference prizes worth of AUD 1200
- Published five manuscripts in peer-review journals

Skills acquired

- Aquaculture water and live feed disinfection using chemicals
- Flow cytometry analysis
- Spectrophotometer (UV/vis, fluorescence and luminescent analysis)
- Laboratory management (instrument care and inventory maintenance)
- Handling of biological samples
- Marine water quality analysis
- Laboratory-scale crustacean rearing system (*Artemia* and prawns)
- Culture medium (liquid and solid) preparation
- Microorganism cultivation and harvesting techniques (bacteria and microalgae)
- DNA extraction and genetic analysis (PCR, Multiplex PCR, Multi Locus Sequence Analysis)
- Morphometric fish measures (weight and length)
- Samples processing and cataloguing
- Survey techniques using longlines, baited underwater video stations (BRUVS), drones, hand nets fishing and direct observations (volunteer work)
- Data analysis and statistical analysis (Excel, SPSS, R-studio)
- Mapping (base) and graphs using R-studio.

September 2007-October 2010

Master's Degree by Research in Biology and Ecology of Marine Coastal Environment

Place

University of Messina (Messina, Italy) and Institute for Environmental Protection and Research (ISPRA, ex ICRAM, Milazzo, Italy)

Project title:

Pelagic fish and cephalopods biomass reconstruction method from otoliths and beaks as important tool in studies of trophic ecology of marine large predators

Skills and Awards

- Awarded higher graduation score (110 on 110)
- Successfully collected beached deep-water (meso- and bathypelagic) fish and cephalopods
- Collection of abiotic parameters related to beached fish (moon phase, current, time, wind, etc.)
- Published two manuscripts in peer-review journals



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- Trophic ecology studies of marine apex predators (swordfish, Tuna, other billfish) and deep-sea fish
- Body mass reconstruction using otolith and beak
- Extraction and preparation of beaks and otoliths
- Stomach content analysis of fish and cephalopods
- Morphometric analysis of fish and cephalopods
- Samples processing and cataloguing
- Data analysis (Excel)
- Thesis writing

September 2002-December 2007

Bachelor' Degree (Honours) in Marine Biology and Ecology

Place

University of Messina (Messina, Italy) and Institute for Environmental Protection and Research (ISPRA, ex ICRAM, Milazzo, Italy)

Project title:

The swordfish (*Xiphias glaudius*, Linneus 1758) in the Strait of Messina and surrounding areas: observations on the distribution and tagging methods

Skills and Awards

- Ecology and biology of swordfish, tuna, tuna-like fish, elasmobranchs
- Telemetry and migration studies using pop-up satellite and acoustic tags on swordfish (*Xiphias glaudius*) and giant evil ray (*Mobula mobular*)
- Trophic ecology studies of marine apex predators (swordfish, Tuna, other billfish)
- Stomach content analysis of fish
- Mobile laboratory and remote area experience
- Samples collection (liver, blood, gonads, muscle, etc.) from fish (swordfish, tuna, billfish)
- Morphometric fish measures (weight and length)
- Samples processing and cataloguing
- Surveys questionnaire to anglers
- Data analysis (Excel)
- Thesis writing
- Collection of abiotic parameters related to fishing data (moon phase, current, temperature, salinity, wind, profundity, GIS coordinate etc.)

WORK AND RESEARCH EXPERIENCE

2020 - current

Field and laboratory technician VI level at Stazione Zoologica Anton Dohrn

Place

Stazione Zoologica Anton Dohrn of Messina and Amendolara

Activity and Responsibility

- Wind farm: report writing, fisheries data analysis and mapping.
- Sample collection on board of trawl vessels using Van Veen grab, niskin bottle, manta trawl and zooplankton nets.
- Scientific diving activities for monitoring programme in MPA (visual census, *Posidonia oceanica*, *pinna nobilis* etc.)
- Samples collection (muscle, liver, gonads, stomach, first ray fin and caudal fin)
- Survey fishing activity when required onshore and/or on board of commercial and recreational fishing vessels
- Age determination using first ray fin and/or otoliths
- Collection of morphometric and ponderal data
- Population structure
- Capture and sighting record

Danilo Malara-Curriculum Vitae

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- Animal tagging using pop-up satellite tags, conduct and design tagging experiment (Swordfish and Mediterranean spearfish)
- Animal movement behaviour data analysis
- Microplastic analysis
- Trophic ecology analysis
- Relate with stockholders (Sea Life Care International, local institutions, contractors and fishermen)
- Supervise and training students and visitor researchers
- Data and statistical analysis (i.e. Excel, R and R-studio etc.)
- Mapping and graphs using R-studio and ArcGis pro
- Intellectual contribution for scientific publication
- Contribution to project application
- Underwater visual census and sample collections
- Equipment acquisition
- Secretary and commission member in technician hiring positions
- Commission member in research fellowship hiring positions
- Seafloor mapping using multibeam, side scan scanner and ROVS
- Technical reports

2019 - 2020 Post-Doc at Stazione Zoologica Anton Dohrn

Place Stazione Zooloica Anton Dohrn of Messina and Milazzo

Status and distribution of Mediterranean spearfish (Tetrapturus belone) in Mediterranean Sea

