

## Dr. Marina Morabito

**PRESENT POSITION:** Associate Professor in Systematic Botany (S.S.D. BIO/02) at the Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, University of Messina, Italy (since 2018).

Afferent to National Consortium Interuniversity for Marine Sciences (Co.N.I.S.Ma.).

National scientific qualification (ASN) for the role of full professor (2021-2030).

**PREVIOUS POSITION:** Researcher and Aggregate Professor in Botany (S.S.D. BIO/01) at the University of Messina (2006-2018).

**ORCID ID:** [orcid.org/0000-0002-0224-2113](https://orcid.org/0000-0002-0224-2113)

**SCOPUS profile:** <https://www.scopus.com/authid/detail.uri?authorId=15136762600>

### RESEARCH

#### RESEARCH INTERESTS:

biology and systematics of macroalgae, with major interest on Rhodophyta and Chlorophyta;

systematics and molecular phylogenetics;

DNA barcoding;

non indigenous species;

cultivation and cryopreservation of economic species;

extraction and evaluation of antimicrobials and anticoagulants;

morphogenesis and life histories both in controlled conditions and in the field;

karyology and cytogenetics.

#### RESEARCH RESPONSIBILITY:

manager of the Laboratory of Molecular Phylogenetics at the University of Messina, 2009 to present;

manager of the Laboratory of Phycology at the University of Messina, 2007 to 2009.

#### RESEARCH FELLOWSHIPS:

Post-doctoral fellowship, Government of Canada Award, University of New Brunswick, Canada, 2005-2006;

Research cooperation, Muséum National d'Histoire Naturelle, Paris, France, 2011.

#### RESEARCH COOPERATIONS:

Centre for Environmental and Molecular Algal Research of the University of New Brunswick, Fredericton, Canada,

Muséum National d'Histoire Naturelle of Paris, France,

University of Catania, Italy,

National Reference Center for Leishmaniasis (C.Re.Na.L.) of the Istituto Zooprofilattico Sperimentale della Sicilia, Palermo, Italy,

Universidad de A Coruña, Spain.

Moulay Ismail University, Meknes, Morocco

#### PAST RESEARCH COOPERATIONS:

Universidad de La Laguna, Tenerife, Islas Canarias, Spain,

University of Roma "Sapienza", Italy,

University of Padua, Italy,

University Ca' Foscari Venice, Italy,

Universitat de Barcelona, Spain,

CNR – Istituto per i Processi Chimico Fisici, Messina, Italy,

CNR – Istituto di Tecnologie Avanzate per l'Energia "Nicola Giordano", Messina, Italy,

Chungnam National University, Korea,

University of Gent, Belgium

#### FUNDED GRANT BASING ON PEER-REVIEWING

FISH PATH NET -Potenziamento dei centri di ittiopatologia siciliani- Misura 2.56, Misure relative alla salute e al benessere degli animali - Po Feamp Sicilia 2014/2020;

FABBR-UNIME 2017- Finanziamento Attività di base della ricerca di ateneo;

PON02\_000451\_3362185 INNOVAQUA - "Innovazione tecnologica a supporto dell'incremento della produttività e della competitività dell'acquacoltura siciliana" [Technological innovation to support increased productivity and competitiveness of Sicilian aquaculture] (2012-2015, as component of the RU at the University of Messina);  
Proyecto de Investigación Fundamental no orientada 2011 "Diversidad y relaciones filogenéticas de algas marinas bentónicas con potencial farmacológico: el complejo *Laurencia* (Rhodophyta) en las costas de la Macaronesia, Atlántico Tropical y Subtropical", Universidad de La Laguna, Tenerife, Islas Canarias, Spain (component);  
Programma di ricerca "ordinario" 2009 "Dinamiche di insediamento ed affermazione di popolamenti alloctoni nel sistema salmastro di Capo Peloro" [Settlement and success dynamics of non indigenous populations in the brackish system of Cape Peloro], University of Messina (component of the RU);  
Programma di ricerca "ordinario" 2006/2007 "Valutazione dell'attività antimicrobica di macroalghe identificate tramite DNA barcoding" [Evaluation of the antimicrobial activity of macroalgae identified by DNA barcoding], University of Messina (component of the RU);  
Programma di ricerca "GR" 2002 "Sistematica molecolare del *Gracilaria gracilis*-complex (Gracilariales, Rhodophyta) nel Mediterraneo" [Molecular systematics of the *Gracilaria gracilis*-complex (Gracilariales, Rhodophyta) in the Mediterranean], University of Messina (principal investigator).

