Europass
Curriculum Vitae

Personal information

First name(s) / Surname(s)	**Michele Scardi**
Address(es)	Riviera di Chiaia 207, 80121 Napoli, Italia
Telephone(s)	+39 081 427022 Mobile: +39 335 6795190
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E-mail	mscardi@mclink.it
Nationality	Italian
Date of birth	January 11, 1956
Gender	Male

Work experience

Dates	2017- present
Occupation or position held	Full professor of Ecology
Main activities and responsibilities	Courses: Fundamental Ecology (MSc) and Statistics and data analysis (PhD). Member of the PhD School in Ecology, Evolution and Applied Anthropology and Deputy Head of the Department of Biology. Research and advanced training in ecological data analysis and modeling.
Name and address of employer	'Tor Vergata' University, Via Orazio Raimondo, Rome, Italy
Type of business or sector	Research and higher education
Dates	2001-2017
Occupation or position held	Associate professor of Ecology
Main activities and responsibilities	Courses: Fundamental Ecology (MSc) and Statistics and data analysis (PhD). Member of the PhD School in Ecology, Evolution and Applied Anthropology and member of the Administrative Council of the Department of Biology. Research and advanced training in ecological data analysis and modeling.
Name and address of employer	'Tor Vergata' University, Via Orazio Raimondo, Rome, Italy
Type of business or sector	Research and higher education
Dates	1998-2001
Occupation or position held	Associate professor of Ecology
Main activities and responsibilities	Courses: Ecology. Research and advanced training in ecological data analysis and modelling.
Name and address of employer	'Aldo Moro' University of Bari, Piazza Umberto I 1, Bari, Italy
Type of business or sector	Research and higher education
Dates	1989-1998
Occupation or position held	Researcher
Main activities and responsibilities	Data analyis and modelling applied to biological oceanography
Name and address of employer	Zoological Station 'A. Dohrn' of Naples, Villa Comunale, Naples, Italy
Type of business or sector	Research and higher education
Dates	1986-1998
Occupation or position held	President
Main activities and responsibilities	Activity planning, relationships with customers, ecological modelling and data analysis
Name and address of employer	Bioservice scrl, Via Cintia, Parco S. Paolo is. 25, Naples, Italy
Type of business or sector	Applied research

Date	1983-present
Occupation or position held	Biologist
Main activities and responsibilities	Freelance professional, member of the Italian Biologists National Association (n. 17958)
Name and address of employer	Self-employed
Type of business or sector	Environmental applied research and consulting

Education and training

Dates	1976-1980
Title of qualification awarded	Degree in Biology, cum laude
Principal subjects/occupational skills covered	Biology and ecology
Name and type of organisation providing education and training	Federico II University of Naples, Italy
Level in national or international classification	ISCED 6

Personal skills and competences

Mother tongue(s)	**Italian**

Other language(s)

Self-assessment	**Understanding**				**Speaking**				**Writing**	
European level (*)	Listening		Reading		Spoken interaction		Spoken production			
English	C1	Proficient user	C2	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user
French	B1	Independent user	B2	Independent user	A1	Basic user	A1	Basic user	A1	Basic user

(*) Common European Framework of Reference for Languages

Social skills and competences	In almost thirty years of professional activity I developed: • Proven attitude towards cooperation in scientific and professional environments • Experience in interacting with both public administrations and stakeholders • Good communication skills, both formal and informal • Experience in teaching, not only in University courses, but also at higher levels • Synthesis and mediation skills aimed at resolving conflicts in work teams • Attitude towards communication in multicultural environments
Organisational skills and competences	In my public and private professional life I showed: • Attitude towards leadership and team work management (acquired in professional activities as well as coordinating scientific research) • Attitude towards work in coordinated projects (research as well as consulting) • Human resources and logistics management skills • Attitude towards design and management of research projects and consulting activities
Technical skills and competences	Usage of lab equipment (precision weighing scales, automatic burettes, fluorometers, spectrophotometers, etc.), in microscopy, analog and digital photography and video, usage of oceanographical instruments (currentmeters, CTD probes and other sensors, rosette samplers, etc.), ROV piloting