Activity and Responsibility

Project

- Samples collection (muscle, liver, gonads, stomach, first ray fin and caudal fin)
- Survey fishing activity when required onshore and/or on board of commercial and recreational fishing vessels
- Age determination using first ray fin and/or otoliths
- Collection of morphometric and ponderal data
- Population structure
- Capture and sighting record
- Animal tagging using pop-up satellite tags, conduct and design tagging experiment (Swordfish and Mediterranean spearfish)
- Animal movement behaviour data analysis
- Microplastic analysis
- Trophic ecology analysis
- Relate with stockholders (Sea Life Care International, local institutions and fishermen)
- Supervise and training students and visitor researchers
- Data and statistical analysis (i.e. Excel, R and R-studio etc.)
- Mapping and graphs using R-studio
- Intellectual contribution for scientific publication

2018 - 2019 Junior aquarist, Aquarist and Dive Safety Officer

Place Cairns Aquarium and Reef Research Centre (Cairns, Australia)

Activity and Responsibility

- Creating dive safety regulations for the whole Aquarium
- Participate in any research activity when required
- Exhibition tanks cleaning
- Monitor water quality
- Animal feeding (i.e. rays, lionfish, stonefish, seahorses, sharks etc.)
- Monitor behaviour, quarantine, and care of large and small animals with emphasis on elasmobranchs
- Small and large aquaria diving
- Water and pump check

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Animal disease diagnose and treatment

Artemia preparation

Life Support Systems and Water Quality monitoring and maintenance

• Problem solving, including understanding the issues, the cause of the issues and making sound decisions to ensure the issues are resolved.

2017 - 2018 Dive Instructor/Marine Biologist

Place

Ocean Freedom and Ocean Free (Cairns, Australia)

Activity and Responsibility

Marine biology presentations

Leadership

Navigation

Live board operation

Dive teaching

Small boat operation

2015 - 2016 Dive Instructor

> Place Adrenalin dive and snorkelling (Townsville, Australia)

Activity and Responsibility

 Leadership Navigation

• Live board operation

Dive teaching

Dive Instructor/Marine Biologist 2012 - 2013

> Place Ocean Freedom and Ocean Free (Cairns, Australia)

Activity and Responsibility

Marine biology presentations

Supervise customers during cruise and dive

Crew duties

Navigation

Group leader

Live board operation

Dive teaching

Dive Master Trainee/Crew Member 2012

Place

Down Under Cruise and Dive (Cairns, Australia) Supervise customers during cruise and dive

Activity and Responsibility

Crew duties

Navigation

Group leader

Live board operation

Teaching dive

Supervise customers during cruise and dive

2011-2012 European Tuna ICCAT Observer on Maltese Fishing Farm

Place Cofrepeche, (Paris, France)

Activity and Responsibility

Macro-fauna marine observer

Manage and supervise fishing activities;

Catch size visual estimation using video records

Fisheries management

2010 - 2011 European Tuna ICCAT Observer on Board French Purse Seiner

Place Cofrepeche (Paris, France) and AGC'98 (Rome, Italy)

Activity and Macro-fauna marine observer euro*pass* Curriculum Vitae Dr. Danilo Malara

Responsibility

Manage and supervise fishing activities;

Catch size visual estimation using video records

Fisheries management

2009 Samples Collection from Mediterranean Sea Terminal Predators for Ecotoxicology Studies

Place University of Siena (Siena, Italy)

Activity and Samples collection (liver, blood, gonads, muscle, etc.) from fish (swordfish, tuna, billfish)

Responsibility • Ecotoxicology analyses

• Field research organisation (equipment inventory and liquid nitrogen refill)

2009 Regional Tuna ICCAT Observer On Board Of Purse Seiner

Place Unimar Consortium national (Rome, Italy)

Activity and Responsibility

Macro-fauna marine observer

Manage and supervise fishing activities;

Catch size visual estimation using video records

Fisheries management

PROJECT INVOLVED

11/01/2024- Project CIAO MARE – Cephalopod Integrated Analysis to identify the impact Of MARine

current Environmental pollution (Prot. n. 0000224 11/01/2024)

Place Messina Founder Founder

Collaborators Dr. Pietro Battaglia (Project Leader), Dr. Giacomo Milisenda, Dr. Giorgio Aglieri, Dr. Cristina Pedà,

Dr. Pierpaolo Consoli, Dr. Giovanna Ponte

Duties Sampliang activities, dissection and data analysis

01/01/2023- Wind farms projects around Italian peninsula

current

Place Sicily, Sardinia, Calabria and Puglia Founder Medwind, Acciona, Minstral, Enotria

Collaborators Dr. Silvestro Greco (Project Leader), Dr. Teresa Romeo, Dr. Pierpaolo Consoli, Dr. Giacomo

Milisenda, Dr. Danilo Malara, Dr. Simone Canese, Dr. Claudio Berti, Dr. Cristina Pedà.

Duties Technical writing, data analysis and elaboration, Mapping platform and relevant survey transect (ROV,

trawl bottom, etc)

01/01/2022- Discovery elasmobranchs using eDNA in Site of Community Importance areas

current

Place Calabria region Founder Regione Calabria

Collaborators Carmen Rizzo, Silvestro Greco

Duties Sampling activities

DNA filtration and extraction

Data analysis

21/10/2021- "Enhancement of Sicilian shellfish farming in the lagoon area of Capo Peloro (ME) – Line of

31/10/2023 intervention n. 1 Conservation and enhancement for breeding the endemic species of shellfish farmed

in Messina (Mytilus spp.)"