#### COOPERATION TO RESEARCH PROJECTS

"BioWALK4Biofuels (2011-2015) – Biowaste and algae knowledge for the production of 2nd generation biofuels", project financed by the European Commission to produce biofuel from algae cultivation ([www.biowalk4biofuels.eu](http://www.biowalk4biofuels.eu)).

"Algal Life Global Audit" (2009-2011), leaded by the Canadian Barcode of Life Network (CBLN) within the International Barcode of Life Initiative (iBOL).

#### TEACHING

##### TEACHING RESPONSIBILITIES:

At the University of Messina, Italy, after the enrolment as Researcher (2006):

Systematic Botany (6 CFU, triennial degree in Biological Sciences), 2018 to present;

Plant Biology (3 CFU, module within the course of Food and Nutrition of Farm Animals, master degree in Veterinary Medicine), 2015 to 2020;

General Botany (7 CFU, triennial degree in Biological Sciences), 2011 to 2020;

Botany (6 CFU, triennial degree in Marine biology and ecology), 2007-2013;

Evolution and diversity of plants (4 CFU, optional, master degree in Biology), 2011-2014;

Biology of reproduction of algae (6 CFU, optional, triennial degree in Biological Sciences), 2009-2015;

Phylogenetic methods for plants (4 CFU, optional, master degree in Biology), 2008-2011;

Faculty member in the Doctorate School of Applied Biology and Experimental Medicine, 2013 to present;

Faculty member in the Doctorate School of Experimental Sciences Applied to Animals, 2012-2013;

Faculty member in the Doctorate School of Tourism, Territory and Environment, 2009-2012;

Faculty member in the Doctorate School of Biology of Algae, 2007-2008 to 2008-2009;

Department delegate to the Internationalization for the degree courses of Marine Biology and Ecology and Biology and Ecology of the Marine and Coastal Environment (2011 to 2013);

Direction of thesis preparation for triennial, master and PhD students (2006-present).

Committee member:

Quality Insurance Committee (AQ) of the triennial degrees in Marine and Terrestrial Environment / Sciences of Environment and Nature, 2020 to present;

Focus group for Didactics of the Department of Chemical, Biological, Pharmaceutical and Environmental Sciences, 2020 to present;

Quality Insurance Committee (AQ) of the triennial degree in Biological Sciences, 2017 to present;

Committee for OFA test of the triennial degree in Biological Sciences, 2016-2017;

admission to the Doctorate School of Biology of Algae, 2007-2008;

admission to the Doctorate School of Tourism, Territory and Environment, 2010-2011;

final exam of the Doctorate School of Biology of Algae, 2011.

final exam of the Doctorate School of Pharmacy at the University of Barcelona, Spain, 2009.

Before the enrolment in 2006, at the University of Messina, Italy:

"Cultore della materia" (Scholar) in Botany (SSD BIO/01);

Teaching assistant in courses of Botany and Systematic Botany (SSD BIO/01, BIO/02) in the triennial degree of Marine Biology and Ecology and in the master degree of Biology and Ecology of the Marine and Coastal Environment, 2005;

Seminars of "Introduction to biology, diversity and economic uses of algae" to undergraduate students in Biology and Natural Sciences, 2004-2005;

Support in laboratory work to undergraduate and PhD students, 1998-2005;

Teaching assistant in laboratory lessons to undergraduate students (courses: Biology of algae, Marine Botany, Marine Systematic Botany, Developmental Biology of marine plant, Laboratory methods in Botany, Economic Marine Algae), 1997-2005.

