

## CURRICULUM VITAE

### PERSONAL DETAILS

**Name:** Elisabetta Betulla Morello  
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**e-mail:** b.morello@ismar.cnr.it  
**Nationality:** Italian  
**Date of birth:** 07/12/1974  
**Languages:** English (mother tongue), Italian (mother tongue), French (intermediate level)

### EDUCATION

- 2000 – 2004 London University (University Marine Biological Station Millport)**  
Philosophy Doctor (Ph.D.) degree in Marine Biology. Research undertaken on the specific topic “Aspects of the impact of hydraulic dredging for the clam *Chamelea gallina* in Italian waters” at the University Marine Biological Station Millport (London University) in collaboration with the Institute of Marine Sciences of the Italian National Research Council (ISMAR-CNR) (Ancona, Italy). Supervisors: Dr R.J.A. Atkinson (UMBSM) and Dr C. Frogliia (ISMAR-CNR). Awarded in April 2004.
- 1998 – 1999 King's College London**  
Master of Science (M.Sc.) degree with distinction in Aquatic Resource Management. Thesis on the fishery for the Venus clam, *Chamelea gallina*, in the western Adriatic Sea. Awarded in November 1999.
- 1995 – 1998 University of Bristol**  
Bachelor of Science (B.Sc.) degree in Biological Sciences with First class honours. 3rd year project on the East African caecilian (Amphibia: Gymnophiona), *Boulengerula taitanus*, with particular attention paid to sexual dimorphism, bladder morphology, superficial cranial musculature and juvenile dentition. Awarded in June 1998.
- 1979 – 1992 The Sir James Henderson British School of Milan, Italy**  
GCSE's and 'A' Levels.

### EMPLOYMENT

- Oct. 2007 – today** Post-doctoral fellowship within the framework of one EU project:  
“Improving assessment and management of small pelagic species in the Mediterranean” (SARDONE). Employer: Dr Enrico Arneri (ISMAR-CNR, Ancona, Italy). Main duties: (i) bibliographic review of small pelagic fry fisheries in the Mediterranean Sea; (ii) experimental design and data analysis; (iii) assessment of the impact of fry fisheries on adult stocks; (iv) project manager.
- Oct. 2005 – Sept. 2007** Post-doctoral fellowship within the framework of one EU project:  
“EMMA – Environmental Management through Monitoring and Modelling of Anoxia”. Employer: Dr Enrico Arneri (ISMAR-CNR, Ancona, Italy). Main duties: (i) collection and analysis of fisheries landings time series data in relation to oxygen concentration time series with the aim of using future changes in landings as short term predictors of dystrophic events; (ii) administrative tasks related to the project.
- July 2004 – Sept. 2005** Post-doctoral researcher within the framework of two projects:  
(1) EU funded project “NEphrops and CETacean Species Selection Information and TechnologY” (NECESSITY). Employer: Dr Carlo Frogliia (ISMAR-CNR, Ancona, Italy). Main duties: (i) evaluation of the differential impacts of the otter-trawl and creel fisheries on Norway lobster populations through fishing trials and UWTV trials, responsible for experimental design, data collection and analysis, and writing of reports; (ii) administrative

tasks related to the project. (2) a project funded by the Italian Coast Guards. Employer: Dr Emilia Gramitto (ISMAR-CNR, Ancona, Italy). Main duties: teaching Coast Guard staff on fisheries biology and Italian and European fisheries legislation.