Place Messina

Founder Regione Sicilia

Collaborators Romeo Teresa, Sordino Paolo, Rizzo Carmen, Mangano Maria Cristina, Milisenda Giacomo,

Berti Claudio, Malara Danilo, Sanfilippo Marilena

Duries Data analysis

Sampling activities

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12/10/2021- IMPLEMENTATION OF THE MEASURE 1.40 par. 1, lett. b) – EMFF Protection and restoration of biodiversity and marine ecosystems and compensation schemes in the context of sustainable fishing

activities (Article 40 of EU Reg. 508/2014) INTERVENTIONS TO PROTECT THE COAST OF THE

GODS

Place Vibo Valentia

Founder Vibo Valentia tribunal

Collaborators Dr. Teresa Romeo (Project Leader), Dr. Silvestro Greco, Dr. Pierpaolo Consoli, Dr. Pietro Battaglia, Dr.

Daniela Pica, Dr. Valentina Costa, Dr. Danilo Malara.

Duties Trawl vessel emabraks

Sampling activities of:

Zooplankton using plankton nets Sediment using Vann Veen Grab Water using Niskin bottle Microplastics using manta trawl

01/05/2022- MSFD MPA Milazzo

31/08/2023

Place Marine Protect Area of Milazzo Founder Marine Protect Area of Milazzo

Collaborators Dr. Teresa Romeo (Project Leader), Dr. Silvestro Greco, Dr. Pierpaolo Consoli, Dr. Giacomo

Milisenda, Dr. Arturo Zenone, Dr. Danilo Malara, Dr. Giorgio Aglieri.

Duties Underwater visual census for fish

Underwater visual census for Posidonia oceanica and Pinna nobilis

Underwater sampling activities

Marine litter census Field trip organisation

Data analysis

Contribute to write annual and final reports

2021 ICCAT Swordfish tagging programme

Place Strait of Messina

Founder ICCAT

Collaborators Dr. Fulvio Garibaldi (Project Leader) and Dr. Pietro Battaglia

Duties Sworfish tagging activities using POP-UP satellite tags

Data analysis

2021 FEAMP 2014-2020 - Misura 1.40- Riduzione Pesca faNtasma in Sicilia (www.progettoresponso.it) -

MIPAF

Place Vulcano Island and MPA Milazzo

Founder Regione Sicilia

Collaborators Dr. Pierpaolo Consoli (Project Leader) and Dr. Teresa Romeo

Duties • Responsible of the field activities (17-21 June 2021)

Underwater visual census (7-11 June 2021)

Underwater visual census and sampling

01/01/2020- Genetics and morphology differences between Chinese and Mediterranean *Trachinotus ovatus*

31/12/2023

Place Italy and China Founder Personal fundings

Collaborators Dr. Pietro Battaglia and Dr. Liang Guo

Duties • Coordinate samples collection

2020-2021 MSFD MPA Capo Rizzuto "Attuazione Piano Operativo Marine Strategy nell' AMP Capo Rizzuto"

Place Area Marina Protetta Capo Rizzuto

Founder Ente Gestore Area Marina Protetta "Capo Rizzuto"

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Collaborators

Dr. Silvestro Greco (Project Leader), Dr. Teresa Romeo (Project coordinator), Dr. Pierpaolo Consoli,

Dr. Chiara Giommi, Dr. Simone Canese, Dr. Eva Salvati, Dr. Paolo D'Ambrosio, Dr. Claudio Berti, Dr.

Martina Genovese, Dr. Alessia Dinoi, Dr. Francesca De Domenico and Dr. Cristina Pedà

Duties

Underwater visual census

Underwater sampling activities

Beach litter surveys

Final report

01/06/2020-

CRIMAC - Centro Ricerche ed Infrastrutture Marine Avanzate in Calabria

current

Place

Amendolara

Collaborators Founder **Duties**

Dr. Silvestro Greco (Project Leader), Dr. Teresa Romeo (Project coordinator)

Ministry of Education, University and Research Laboratory management and technical support

• Field and Underwater support for sampling activities (i.e. Visual census)

Basic administrative activities

Statistics, data analysis and mapping using Rstudio and Arcgis pro

• Involved in the marine turtle rescue project (Turtle point)

Contact person for services in the Calabria Marine Centre

01/04/2019-31/12/2021

FEAMP 2014-2020 - Misura 1.40 - Valutazione dello stato dell'Aguglia Imperiale - Regione Sicilia

Place

Duties

Mediterranean Sea

Collaborators

Dr. Teresa Romeo (Project Leader), Dr. Pietro Battaglia and Dr. Pierpaolo Consoli

• Responsible of the field activities (from April to September each year)

Responsible of tag and sampling operations on board of fishing vessels (from April to September each

Coordinating the tagging and sampling activities (from April to September each year)

Coordinating meetings with international collaborators (Standford University, IGFA, SLCI etc.)

• Coordinating meeting with stockholders (professional and artisanal fishermen)

Purchase materials within allocated budget

Mentoring students and temporary researchers on sampling methods

Data analysis and publication outputs

• Involved in the preparation of the project budget implementation request

Annual report

2017 Ecological Roles of Stingrays in Coastal Sandflats

Place James Cook University (Townsville, Australia)

Duties

Survey fieldwork (BRUVS, UVA)

Collection of stingrays using bottom-set longlines drumlines

Telemetry studies (acoustic)

Sample collection for trophic ecology studies

Research boat handlings

2017 Technical advice on Aquaculture livelihood in Tofo

Place Marine Megafauna Foundation

Duties Research possible species for a new aquaculture farm in Tofo

2008 - 2011 MIPAAF 2008 and "Study of Great Pelagic Fishes Catches as Function of Climate Changes in Action on The Plane" (as Part of "Vulnerability of The Italian Coastal Area and Marine Ecosystems to

