# **Curriculum Vitae**

### Last update: 23 April 2014



# **Fiorella Prada**

Coral Ecology & Biology Lab Marine Science Group Department of Biological, Geological and Environmental Sciences Alma Mater Studiorum – University of Bologna Via F. Selmi 3 I-40126 Bologna, Italy European Union

Tel: +39 051 2094162 Mobile: +39 333 4873391 E-mail: fiorella@marinesciencegroup.org

Home: Via Rota Ancone 4, Zibello, Parma, Italy, European Union

Nationality: Italian Date of Birth: 07 July 1984 Place of Birth: San Jose', Costa Rica Gender: Female Marital Status: Single

# Education

2011 – today	Ph. D. in "Biodiversity and Evolution", Alma Mater Studiorum – University of Bologna,
,	
	(Italy).
2010	Master Degree (M. Sc.) in Ecology, University of Parma. Thesis conducted in the
	laboratories of the Marine Science Group, Department of Biological, Geological and
	Environmental Sciences of Bologna entitled: "Relationship between environmental and
	skeletal parameters in corals from the Mediterranean Sea."
2007	Bachelor Degree in Natural Sciences, University of Parma. Thesis conducted at the
	Laboratory of Molecular and Biochemical Zoology at the Department di Functional and
	Evolutionary Biology (University of Parma) entitled: "Analysis of mitochondrial haplotypes
	for the taxonomic classification of Cyprinid hybrids (Teleostei – Cyprinidae)."
2003	Scientific High School Degree at the Lines Scientifics Stately C. Illivi di Derma
2003	Scientific High School Degree at the Liceo Scientifico Statale G. Ulivi di Parma.
1990 – 2000	Primary schools attended in different countries (Costa Rica, Italy, Mozambique, USA)
	because of family working activities with the UN and World Bank.

# Areas of scientific interest

Demography, biometry, growth rates and population dynamics in temperate and subtropical corals, and their relationship with environmental parameters such as temperature, solar radiation and pH. global climate change and its effect on temperate and tropical coral-reef communities; the use of contemporary corals in predictive models concerning with global climate change.

## Academic professional experience

- 2011 today <u>Ph.D research</u> conducted under the EU Project "Corals and Global Warming: the Mediterranean versus the Red Sea" (CoralWarm; www.coralwarm.eu), coordinated by Dr Stefano Goffredo, Prof. Zvy Dubinsky and Prof. Giuseppe Falini, funded by the European Research Council (FP7 IDEAS programme), European Union.
- 2009 today <u>Research support</u>. Marine & Freshwater Science Group Association, Bologna (Italia). Social Advancement Association devoted to the support and development of the research in the fields of marine and freshwater, bio-ecology and environmental education (www.msgassociation.org).

# Other professional experience

2010	Rescue Diver. Scuba Nitrox Safety International (SNSI)
2008	Advanced Open Water Diver. National Association of Underwater Instructors (NAUI)
2003	Driving License
2002	Open Water Diver. Professional Association of Diving Instructors (PADI)

# **Research abroad**

Jan-Dec 2013 Spent a period of research and training at the Mina and Everard Goodman Faculty of Life Sciences at the Bar-Ilan University (Ramat Gan, Israel) under the supervision of Prof. Zvy Dubinsky and Dr Oren Levy. Conducted a research on the effects of pH on the

photosynthetic efficiency in the coral-zooxanthellae symbiotic system of the Mediterranean scleractinian coral *Balanophyllia europaea*, performed under controlled conditions. Moreover, in collaboration with Prof. Aldo Shemesh at Weizmann Institute of Science (Rehovot), worked on stable isotopes. Measurements of  $\delta^{13}$ C and  $\delta^{18}$ O were performed on skeletons of *B. europaea*, *Leptopsammia pruvoti* (solitary, non-zooxanthellate), *Astroides calycularis* (colonial, non-zooxanthellate), *Caryophyllia inornata* (solitary, non-zooxanthellate) and *Cladocora caespitosa* (colonial, zooxanthellate) collected along a latitudinal gradient from 44°20'N to 36°45'N and on seawater samples collected in the same sites where the corals were sampled.

A second collaboration was initiated with Prof. Anders Meibom at the École Poltechnique Fédérale de Lausanne in Switzerland and Prof. Jaroslaw Stolarski at the Institute of Paleobiology in Poland, to study the micro- and ultra-structural growth dynamics of *B. europaea*, *L. pruvoti*, *A. calycularis* and *Galaxea fascicularis* (tropical, colonial zooxanthellate species) by means of pulsed <sup>86</sup>Sr-labeling and high spatial resolution NanoSIMS isotopic imaging.