Computer skills and competences	- Personal computer power user since 1982 - Proficient in all the most common office automation software packages as well as in several CAD, matematical, statistical, raster and vector graphics packages - Excellent knowledge of the Microsoft Windows environment - Familiar with the most common Linux distros (e.g. Ubuntu, Mint, etc.) - Development of web pages and web sites - Java applets and Javascript - Interfacing and controlling lab and field instruments - **Software development** in Visual Basic .Net, Visual Basic 6, FreeBasic and Fortran; basic skills in Pascal, C, C# e C++ - Good knowledge of R and Phyton for statistical analyses and Machine Learning applications. - All the programming skills were developed through self-teaching, but they led to well documented professional products and scientific tools.
Other skills and competences	- Downhill ski instructor (qualification obtained in 1979) - High water sailing (with Italian unlimited license)
Driving licence	- Italian "B" driving licence (cars and motorcycles)
Additional information	Married with two children. Home page: http://www.michele.scardi.name I am working since more than 30 years in research institutions and I participated in several fundamental and applied research projects, at both national and international levels. In the framework of these projects I played different roles, ranging from simple participation to management and scientific coordination (from research groups to whole projects). Moreover, I also carried out many consulting activities focusing on ecological issues as well as on Machine Learning applications, supporting commercial enterprises as well as public administrations. I am a founding member of the International Society for Ecological Informatics, and I organized its third conference (http://www.isei3.org). I am a member of the editorial board of Ecological Informatics (Elsevier), as well as of Scientific Reports (open access journal by Nature Publishing Group) and Freshwater Biology (Wiley). I have been the Italian representative in the intercalibration of the methods based on fish fauna for assessing the ecological status of streams and rivers in the light of Water Framework Directive (2000/60/EC). I have been a member of the Italian National Scientific Committee for Antarctic Research from 2007 to 2011. From 2013 to 2014 I coordinated the CAMP Italy project (integrated coastal zone management on behalf of UNEP PAP/RAC and Italian Ministry for the Environment). I have assisted the Italian Ministry for the Environment in the implementation of the Marine Strategy Directive (2008/56/EC) and at present I represent the Italian Ministry of Agricultural, Food and Forestry Policies in the Technical Committee that is in charge for the implementation of that Directive. I am a member of the Board and Vice-president of CoNISMa (a consortium of 34 Italian universities focusing on marine research). Moreover, I am Vice-president of the Italian Sociaty for Marine Biology. From July 2017 I am a member of the Scientific Council of ISPRA (Italian National Institute for Environmental Protection and Research). I supervised 20 PhD theses so far and I am supervising 2 more PhD thesis in 2022. I have been member of PhD evaluation committees for Biomathematics at the University "Paul Sabatier" of Toulouse (France), at the University "Pierre et Marie Curie" of Paris (France), at the University of Adelaide (Australia) and at the Massey University (New Zealand). My scientific publications are comprised of more than 150 papers and book chapters and more than 150 oral presentations at congresses. I am co-author of a book on modelling community structure in freshwater ecosystems (published by Springer) and I have been guest editor for two special issues of the Ecological Modelling journal (Elsevier), one on the application of neural networks in ecology and another on matter and energy flows in the biosphere and human economy. In the framework of national and international programmes, my present research activities include applications of neural networks and other machine learning techniques as empirical models of ecological processes, regional and global phytoplankton primary production models, assessment of ecosystem status and development and application of data analysis techniques in ecology, zoology and oceanography.

Ten selected publications from the last decade are showed in the following list:

1. Conti L., Grenouillet G., Lek S., **Scardi M.**, 2012. Long-term changes and recurrent patterns in fisheries landings from Large Marine Ecosystems (1950–2004). Fisheries Research, 119–120: 1–12.
2. Bacci T., Rende S.F., Rocca D., Scalise S., Cappa P., **Scardi M.**, 2015. Optimizing Posidonia oceanica (L.) Delile shoot density: Lessons learned from a shallow meadow. Ecological Indicators, 58: 199–206.
3. Penna A., Casabianca S., Guerra A.F., Vernesi C., **Scardi M.**, 2017. Analysis of phytoplankton assemblage structure in the Mediterranean Sea based on high-throughput sequencing of partial 18S rRNA sequences. Marine genomics, 36: 49-55
4. Mattei F., Franceschini S., **Scardi M.**, 2018. A depth-resolved artificial neural network model of marine phytoplankton primary production. Ecological Modelling, 382: 51-62
5. Sammartino M., Marullo S., Santoleri R., **Scardi M.**, 2018. Modelling the vertical distribution of phytoplankton biomass in the Mediterranean Sea from satellite data: A neural network approach. Remote Sensing, 10 (10): 1666
6. Franceschini S., Tancioni L., Lorenzoni M., Mattei F., **Scardi M.**, 2019. An ecologically constrained procedure for sensitivity analysis of Artificial Neural Networks and other empirical models. PloS one, 14 (1): e0211445
7. Catucci E., **Scardi M.**, 2020. A Machine Learning approach to the assessment of the vulnerability of Posidonia oceanica meadows. Ecological Indicators, 108: 105744
8. Mattei F., **Scardi M.**, 2021. Collection and analysis of a global marine phytoplankton primary-production dataset. Earth System Science Data, 13 (10): 4967-4985
9. Mattei F., Buonocore E., Franzese P.P., **Scardi M.**, 2021. Global assessment of marine phytoplankton primary production: Integrating machine learning and environmental accounting models. Ecological Modelling, 451: 109578
10. Mattei F., **Scardi M.**, 2022. Mining satellite data for extracting chlorophyll a spatio-temporal patterns in the Mediterranean Sea. Environmental Modelling & Software, 150: 105353

(More details at http://scholar.google.com/citations?user=SpvDX-IAAAAJ&hl=en)