Climatic Changes and Their Role in The Mediterranean Carbon Cycles")

Place Institute for Environmental Protection and Research (ISPRA, Milazzo, Italy)



Founder

Ministry of Education, University and Research, Ministry of Economy and Finance, Ministry of the Environment and Protection of Natural Resources, Ministry of Agriculture and Forestry and Integrated Special Fund for Research (FISR) – VECTOR DIVCOST

Duties

- Data collection activities of great pelagic fishes (Bluefin tuna, swordfish and spearfish) in the marine of Lipari (Aeolian's Archipelagos) and Milazzo
- Collection of samples from Mediterranean Sea terminal predators

2007 - 2008

Assessment of The Ecotoxicological Impacts of Old and Emerging Contaminants, Studies of Biology and Ecology of The Mediterranean Swordfish, Bluefin Tuna and Spearfish Population; Giant Evil Ray Tagging Programme

Place ICRAM (Central Institute for Marine Environmental Research)

Duties

- Organ and tissues sampling activities
- Survey data captures and fishing effort
- Helping in tagging Mobula mobular in central Mediterranean Sea

COMMISSION MEMBER

2023 Committee member for research fellow hiring position n. 41/2023

Place Stazione Zoologica Anton Dohrn (prot. N. 50/2024 19/01/2024)

2023 Committee member and Secretary for Postdoc fellowship hiring position n.17\2023

Place Stazione Zoologica Anton Dohrn (prot. N. 2422 28/04/2023)

2023 Committee member for research fellow hiring position n. 17/2023, 26/2023, 43/2023

Place Stazione Zoologica Anton Dohrn (prot. N. 2960 del 24/05/2023 and N. 4359 del 21/07/2023, 949/2023 14/11/2023)

2021 Committee member for research fellow hiring position n.31\2021

Place Stazione Zoologica Anton Dohrn (prot. N. 4051 02/08/2021)

2021 Secretary commission member for Researcher hiring position n.09\2020

Place Stazione Zoologica Anton Dohrn (prot. N. 309 27/01/2021)

2020 Secretary commission member for Technician hiring position n. 05\2020, 06\2020 and 07\2020

Place Stazione Zoologica Anton Dohrn (prot. N. 3289 02/07/2020)

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

UNDERSTAND	SPEA	WRITING		
Listening	Reading	Spoken interaction	Spoken production	
6.5	7.0	7.5	7.5	6.0

English

Sum of IELTS certificate equivalent to CEFRL C1

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user Common European Framework of Reference for Languages

Organisational / managerial skills

Acquired through academic pursuits and diverse professional experiences:

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- Leadership: Demonstrated ability to lead and motivate teams towards achieving common objectives.
- **Deadline Management**: Proficient in setting and adhering to deadlines, ensuring timely completion of tasks and projects.
- **Delegation**: Skilled in assigning tasks effectively to team members based on their strengths and capabilities.
- Goal Setting and Achievement: Proven track record of setting SMART goals and successfully meeting or exceeding them.
- Appointment Management: Efficiently managing appointments and schedules to optimize productivity and time utilization.
- **Project Management**: Experienced in planning, executing, and overseeing projects from inception to completion.
- **Problem Solving**: Strong analytical skills to identify issues and implement effective solutions.
- **Productivity Enhancement**: Implementing strategies to enhance productivity and efficiency in work processes.
- **Teamwork**: Collaborating effectively with colleagues to achieve common goals and objectives.
- **Multitasking**: Ability to handle multiple tasks simultaneously without compromising quality or efficiency.
- **Strategic Thinking**: Capable of developing and implementing strategic plans to achieve long-term objectives.
- Decision Making: Proficient in making well-informed and timely decisions to drive organizational success.
- Attention to Detail: Meticulous attention to detail in all aspects of work to ensure accuracy and quality.
- Inventory Management: Experience in managing stock inventory and ensuring adequate supply of materials.
- Record Keeping: Maintaining accurate records and documentation to track progress and ensure compliance.
- **Equipment Responsibility**: Responsible for the maintenance and proper handling of job materials and equipment.

Job-related skills

During my tenure as a Research Fellow and through my academic pursuits, I have acquired a diverse skill set encompassing:

- Research and Analysis: Conducted marine surveys employing various techniques, including longlines, BRUVS, drones, and underwater sample collection. Proficient in data analysis using Excel, SPSS, and R, with experience in base mapping using ArcGIS Pro and creating graphs in R-studio.
- Field and Laboratory Expertise: Demonstrated proficiency in laboratory management, instrument care, and inventory maintenance. Skilled in handling and processing biological samples with precision and attention to detail.
- Marine Biology and Ecology: Extensive knowledge of marine ecosystems, specializing in pelagic fish, elasmobranchs, cephalopods, and deep-sea fish. Conducted telemetry and animal migration behavior studies using advanced tagging techniques.
- Leadership and Training: Served as a mentor and supervisor for students and visiting researchers, facilitating their learning and professional development. Led scientific dives, totaling 60, and provided dive instruction in Nitrox and compressed air diving.
- Operational Skills: Capable of working autonomously in diverse environments, including mobile laboratories, remote areas, and aboard research and fishing vessels. Proficient in boat driving, up to 7 meters, with a focus on trophic ecology studies of marine apex predators.