- Feb. – Apr. 2004** External contract for: the realisation of photographic material on North-East Atlantic fish species. Employer: Dr Emilia Gramitto (ISMAR-CNR, Ancona, Italy). Carried out at the University Marine Biological Station Millport (London University), Scotland, UK.
- Jul. 2002 – Jan. 2004** Researcher within the framework of a project funded by the Italian Coast Guards. Employer: Dr Emilia Gramitto (ISMAR-CNR, Ancona, Italy). Main duties: teaching Coast Guard staff on fisheries biology and Italian and European fisheries legislation. Project used to fund the last two years of PhD degree.
- Jul. 2000 – Jul. 2002** Doctoral student within the framework of one EU-funded project: “Assessments of the impact and efficiency of hydraulic dredging in Scottish and Italian waters”. Employer: Dr Carlo Froggia (ISMAR-CNR, Ancona, Italy). Main duties: work carried out on the impacts of fishing on the benthic community; responsible for experimental design, data collection and analysis, and writing of reports and papers.

## **PARTICIPATION TO PROJECTS**

- Dec. 2006 – today** Participation to the EU project: “Southern European Seas: Assessing and Modelling Ecosystem changes” (SESAME – contract no. FP6 – 036949-2). Duties: responsible for time series analysis of fishery catch data in relation to environmental factors.
- 2005 – 2006** Bilateral agreement between the Institute of Marine Sciences (CMIMA – CSIC, Barcelona, Spain) and the Marine Fisheries Section (ISMAR – CNR, Ancona, Italy): “Dynamic ecological modelling applied to the Adriatic Sea: fishing activities and environmental factors”. Duties: responsible for time series analysis of fishery catch data in relation to environmental factors.
- Sept. 2003 – Dec. 2005** Responsible for the translation of: biodiversity-related terms from English to Italian within the framework of WP11 (Multi-lingual access) of the EU-funded project “European Network for Biodiversity Information” (ENBI) using FishBase as a working template.
- 2001 – 2002** Participation in a project aimed at evaluating the feasibility of a proposed Marine Protected Area (“parco marino del Piceno”) in a coastal zone of the western Adriatic Sea. Duties: responsible for the analysis of the collected data in order to characterise and classify the soft bottom biocoenoses present.
- 2000 – 2002** Data collection and analysis within the framework of a project on the assessment of the clam (*Chamelea gallina*) stock in the Adriatic Sea funded by the Italian Ministry for Fisheries, Agriculture and Forestry. Duties: responsible for analysis of survey data towards stock assessment and estimation.

## **COURSES ATTENDED**

- October 2005** Course on the use of time series analysis applied to ecological data held by Dr A.F. Zuur: “Analysing biological and environmental data - Using Univariate Analysis and Multivariate Time Series Analysis”, at ARPAT (Agenzia Regionale per la Protezione Ambientale della Toscana), Livorno (Italy).
- July 2004** Course on the use of Geographic Information Systems (GIS) through the ArcView Software, held by Dr R. Gramolini at ISMAR-CNR, Ancona (Italy).
- May 2004** Course on the use of mass-balance ecosystem models applied to fisheries management and impact prediction (with particular attention focussed on the Ecopath, Ecosim and Ecospace software) held by Dr C. Walters e Dr V. Christensen at the University of British Columbia, Vancouver, Canada.

- March 2003** Course on the use of multivariate statistical analysis techniques applied to marine ecology held by Dr M. J. Anderson (University of Auckland, NZ) and Dr L. Benedetti-Cecchi (University of Pisa, Italy): “Design and Analysis of Monitoring and Experiments for Environmental Scientists” at the Centro Interdipartimentale di Ricerca per le Scienze Ambientali in Ravenna, Bologna University, Italy.
- Sept. 2001** Course on the use of Analysis of Variance applied to marine ecology held by Dr A. Underwood and Dr G. Chapman (University of Sydney, Australia): “Design and Analysis of Ecological Experiments” at the University of Sassari, Nuoro (Sardinia).
- March 2001** Workshop on the use of the software PRIMER (Plymouth Routines in Multivariate Ecological Research) for the multivariate analysis of ecological data, Plymouth (U.K.).
- April 2000** Course on DNA sequencing and the use of sequencing machinery (ABI PRISM 310 and 377 sequencers) and their software at the Genetic Core Lab of PE Biosystems Italia.