# Active participation in scientific meetings

- **Prada F**, Caroselli E, Capaccioni B, Falini G, Levi O, Dubinsky Z, Zaccanti F, Goffredo S (2013) Different sensitivities among Mediterranean scleractinian corals to enhanced ocean acidification. ICCB 2013: The international conference on coelenterate biology, Eilat (Israel) 1-5 December 2013.
- Goffredo S, **Prada F**, Caroselli E, Capaccioni B, Reggi M, Fermani S, Fantazzini P, Pasquini L, Levi O, Dubinsky Z, Falini (2013) Biomineralization and population density of benthic marine calcifiers along a natural carbon dioxide gradient. ICCB 2013: The international conference on coelenterate biology, Eilat (Israel) 1-5 December 2013.
- **Prada F**, Caroselli E, Capaccioni B, Falini G, Levy O, Zaccanti F, Dubinsky Z, Goffredo S (2013) Ocean acidification effects on benthic Mediterranean organisms along a natural CO2 gradient. 10th Annual Conference of the Israeli Association for Aquatic Sciences, Mikhmoret (Israel), 13-14 March.
- Goffredo S, **Prada F**, Caroselli E, Capaccioni B, Falini G, Levy O, Dubinsky Z, Zaccanti F (2012) Different Sensitivity among scleractinian corals to enhanced ocean acidification. 12th International Coral Reef Symposium, Cairns (Australia), 9-13 July.
- Goffredo S, **Prada F**, Caroselli E, Levy O, Falini G, Dubinsky Z (2011) Effects of sea acidification on mediterranean corals in a volcanic site with underwater CO2 emissions. LLXXII National meeting of Italian Zoological Union, Bologna (Italy), 5-8 September 2011 (Original language: Italian).
- Goffredo S, Caroselli E, **Prada F**, Pasquini L, Nonnis Marzano F, Zaccanti F (2010) Identification of tolerant/sensible Mediterranean coral species in face of global change. EURO ISRS symposium 2010: Reefs in a changing environment, Wageningen (Netherlands), 13-17 December.

#### IN EXTENSO CONGRESS PROCEEDINGS

Prada F, Caroselli E, Zaccanti F, Capaccioni B, Falini G, Levy O, Dubinsky Z, Goffredo S (2013) Ocean acidification effects on benthic Mediterranean organisms along a natural CO2 gradient. Joint International Scientific Diving Symposium, American Academy of Underwater Sciences and European Scientific Diving Panel, Curaçao, 24-27 Ottobre 2013. American Academy of Underwater Sciences, p. 231-233

### Workshops

2013 – Attended workshop: 1st International Workshop: Impacts of Ocean Acidification and Climate Change on Corals and Coral Reefs (Eilat, Israel).

### Awards

- 2013 University of Bologna: Marco Polo Programme to finance part of a one-year research experience abroad at the Bar-Ilan University in Israel. (amount: € 2487).
- 2013 Student award: awarded at the ICCB 2013: The international conference on coelenterate biology, Eilat (Israel) 1-5 December 2013.

# Articles in peer review / impact factor journals

- Goffredo S, **Prada F**, Caroselli E, Capaccioni B, Zaccanti F, Pasquini L, Fantazzini P, Fermani S, Reggi M, Levy O, Katharina F, Dubinsky Z, Falini G (2014) Biomineralization control related to population density under ocean acidifcation. Nature Climate Change, *in press*
- Fantazzini P, Mengoli S, Evangelisti S, Pasquini L, Mariani M, Brizi L, Goffredo S, Caroselli E, Prada F, Falini G, Levy O, Dubinsky Z (2013) Time-Domain NMR study of Mediterranean scleractinian corals reveals skeletal-porosity sensitivity to environmental changes. Environmental Science & Technology, 47:12679–12686
- Caroselli E, **Prada F**, Pasquini L, Nonnis Marzano F, Zaccanti F, Falini G, Levy O, Dubinsky Z, Goffredo S (2011) Environmental implications of skeletal micro-density and porosity variation in two scleractinian corals. Zoology, 114:255-264.

## **Disseminating activities**

29 November 2010 - COSMOS magazine (Australia), by Mico Tatalovic, "Acidic seas threaten coral reefs"

1-2 June 2012 - Researchers talk to the city: "in piazza tra bolle e coralli", Giardini Margerita, Bologna.

15 March 2014 - Fiera di Bologna, XXII European Diving Show (EU.DI. Show), Diving Masters, presentation entitled "The underwater Panarea crater: a natural laboratory for studying ocean acidification".

### Languages

Mother tongue Spanish, Italian

Other Languages English: Fluent reading, writing and speaking. Portuguese: Fluent reading and speaking. French: scholastic reading, writing and speaking.

## Social and organizational skills and competences

Ability to adapt to situations where you meet people of different cultures and ways of thinking and even seemingly contradictory developed during several transfers around the world (South America, Central America, Africa and the USA). Ability to work in team, acquired primarily from the experience gained during scientific sampling expeditions during my PhD.

### Technical skills and competences

I have good knowledge of windows-based softwares, office package, Internet, softwares that perform calculations relating parameters of the carbon dioxide (CO<sub>2</sub>) system in seawater and freshwater (CO2SYS, PHREEQC), softwares for data acquisition and image processing (Nikon NIS-Elements) and professional softwares for advanced statistics (SPSS) and image editing like Photoshop or Illustrator.