Communication skills

Throughout my professional journey, particularly in roles such as a Marine Biologist and Dive Instructor, as well as during my academic pursuits including field and laboratory technician roles, research fellowships, and PhD studies, I have honed my communication skills. These include:



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- Effective Verbal and Written Communication: Proficient in conveying complex scientific concepts with clarity and precision, both in English and Italian.
- Active Listening and Persuasive Speaking: Skilled in empathetic listening and delivering persuasive presentations or speeches.
- Confidence and Articulacy: Capable of articulating ideas confidently and professionally in various settings.
- Presentation and Negotiation: Experienced in delivering compelling presentations, negotiating effectively, and engaging diverse audiences.
- Public Speaking: Comfortable addressing groups, whether in conferences, meetings, or public forums, with clarity and confidence.

Other skills

Acquired through diverse roles and educational pursuits, my skills encompass:

- Laboratory Techniques: Proficient in flow cytometry analysis and various spectrophotometer analyses, including UV/vis, fluorescence, and luminescent analysis.
- Environmental Analysis: Skilled in marine water quality analysis, with a focus on assessing and maintaining aquatic environments.
- Microbiology: Experienced in microorganism cultivation and harvesting techniques, encompassing bacteria and microalgae.
- Genetic Analysis: Capable of DNA extraction and genetic analysis using techniques such as PCR, Multiplex PCR, and Multi Locus Sequence Analysis, including phylogenetic Tree construction.
- Aquaculture: Knowledgeable in laboratory-scale crustacean rearing systems, particularly Artemia and prawns.
- · Anatomical Analysis: Proficient in the extraction and analysis of otoliths, vertebrae, dorsal rays, and beaks for age estimation and coloration analysis. Dissection and organ collection in fish and cephalopods

Digital skills

SELF-ASSESSMENT							
Information processing	Content creation	Safety	Problem solving				
Proficient user	Proficient user	Independent user	Proficient user	Proficient user			

Levels: Basic user - Independent user - Proficient user Digital competences - Self-assessment grid

Acquired through various professional roles and educational achievements:

- Advanced Command of Office Suite: Proficient in Word, Excel, and PowerPoint, facilitating efficient document creation, data analysis, and presentations.
- Proficient in Photo Editing with Adobe Photoshop: Developed skills through amateur photography, capable of editing and enhancing images for various purposes.
- Advanced Programming Skills in R and R-Studio: Skilled in statistical analysis, long time-series data organization, mapping, graph presentation, data analysis, as well as animal tracking and diving behavior studies.
- Data Presentation: Experienced in presenting data effectively using PowerPoint, peer-reviewed journals, report summaries, posters, and theses

Driving licence

- B (Italian license) Open C (Australian)
- A2 (Italian license)

- A1 (Italian license)

Recreational boat license (obtained in Australia)

SCIENTIFIC PUBBLICATIONS

Publications with IF subjected to peer-review

Malara Danilo*, Carmen Rizzo, Teresa Romeo, Silvestro Greco. Community interest Site and their shark biodiversity: eDNA investigation (in preparation)

Consoli Pierpaolo, Costa Valentina, Sciutteri Valentina, Malara Danilo, Pedà Cristina, Figurella Fabio, Campbell Ian, Deery Emily, Romeo Teresa, Andaloro Franco. (2024). Synthetic polymers: a global threat to aquatic benthic environment. Jornal of Hazardous Materials (under review) (IF = 13.6, Q1).

Malara Danilo*, Battaglia Pietro, Arostegui Martin C., Braun Camrin, Dale Jonathan, Block Barbara, Brogna Massimo, Greco Silvestro, Romeo Teresa. (2024) Satellite tagging insights into the seasonal movements and behavior of Mediterranean spearfish (Tetrapturus belone, Istiophoridae). Frontiers in Marine Science. 11:1362169. Doi: 10.3389/fmars.2024.1362169 (IF = 3.7; Q1)

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Guo Liang, **Malara Danilo**, Battaglia Pietro, Waiho Khor, Davis D. Allen, Deng Yu, Shen Zhongyuan, Rao Ke. (2024). Turnovers of Sex-Determining Mutation in the Golden Pompano and Related Species Provide Insights into Microevolution of Undifferentiated Sex Chromosome. *Genome Biology and Evolution*. 16 (3): evae037. Doi: 10.1093/gbe/evae037 (IF = 3.3; Q1)

Sciutteri Valentina, Costa Valentina, **Malara Danilo**, Figurella F., Campbell Ian, Deery E., Romeo Teresa, Andaloro Franco, Consoli Pierpaolo. (2024). Citizen science through a recreational underwater diving project supports the collection of large-scale marine litter data: The Oceania case study. *Marine Pollution Bulletin*. 200: 116133. Doi: 10.1016/j.marpolbul.2024.116133 (IF = 5.8; Q1)

Laface Federica, Pedà Cristina, Giommi Chiara, Scozzafava Serena, Rizzo Carmen, **Malara Danilo**, Greco Silvestro, Romeo Teresa. (2023). A glimpse into the future: A suitable methodological approach for the detection and identification of micro-bioplastics in biota. *Science of The Total Environment*. 899: p. 165613. DOI: 10.1016/j.scitotenv.2023.165613 (IF = 10.753; Q1)

Longo Francesco*, **Malara Danilo***, Asciutto Emanuele, Battaglia Pietro. (2023). Growth of the Mesopelagic Fish *Vinciguerria attenuata* (Cocco, 1838) in the Strait of Messina (Central Mediterranean Sea). *Journal of Marine Science and Engineering*. 11, 1055. DOI: 10.3390/jmse11051055 (IF = 2.744; Q2) *Same contribution

Battaglia Pietro, Pedà Cristina, **Malara Danilo**, Milisenda Giacomo, MacKenzie Brian R., Esposito Valentina, Consoli Pierpaolo, Vicchio Teresa Manuela, Stipa Maria Giulia, Pagano Luca, Longo Francesco, Romeo Teresa (2022). Importance of the Lunar Cycle on Mesopelagic Foraging by Atlantic Bluefin Tuna in the Upwelling Area of the Strait of Messina (Central Mediterranean Sea). *Animals* 12(17): 2261. DOI: 10.3390/ani12172261. (IF=3.231; Q1).