Extra-University teaching:

Lectures on macroalgal diversity and commercial applications for cultural associations, 2006-present

Teacher in lessons of Introductory Botany to secondary school students, Farm "Polito", Vibo Valenzia, Italy, January-May 2002

Service as visitor guide at the Botanical Garden, University of Messina, Italy, 1997-1998

**AGREEMENT PROMOTER BETWEEN THE UNIVERSITY OF MESSINA AND OTHER UNIVERSITIES AND RESEARCH INSTITUTIONS FOR STUDENT MOBILITY:**

2014-present: University of Sfax, Tunisia;

2008-present: Muséum National d'Histoire Naturelle of Paris, France;

2010-2012: University of Gent, Belgium (Erasmus programme);

2011: Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle D'Aosta, sezione di Genova e Savona.

2010: Universidad de Las Palmas de Gran Canaria, Islas Canarias, Spain.

**EDUCATION**

PhD in Biology of Algae, University of Messina, Italy, 2001;

Degree in Biological Sciences (final evaluation: 110/110 cum laudae), University of Messina, Italy, 1997

**SPECIALIZATION COURSES**

Officinal plants, with final examination, University of Messina, Italy, 2001-2002

Cladistics – Isozymes electrophoresis, University of Messina, Italy, May 2000

Molecular biology techniques applied to ecology and taxonomy of macroalgae, University of Messina, Italy, May 1999

Apprenticeship as Biologist (Botany/ Microbiology), with final examination, University of Messina, Italy, March 1997-February 1998

Phycology, Società Botanica Italiana, Algology working group, June 1996, June 1998, June 2000

**SCHOLARSHIP AND AWARDS**

Post-doctoral fellowship [Life history of *Bryopsis* species (Chlorophyta, Bryopsidales) from the Straits of Messina], University of Messina, Italy, 2002-2004

"Premio Società Botanica Italiana", award for outstanding PhD thesis in Botany (2000-2002), Società Botanica Italiana, 2003

PhD fellowship [Biology of algae], University of Messina, Italy, 1998-2000

**STAGES**

Attendance at the Martin Ryan Institute to study phylogenetic inference techniques, National University of Ireland, Galway, January 2003;

Attendance as guest student at the Ecology of Benthos Laboratory to study molecular biology techniques applied to macroalgal phylogenies, Stazione Zoologica "A. Dohrn", Italy, October-December 1999.

**PEER REVIEWER:**

Journal of Applied Phycology, ISSN: 0921-8971, 2019

Scientific Reports-NatureResearch, ISSN 2045-2322, 2019

Diversity, ISSN 1424-2818, 2018

Algae, ISSN 1226-2617, 2018

Marine Drugs, ISSN 1660-3397, 2010-2017

Cryptogamie, Algologie, ISSN 0181-1568, 2017

European Journal of Phycology, ISSN 0967-0262, 2016

Joint Projects, University of Verona, 2014

Aquaculture Research, ISSN: 1365-2109, 2014

Futuro in ricerca (MIUR), 2013

Botanica Marina, ISSN 1437-4323, 2010, 2013

Cahiers de Biologie Marine, ISSN 2262-3094, 2013

FIRB-Futuro in ricerca (MIUR), 2011

Chinese Journal of Oceanology and Limnology, ISSN 0254-4059, 2012

Cryptogamie: Algologie, ISSN 0181-1568, 2011, 2017

Sexual Plant Reproduction, ISSN 0934-0882, 2011

#### **MEMBERSHIPS**

Marine Organism Taxonomy (MOTax) Service of the European Marine Biological Resource Centre (EMBRC)

British Phycological Society

Federation of European Phycological Societies

International Phycological Society

Italian Network for DNA barcoding

#### **CONFERENCES / WORKSHOPS ATTENDED**

Annual Scientific Meeting of the Algology working group - Società Botanica Italiana, University of Bari, November 8-9 2019.

Annual Scientific Meeting of the Algology working group - Società Botanica Italiana, University of Catania, November 16-17 2018.