## TEACHING PROFILE

### University Level

- January 2007** Taught a 3 hour lecture on “Fisheries management” within the “Fisheries biology and technology” course of the B.Sc. in Acquaculture and Ichthyopathology (2<sup>nd</sup> year of study), Faculty of Medicine and Veterinary Science, University of Bologna, Italy.
- January 2007** Taught a 3 hour lecture on “The ecological impacts of fisheries” within the “Fisheries biology and technology” course of the B.Sc. in Acquaculture and Ichthyopathology (2<sup>nd</sup> year of study), Faculty of Medicine and Veterinary Science, University of Bologna, Italy.
- Feb. 2007** Three hour seminar on “The ecological impacts of fisheries”, University of Padova, Italy.
- Nov. 2005** Taught a 3 hour lecture on the ecological impacts of fisheries at the undergraduate degree in Marine Biology, Faculty of Science, Università Politecnica delle Marche, Ancona, Italy.
- July 2005** Taught a 3-day practical course in fisheries biology on board the RV Dallaporta in favour of the 4<sup>th</sup> year undergraduates of the Naval Military Academy in Livorno (Accademia Navale di Livorno), Italy.
- July 2004** Taught a 2-day practical course in fisheries biology on board the RV Dallaporta in favour of the 4<sup>th</sup> year undergraduates of the Naval Military Academy in Livorno (Accademia Navale di Livorno), Italy.
- March 2004** Taught a 3 hour lecture in Mollusc biology and fisheries at the EMAS post-graduate School for environmental consultants and auditors, Faculty of Agriculture, Università Politecnica delle Marche, Ancona, Italy.
- Dec 2002-Sep 2005** Taught a total of 6 undergraduate courses (12 hours each) in fisheries biology and legislation at the Naval Military Academy in Livorno (Accademia Navale di Livorno), Italy.
- Other**
- May 2008** Taught a 3-day practical course in fisheries biology on board the RV Dallaporta in favour of the European Fisheries Inspectors of the Italian Coast Guard.
- Sep 2002-Nov.2005** Taught a total of 15 courses (8 hours each) in fisheries biology and legislation at 15 different Coast Guard Headquarters in Italy, including 3 at the National School for non-commissioned officers in Sardinia, Italy.

## SKILLS AND OTHER INTERESTS

Competent in all Microsoft programs (Word, Excel, Powerpoint, Access); as well as advanced software: Primer, Gmav, Statistica, Minitab, Brodgar (a windows interface to R), R (limited experience), a number of

Fortran programs for non-parametric multivariate analyses, image analysis software (e.g. OPTIMAS), Arcview (limited experience), Surfer and Ocean Data View.

PADI advanced open-water diver with over 30 logged scientific dives certified by the research institute I carried out the work with.

Holder an Italian boat-handling license (issued by the Italian Ministry of Transport, no. 267/02, expires 08/07/2012) which allows me to operate sailing and motor vessels up to 24 m in length with no distance limits from the coast, for recreational use.

Holder of clean Italian and British driving licences.

## PUBLICATIONS

**Morello E.B.**, Antolini, B., Gramitto, M.E., Atkinson R.J.A. & Froglija C. Submitted. The fishery for *Nephrops norvegicus* (Linnaeus, 1758) in the central Adriatic Sea (Italy): a comparison between bottom trawl and baited creels. *Fisheries Research*.

Panfili M., **Morello E.B.**, and Froglija C. 2007. The impact of scavengers on the creel fishery for *Nephrops norvegicus* in the central Adriatic sea. *Rapp. Comm. int. Medit.*, **38**.

**Morello E.B.**, Froglija C. & Atkinson R.J.A. 2007. Underwater television as a fishery-independent method for stock assessment of Norway lobster, *Nephrops norvegicus*, in the central Adriatic Sea (Italy). *ICES Journal of Marine Science*, **64**: 1116 – 1123.