Danilo Malara⁺, Francesco Longo, Teresa Romeo, Franco Andaloro, Pietro Battaglia. (2021) Age and growth of pompano, *Trachinotus ovatus* (Linnaeus, 1758), from the Strait of Messina (central Mediterranean Sea). *Scientia Marina*, 85(3): 175-185. DOI: 10.3989/scimar.05167.016. (IF = 2.17; Q2). +corresponding

Francesco Longo*, **Danilo Malara***, Maria Giulia Stipa, Pierpaolo Consoli, Teresa Romeo, Marilena Sanfilippo, Francesco Abbate, Franco Andaloro, Pietro Battaglia. 2021. Age, growth and otolith microstructure of the spotted lanternfish *Myctophum punctatum* Rafinesque 1810. *Journal of Marine Science and Engineering*, 9(8): 801. DOI: 10.3390/jmse9080801. (IF=2.744; Q2). *Same contribution

Danilo Malara, Pietro Battaglia, Pierpaolo Consoli, Erika Arcadi, Francesco Longo, Maria Giulia Stipa, Luca Pagano, Silvestro Greco, Franco Andaloro, Teresa Romeo. (2021). When opportunistic predators interact with swordfish harpoon fishing activities: shark depredation over catches in the Strait of Messina (central Mediterranean Sea). *The European Zoological Journal*, 88 (1): 226-236. DOI: 10.1080/24750263.2021.1879284 (IF = 1.8; Q2).

Danilo Malara, Pietro Battaglia, Pierpaolo Consoli, Erika Arcadi, Simonepietro Canese, Silvestro Greco, Franco Andaloro, Teresa Romeo. (2020). Evidence of a predation event on a tagged Mediterranean spearfish (*Tetrapturus belone*; Pisces, Istiophoridae), inferred from pop-up satellite tagging data. *Aquatic Living Resources*, 33: 23. DOI: 10.1051/alr/2020024. (IF = 1.592; Q3)

Mauro Cavallaro, Maria Cristina Guerrera, Francesco Abbate, Maria Beatrice Levanti, Rosaria Laurà, Giovanni Ammendolia, **Danilo Malara**, Maria Giulia Stipa e Pietro Battaglia. (2020). Morphological, ultrastructural and immunohistochemical study on the skin ventral photophores of *Diaphus holti* Tåning, 1918 (Family: Myctophidae). *Acta Zoologica*, 1-7. DOI: 10.1111/azo.12348. (IF = 1.205; Q2)

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Danilo Malara, Lone Høj, Kirsten Heimann, Gabriella Citarrella and Michael Oelgemöller. 2017. Capacity of cationic and anionic porphyrins to inactivate the potential aquaculture pathogen *Vibrio campbellii. Aquaculture*. 473: 228-236. DOI: 10.1016/j.aquaculture.2017.02.015. (IF = 5.135; Q1).





Danilo Malara, Christina Mielke, Michael Oelgemöller, Mathias O. Senge and Kirsten Heimann. 2017. Sustainable water treatment in aquaculture – Photolysis and photodynamic therapy for the inactivation of Vibrio species. *Aquaculture Research.* 48 (6): 2954–2962. DOI: 10.1111/are.13128. (IF = 2.184; Q2).

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Pietro Battaglia, Valentina Esposito, **Danilo Malara**, Manuela Falautano, Luca Castriota and Franco Andaloro. 2014. Diet of the spothead lanternfish *Diaphus metopoclampus* (Cocco, 1829) (Pisces: Myctophidae) in the central Mediterranean Sea. *Italian Journal of Zoology*, 81 (4): 530-543. DOI: 10.1080/11250003.2014.948500. (IF = 1.8; O2).

Pietro Battaglia, Franco Andaloro, Pierpaolo Consoli, Valentina Esposito, **Danilo Malara**, Simona Musolino, Cristina Peda' and Teresa Romeo. 2013. Feeding habits of the Atlantic Bluefin tuna, *Thunnus thynnus* (L. 1758), in the central Mediterranean Sea (Strait of Messina). *Helgoland Marine Research*, 67 (1): 97-107. DOI: 10.1007/s10152-012-0307-2. (IF = 2.217; Q2).

Teresa Romeo, Patrizia Perzia, Valentina Esposito, **Danilo Malara**, Pietro Battaglia, Pierpaolo Consoli, Simone Canese and Franco Andaloro.2011. Relationship between swordfish swimming behaviour and sea surface temperature in the central Mediterranean Sea during the reproductive period. *Marine Biology Research*, 7 (2): 186-194. DOI: 10.1080/17451000.2010.489615. (IF = 1.609; Q3).

