

## CURRICULUM VITAE

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# Francesca Gizzi

Coral Ecology & Biology Lab  
Marine Science Group  
Dipartimento di Biologia Evoluzionistica Sperimentale  
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Home: Viale Oriani 38/3, 40138 Bologna, Italy, European Union

Nationality: Italian

Date of birth: 28 August 1984

Place of Birth: Roma, Italy, European Union

Marital Status: Nubile

C.F.: GZZFNC84M68H501U

## Education

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| 17 May 2016   | <b>Ph.D.</b> in Biodiversity and Evolution, University of Bologna, Italy. <u>Ph.D. thesis</u> : “Reproduction, growth and biomineralization of calcifying marine organisms and their relationship with environmental parameters”   |
| June 2012     | <b>Graduate goer.</b> Coral Ecology & Biology Lab. Marine Science Group - Department of Evolutionary and Experimental Biology, Alma Mater Studiorum – University of Bologna (Italy)  |
| March 2012    | <b>Master Degree in “Biodiversity and Evolution”</b> , Alma Mater Studiorum – University of Bologna, Bologna (Italy).<br><u>Title of Thesis</u> : Variation in reproductive output of <i>Balanophyllia europaea</i> (Scleractinia, Dendrophylliidae) along a latitudinal gradient of irradiance and temperature. Vote degree 110/110 and laud. |
| February 2009 | <b>Training.</b> Introduction to GIS, nature regional reserve “Monte Genzana – Alto Gizio”   |
| December 2008 | <b>Degree in Biological Sciences, Alma Mater Studiorum – University of Bologna, Bologna (Italy).</b><br><u>Title of Thesis</u> : “Survival and catchability of the Bologna botanic garden Bufo bufo populations in relation with meteorological and air quality parameters” Vote degree 95/110.  |
| July 2004     | <b>Diploma Scientific</b> , Liceo Scientifico “G.Torelli”, Fano (PU) (Italy)   |

## Academic professional experience

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2012 - today      **Teacher assistant.** “Laboratory of Scientific Diving”, Course of Master Degree in Biodiversity and Evolution, School of Science, Alma Mater Studiorum – University of Bologna (Italy). Teacher: Dott. Stefano Goffredo.

## Other professional experience

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2014 - today      **Webmaster.** www.marinesciencegroup.org, website of the Marine Science Interdisciplinary Research Group, Department of Evolutionary and Experimental Biology, Alma Mater Studiorum – University of Bologna (Italy). Research group of Citizen Science & Coral Biology and Ecology.

2014      **Assistant Assessor of the status of conservation of Mediterranean corals.** On the behalf of the Red List of Threatened Species (www.iucnredlist.org) of the International Union for Conservation of Nature ([www.iucn.org](http://www.iucn.org)).

2013 - today      **Assistant referee.** Marine Ecology Progress Series. (3 manuscript)

2013 - today      **Diving.** Diving Instructor of the of the school of marine research scientific diving “Scientific Diving School” (www.sdseducational.org), in Bologna (Italy).

August 2013      **Diving.** Diving Instructor of the of the diving center “Holiday Service” in Sharm el Sheikh (Egitto)

2012      **Diving.** Dive Master of the school of marine research scientific diving “Scientific Diving School” (www.sdseducational.org), in Bologna (Italy).

March - June 2012      **Marine biologist and snorkeling guide.** Resort Floriana Lagoon – Settemari S.p.a. - Marsa Alam (Egypt).

March - June 2012      **Volunteer researcher.** “STE: Scuba Tourism for the Environment” dissemination of the project and the involvement of volunteers in data collection in Marsa Alam area (Egypt)

2012      **Private lessons** of Biology, Chemistry e Science for in middle and high schools

2009      **Environmental education.** Teacher in primary, secondary and high schools of Bologna district with coop. Madreselva

2009      **Volunteer.** Monitoring and data analysis of common toad (*Bufo bufo*) populations that live in the Bologna botanic garden. Department of Evolutionary and Experimental Biology, Alma Mater Studiorum – University of Bologna (Italy)

2009      **Volunteer.** Monitoring and data analysis of newt populations (*Triturus carniflex*, *T. alpestris* e *T. vulgaris*) for the Laghi di Suviana e Brasimone Regional Park. Department of Evolutionary and Experimental Biology, Alma Mater Studiorum – University of Bologna (Italy)

2009      **Volunteer.** Ichthyic fauna sampling and monitoring in collaboration with the Province of Florence. Department of Evolutionary and Experimental Biology, Alma Mater Studiorum – University of Bologna (Italy)

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## Research abroad

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July-November 2015 I performed a research period of five months, from 25 June to 27 November 2015, at King Abdullah University of Science and Technology (KAUST), Saudi Arabia, under Prof. Christian Voolstra supervision. The project title was: "Physiology variations in three tropical corals exposed to pH and temperature levels projected for the end of this century". The aim was to investigate the effect of mid-term (1 month) exposure to normal and elevated temperatures (T and T+3°C), pH (pH and pH-0.3 units) and their interaction on physiology (calcification, skeletal density, symbiont photosynthesis and host respiration rate) of *Fungia granulosa* (solitary, zooxanthellate), *Pocillopora verrucosa* (colonial, zooxanthellate) and *Rhizopsammia wettsteini* (colonial, non-zooxanthellate). This work involved the aquaria set up, the collection and breeding of coral specimens and physiological, physical, and chemical measures to provide further insight into the response of coral organisms to environmental change. In addition I had the opportunity to participate in molecular-based projects to learn more about genomics techniques.