**Morello E.B.**, Froglija C., Atkinson R.J.A. & Moore P.G. 2006. The effects of hydraulic dredging on the reburial of several molluscan species. *Biologia Marina Mediterranea*, **13** (1): 610 – 613.

**Morello E.B.**, Froglija C., Atkinson R.J.A. & Moore P.G. 2006. Medium-term impacts of hydraulic clam dredgers on a macrobenthic community of the Adriatic Sea (Italy). *Marine Biology*, **149**: 401 – 413.

Solustri C., **Morello E.L.B.**, Vitali C., Froglija C. 2005. Coastal malacofauna of the proposed MPA "Parco Marino del Piceno" in the central Adriatic Sea. *Biologia Marina Mediterranea*, **12** (1): 159 – 163.

**Morello E.B.**, Froglija C., Atkinson R.J.A. & Moore P.G. 2005. Hydraulic dredge discards of the *Chamelea gallina* fishery in the western Adriatic Sea, Italy. *Fisheries Research*, **76** (3): 430 – 444.

**Morello E.B.**, Froglija C., Atkinson R.J.A. & Moore P.G. 2005. Impacts of hydraulic dredging on a macrobenthic community of the Adriatic Sea, Italy. *Canadian Journal of Fisheries and Aquatic Sciences*, **62**: 2076 – 2087.

**Morello, E.B.**, Solustri, C. & Froglija, C. 2004. The alien bivalve *Anadara demiri* (Arcidae): a new invader of the Adriatic Sea, Italy. *Journal of the Marine Biological Association of the United Kingdom*, **84**: 1057 – 1064.

**Morello, E.L.B.** 2004. Assessment of the impact of hydraulic dredging for *Chamelea gallina* in Italian waters. Ph. D. Thesis, University of London, Great Britain.

**Morello, E.**, Solustri C., Antolini B. & Froglija C. 2004. On the distribution of *Anadara inaequalis* (Bruguère, 1789), *Anadara demiri* (Piani, 1981) e *Musculista senhousia* (Benson in Cantor, 1842) in the Adriatic Sea, Italy. *Biogeographia*, **25**: 65 – 72.

Solustri, C., **Morello, E.** & Froglija, C. 2003. *Musculista senhousia* (Benson in Cantor, 1842) (Bivalvia: Mytilidae) in the coastal waters of the Adriatic Sea (Italy). *Atti Società Italiana Scienze Naturali Museo Civico Storia Naturale Milano*, **144** (2): 231 – 240.

Solustri, C., **Morello, E.** & Froglija C. 2003. Observations on *Anadara demiri* (Piani, 1981) (Bivalvia: Arcidae) epibiont of some molluscan species. *Biologia Marina Mediterranea*, **10** (2): 622 – 625.

Solustri, C., **Morello, E.** & Sabelli, B. 2002. Preliminary data on the malacofauna associated to beds of *Posidonia oceanica* (L.) Delile in the eastern Adriatic (Croatia). *Biologia Marina Mediterranea*, **9** (1): 231 – 235.

Hauton, C., **Morello, E.B.**, Howell, T.R.W., Froglija, C., Moore, P.G. & Atkinson, R.J.A. 2002. *Assessments of the Impact and Efficiency of Hydraulic Dredging in Scottish and Italian Waters*. Final Report to the EC, Study Contract. 99/078, 520 pp.

- Morello, E.** & Solustri, C. 2001. First record of *Anadara demiri* (Piani, 1981) (Bivalvia:Arcidae) in Italian waters. *Malacological Bulletin*, **37** (9-12): 231 – 234.
- Morello, E.** 1999. Management of the *Chamelea gallina* (Bivalvia: Veneridae) fishery in the western Adriatic Sea and stock assessment in the fishing district of Ancona in 1999. M.Sc. Thesis, King's College London, UK.
- Morello, E.** 1998. Aspects of the anatomy of the East African caecilian, *Boulengerula taitanus* Loveridge. B.Sc. Thesis, Bristol University, UK.