Pietro Battaglia, **Danilo Malara**, Teresa Romeo and Franco Andaloro. 2010. Relationships between otolith size and fish size in some mesopelagic and bathypelagic species from the Mediterranean Sea (Strait of Messina, Italy). *Scientia Marina*, 74 (3): 605-612. DOI: 10.3989/scimar.2010.74n3605. (IF = 2.17; Q2).

conference paper and posters

Monique Mancuso⁺, Erika Arcadi, **Danilo Malara**, Marilena Sanfilippo, Pietro Battaglia, Franco Andaloro, Nunziacarla Spano, Teresa Romeo. 2020. A pre-screening of the presence of antibiotics in traces in two large pelagic fish in the strait of Messina. Evolmar, 1st online Italian congress on Marine Evolution, 23-25 November 2020.

Danilo Malara⁺, Erika Arcadi, Pietro Battaglia, Pierpaolo Consoli, Franco Andaloro, Teresa Romeo. 2019. Shark attacks: competitors to large pelagic predators in the Strait of Messina (central Mediterranean Sea). XXIII European Elasmobranch Association Meeting, Rende (Italy) 16-18 October 2019.

Danilo Malara, Pietro Battaglia, Erika Arcadi, Pierpaolo Consoli, Franco Andaloro, Teresa Romeo⁺. 2019. Status and distribution of Mediterranean spearfish (*Tetrapturus belone*) in Mediterranean Sea. Blue Sea Land, Mazzara del Vallo (Italy) 17-19 October 2019.

Danilo Malara, Pietro Battaglia, Erika Arcadi, Pierpaolo Consoli, Franco Andaloro, Teresa Romeo⁺. 2019. Billfish of the Mediterranean Sea. Blue Sea Land, Mazzara del Vallo (Italy) 17-19 October 2019.

Danilo Malara⁺, Pietro Battaglia, Teresa Romeo. 2019. Ecological, historical, and cultural aspect of the Sicilian artisanal fisheries: developing opportunity for fishing tourism. Pescaturismo e fruizione del mare. Opportunità di sviluppo per l'area dello Stretto. University of Messina, workshop 26 September 2019.

Danilo Malara⁺, Michael Oelgemöller, Kirsten Heimann and Lone Høj. 2016. Prawn pathogen inactivation using porphyrin-based Photodynamic Antimicrobial Chemo-Therapy (PACT). Sharing Ocean Resources: Now and in the future. NZMSS-AMSA 2016 Conference Wellington (NZ), 4-7 July 2016

Danilo Malara⁺, Gabriella Citarrella, Michael Oelgemöller, Kirsten Heimann and Lone Høj. 2016. Photodynamic Antimicrobial Chemo-Therapy: a promising tool for aquaculture pathogen eradication. North Queensland Festival of Life Science. James Cook University (CSE poster prize)

Danilo Malara⁺, Lone Hoj, Michael Oelgemöller, Kirsten Heimann. 2014. Porphyrins as self-destructive photocatalysts. AIMS@JCU Student Day (2nd prize)

Cristina Pedà⁺, **Danilo Malara**, Pietro Battaglia, Patrizia Perzia, Franco Andaloro and Teresa Romeo. 2009. Cephalopods in the diet of large pelagic predators: beaks identification and photo archive reference reconstruction. Mediterranean Marine Biology 16 (1): 354-355.

+ presenter

Reports, manuals and books

Technical report. Ichthyofauna monitoring activities in MPA of Capo Milazzo

Cristina Pedà, Pietro Battaglia, Teresa Romeo, Maria Giulia Stipa, Francesco Longo, **Danilo Malara**, Pierpaolo Consoli, Franco Andaloro. Photographic atlas of cephalopod beaks from the Mediterranean Sea. *Officine grafiche F. Giannini & figli S.P.A.* pp. 107 (**ISBN 9791259686381**).



Curriculum Vitae Dr. Danilo Malara

Technical report. Court of Leuca. "Pesca motonave EVA leuca_AT finale" Prot. N 208, 18-01-2022 Technical report. Mitigation actions and management guide lines MPA Capo Rizzuto-2021 Technical manual. Dive Operations General Operating Procedures v1.4 - 2018

Publication metric	S
(Google Schola	ır
08/05/2024	.)

	All pu	blication	18		I	SI publicati	ons	Normalizati	on publication	on/year
Total number of	Total IF	Total	Year PhD/	first	H-	N.	N.	Year first	Year obtained	Last 3
publications		citation	publication	on	index	publications	citations	publication	PhD	years
35	80.773	536	2017/201	10	10	21	536	1.5	3	4

ISI Publication in the Core Collection of Web of Science Citation from google scholar (08/05/2024)

IF	Cited	Cites/Year	Age	Accession Number	DOI
3.7	0	0.0	0		10.3389/fmars.2024.1362169
3.3	1	1.0	0	WOS:001180124600001	10.1093/gbe/evae037
5.8	0	0.0	0	WOS:001184222500001	10.1016/j.marpolbul.2024.116133
10.753	2	2	2	WOS:001047210900001	10.1016/j.scitotenv.2023.165613
2.744	0	0.0	1	WOS:000997182800001	10.3390/jmse11051055
3.231	12	12	2	WOS:000850965500001	10.3390/ani12172261
2.17	2	1	3	WOS:000692824300003	10.3989/scimar.05167.016
2.744	8	4	3	WOS:000555794200001	10.3390/jmse9080801
1.8	8	4	3	WOS:000618330300001	10.1080/24750263.2021.1879284
1.592	2	0.5	4	WOS:000599957900001	10.1051/alr/2020024
1.205	3	0.75	4	WOS:000555794200001	10.1111/azo.12348
5.411	18	4.5	4	WOS:000561206300001	10.3389/fenvs.2020.00119
3.404	4	0.8	5	WOS:000489035300001	10.1007/s10811-019-01854-1
1.7	10	1.4	7	WOS:000402463100029	10.1016/j.aquaculture.2017.02.015
5.135	34	4.85	7	WOS:000413483000009	10.1111/maec.12459
2.184	18	2.57	7	WOS:000404300300029	10.1111/are.13128
2.504	58	6.44	9	WOS:000360669700017	10.1111/jfb.12744
1.8	25	2.5	10	WOS:000344781500007	10.1080/11250003.2014.948500
2.217	120	10.9	11	WOS:000315444300008	10.1007/s10152-012-0307-2
1.609	16	1.23	13	WOS:000288269700007	10.1080/17451000.2010.489615
2.17	183	13.07	14	WOS:000280917100018	10.3989/scimar.2010.74n3605