112<sup>nd</sup> Congress of the Società Botanica Italiana and IV International Plant Science Conference (IPSC), Parma, Italy, September 20-23 2017

XXI Simposio de Botánica Criptogámica, Universidad Rey Juan Carlos, Aranjuez, Madrid, Spain, June 20-24 2017

1<sup>st</sup> MOTax Meeting, Stazione Zoologica Anton Dohrn, Villa Comunale, Napoli, October 26-27 2016

86th National Congress of the Italian Society of Experimental Biology, University of Palermo, October 24-25 2013

Annual Scientific Meeting of the Algology working group - Società Botanica Italiana, University Ca' Foscari, Venice, October 18-19 2013

Annual Scientific Meeting of the Algology working group - Società Botanica Italiana, Zoological Station "A. Dohrn", Ischia, November 8-9 2012

4th European Phycological Congress, Rhodes, Greece, September 4-9 2011

2nd European Consortium for the Barcode of Life (ECBOL) conference, Braga, Portugal, 2-4 June 2010

Giornata di Ateneo, University of Messina, Italy, 06 July 2009

103rd Congress of the Società Botanica Italiana, University of Reggio Calabria, Italy, 17-19 September 2008

XII OPTIMA Meeting, University of Pisa, Italy, 10-16 September 2007

4th European Phycological Congress, Oviedo, Asturias, Spain, 22-27 July 2007

Annual Scientific Meeting of the Algology working group - Società Botanica Italiana, Catania, Italy, 24-25 November 2006

14th Meeting of the Group of European Charophytologists (GEC), Barcelona, Catalonia, Spain, 20-22 October 2006

Unravelling The Algae - The Past, Present And Future Of Algal Molecular Systematics, The Natural History Museum, London, UK, 11-12 April 2006

8th International Phycological Congress, Durban, South Africa, 13-19 August 2005

XVIII International Seaweed Symposium, Bergen, Norway, 20-25 June 2004

52nd British Phycological Society Winter Meeting, Lancaster University, UK, 4-7 January 2004

98th Congress of the Società Botanica Italiana, University of Catania, Italy, 24-26 September 2003

3rd European Phycological Congress, Queen's University, Belfast, UK, 21-26 July 2003

Italy-USA joint symposium on Marine Biology and Biotechnology, University of Messina, Italy, 18-21 March 2003

51st British Phycological Society Winter Meeting, National University of Ireland, Galway, Ireland, 2-5 January 2003

Annual Scientific Meeting of the Algology working group - Società Botanica Italiana, Chioggia, Italy, 8-9 November 2002

97th Congress of the Società Botanica Italiana, University of Lecce, Italy, 24-27 September 2002

Annual Scientific Meeting of the Algology working group - Società Botanica Italiana, University of Sassari, Italy, 19-21 October 2001

X OPTIMA Meeting, University of Palermo, Italy, 13-19 September 2001

95th Congress of the Società Botanica Italiana, University of Messina, Italy, 28-30 September 2000

2nd European Phycological Congress, Montecatini Terme, Italy, 20-26 September 1999

Annual Scientific Meeting of the Algology working group - Società Botanica Italiana, Istituto Sperimentale Talassografico, CNR, Taranto, Italy, 6-7 November 1998

## TAXONOMIC DESCRIPTION

### GEN. NOV.

*Felicinia* Manghisi, Le Gall, Ribera, Gargiulo et Morabito 2014

### SP. NOV.

*Gracilaria viridis* A. Sfriso, M.A. Wolf, K. Sciuto, Morabito, C. Andreoli et I. Moro 2013

*Pachymeniopsis gargiuli* S.Y. Kim, Manghisi, Morabito et S.M. Boo 2014

*Yonagunia atimo-vatae* Manghisi, M.Morabito, G.H.Boo, S.M.Boo et Le Gall 2015

### COMB. NOV.

*Dermocorynus dichotomus* (J. Agardh) Gargiulo, Morabito et Manghisi 2013

*Dermocorynus horridus* (Kützinger) Gargiulo, Morabito et Manghisi 2013

*Felicinia marginata* (Roussel) Manghisi, Le Gall, Ribera, Gargiulo et Morabito 2014

*Phyllymenia capensis* (O. De Clerck) Gargiulo, Morabito et Manghisi 2013

*Yonagunia ligulata* (Harvey ex Kützinger) Manghisi, Morabito, De Clerck et Le Gall 2015