Awards and **Funding**

- James Cook University Postgraduate
 Doctoral Completion Scheme Research Scholarship (JCU-PRS) 2013-2017 (A\$56000/year)
- James Cook University-AIMS@JCU special stipend scholarship 2017 (A\$56000/year)
- AIMS@JCU Pilot Research Funding
 AIMS@JCU Pilot Research 2014 (A\$1000)
- Award. (A\$2,000)
- AIMS@JCU Student Day 2nd prize for poster 2014 (A\$600)
- AIMS@JCU Pilot Research Funding 2015 (A\$1000)
 - Funding 2016 (A\$1000)
- AIMS@JCU Travel Funding 2016 (A\$1500)
- Festival of Life Science 2016 CSE best poster presentation (~A\$500)
- AIMS@JCU Student Day photo competition 2016 (A\$100)

Membership

- Italian Researcher Group on sharks, rays, and chimeras ORCID iD https://orcid.org/0000-0002-7182-1848 (GRIS) from 01/04/2020
- Italian Society of Marine Biology (SIBM) from 01/04/2020
- Fisheries Society of the British Isles from 20/04/2019
- AMSA (Australian Marine Sciences Association) Member ID 15541 (not active)
- Web of Science ResearcherID Q-3376-2018

Certifications

- KLEIN S4900 Side Scan Sonar operator
- Dive instructor (PADI) certificate
- Fist Response Instructor

- ASFB (Australian Society of Fish Biology) Member ID ASFBM-18272 (not active)
- Oceania Chondrichthyan Society ID 27664543 (not active)
- PADI Dive Instructor Member ID 308301 (not active)
- CPR/AED/First AID Instructor ID OWSI-308301 (not active)
- Certificate 4 in Training and Assessment
- ICCAT observer
- Current O2, CPR and First AID certificate





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• Training school: Calculating Positions in Aquatic Telemetry. 18 - 20 May 2022 Biology Centre CAS, Ceske Budejovice, Czech Republic and online. Calculating positions for acoustic telemetry. YAPS (Yet Another Positioning Solver). Visualization of Generalized Additive Models (GAMs). Hierarchical GAM, hidden Markov, step selection models. Social network analyses. Creation and animation of trajectories.

- Lighthouse practical and theoretic course for KLEIN S4900 Side Scan Sonar operator, Portici (Na), 14-15-16 December 2021. Data acquisition, processing with Side Scan Sonar Klein 4900 system. Utilization of Software SonarPro for managing Side Scan Sonar during the navigation and real-time data acquisition, visualization, and registration. Utilization of SonarWiz 7.x for the data processing (clean navigation gaps, correction stands range, application of Gain algorithm, modification of the georeferenced navigation points).
- AIMS@JCU development statistical course using R and R-studio, AIMS@JCU funded, 5 days-course (R syntax, R basics, R Data frames, Introductory statistical principles, Basic statistics, R data summaries, numerical and graphical, R graphics, Statistical modelling, Simple hypothesis testing, Linear models, Heterogeneity and autocorrelation, Linear mixed effects models, Frequency analyses and generalized linear models, Generalized linear mixed models, Non-linear models, Multivariate analyses, Multivariate data, R-mode analyses, Q-mode analyses, Reproducible research, Document languages, knitr, Emacs, Git and version control)
- Animals in Motion 2017 Workshop James Cook University (Introductions, Introduction to spatial data, Reading telemetry data into R, Accessing variables in the data frame, Working with dates and times in R, Filtering datasets, Packages, Spatial Points and animal locations, Coordinate Reference Systems (CRS), Spatial Polygons and home ranges, Spatial Lines and animal trajectories, Movement metrics, Spatial Lines objects, Distance travelled, Writing a shapefile object from R, Visualising your data in Google Earth, Visualising points, Visualising animations, tidy style, pipes and ggplot2, The tidy verse, What is the tidy verse?, Members of the tidy verse, tidy style, Loading in our spatial data, Introduction to pipes "%>%", Benefits of "%>%" and tidy style, Dplyr, Basic vocabulary, select, filter and arrange, mutate, Summarise, Data visualisation using ggplot, Interactive maps using leaflet)
- Introduction to GIS, JCU founded, (1-day course)
- ICCAT, CICTA, CICAA, BFT Regional Observer Programme Training Workshop (ICCAT structure and functions, tuna biology, Bluefin tuna fisheries & farming operations, fisheries management initiatives & instruments for blue fin tuna, ICCAT recommendation 10-04, ICCAT observer code of conduct, BFT regional observer program framework, structure & role of memorandum of understanding, logistics protocols, reporting protocols, communications protocols, monitoring protocols, data collation, program outputs, use of observer health & safety, and operational equipment, health & safety protocols.)

Referees

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