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## Funding ID

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July 2015 Scholarship of 4,050 Euros from Marco Polo program (abroad research fellowship program), Department Integrated Budget, University of Bologna, Ministry of Education, Universities and Research for the project "Physiology, biomineralization and skeletal properties variations in two tropical corals exposed to pH and temperature levels projected for the end of this century". Coordinators: Prof. Christian Voolstra, Red Sea Research Center, King Abdullah University of Science and Technology (KAUST), Saudi Arabia; Dr. Francesca Gizzi and Dr. Stefano Goffredo, Department of Biological, Geological and Environmental Sciences, University of Bologna.

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## Membership in professional societies

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2016 - today International Society for Reef Studies  
2014 - today Association for the Sciences of Limnology and Oceanography  
2012 - today American Academy of Underwater Science

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## Participation to research project

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1 June 2010 - today **Research.** Corals and Global Warming: the Mediterranean versus the Red Sea" (CoralWarm), coordinated by Dott. Stefano Goffredo, Prof. Zvy Dubinsky and Prof. Giuseppe Falini, funds by the European Research Council (FP7 – IDEAS programme), European Union.

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## Supervision of students

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2015 - 2016 Ginevra Allegra Simoncini; Bachelor of Science in Biological Sciences; Thesis title: "Relationship between phenotype and environment in calcifying organisms: the case study of the clam *Chamelea gallina* in the Adriatic Sea"; supervisor: Dott. Stefano Goffredo, Department of Biological, Geological and Environmental Sciences (BiGeA); co-supervisors: Prof. Giuseppe Falini, Department of Chemistry (CIAMICIAN), Dott. Francesca Gizzi, Department of Biological, Geological and Environmental Sciences (BiGeA), Dott. Michela Reggi Department of Chemistry (CIAMICIAN)

2015 - 2016 Francesco Montori; Bachelor of Science in Biological Sciences; Thesis title: "Effect of ocean acidification on the gametogenesis and embryogenesis of orange coral

*Astroides calycularis* (Scleractinia, Dendrophylliidae) transplanted along a natural gradient of CO<sub>2</sub>"; supervisor: Dott. Stefano Goffredo, Department of Biological, Geological and Environmental Sciences (BiGeA); co-supervisors: Dott. Francesca Gizzi, Department of Biological, Geological and Environmental Sciences (BiGeA)

2014 - 2015 Ludovica de Mas; Master of Science in Biodiversity and Evolution; Thesis title: "Effect of ocean acidification on the reproduction of solitary coral *Leptopsammia pruvoti* (Scleractinia, Dendrophylliidae) transplanted along a natural gradient of CO<sub>2</sub>"; supervisor: Dott. Stefano Goffredo, Department of Biological, Geological and Environmental Sciences (BiGeA); co-supervisors: Dott. Francesca Gizzi, Department of Biological, Geological and Environmental Sciences (BiGeA)

2014 - 2015 Luca Marisaldi; Bachelor of Science in Natural Science; Thesis title: "Effect of ocean acidification on the reproduction of coral *Astroides calycularis* (Scleractinia, Dendrophylliidae) transplanted along a natural gradient of CO<sub>2</sub>"; supervisor: Dott. Stefano Goffredo, Department of Biological, Geological and Environmental Sciences (BiGeA); co-supervisors: Dott. Francesca Gizzi, Department of Biological, Geological and Environmental Sciences (BiGeA)

2013 - 2014 Valentina Lazzari; Master of Science in Marine Biology; Thesis title: "Study of acidification effect on the reproduction of sea coral *Astroides calycularis* (Scleractinia, Dendrophylliidae) along a natural gradient of CO<sub>2</sub>"; supervisor: Dott. Stefano Goffredo, Department of Biological, Geological and Environmental Sciences (BiGeA); co-supervisors: Dott. Francesca Gizzi, Department of Biological, Geological and Environmental Sciences (BiGeA)

## Membership in academic examination committees

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2015 **Member of the Graduation Committee.** Bachelor of Science course in Biological Sciences, University of Bologna (Italy)

2015 **Member of the Graduation Committee.** Master of Science course in Biodiversity and Evolution, University of Bologna (Italy)

2014 **Member of the Graduation Committee.** Bachelor of Science course in Natural Sciences, University of Bologna (Italy)

2013 - today **Co-examiner.** Laboratory of Scientific Diving, Master Degree Course in Biodiversity and Evolution, University of Bologna (Italy)

## Technical reports

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Nigro F, Rinaldi M, Rossi G, Capostagno S, Zuffi G, Belcari I, **Gizzi F**, Falconi R, Zaccanti F (2009) Distribution and conservation status of amphibians of the genus *Triturus* (Rafinesque, 1815) in the regional park of Suviana and Brasimone. Bologna University, 36 pp.

## Active participation in scientific meetings

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### ABSTRACT

**Gizzi F**, de Mas L, Marisaldi L, Lazzari V, Airi V, Caroselli E, Prada F, Falini G, Dubinsky Z, Goffredo S (2015) Effects of ocean acidification on the reproductive output of three Mediterranean corals transplanted at an underwater crater characterized by CO<sub>2</sub> emissions. Association for the Sciences of Limnology and Oceanography, Aquatic Sciences Meeting, Granada (Spain), 22-27 February.

Reggi M, Landi V, Fermani S, Sparla F, Caroselli E, **Gizzi F**, Dubinsky Z, Levy O, Cuif J-P, Dauphin Y, Goffredo S, Falini G (2014) Biomineralization in Mediterranean corals. 2nd Joint Congress of the Italian Society of Synchrotron Light and of the Crystallography Italian Society, Florence (Italy), 15-18 September.

**Gizzi F**, Airi V, Polimeni G, Levy O, Falini G, Dubinsky Z, Goffredo S (2013) Effects of ocean acidification on the reproductive output of three mediterranean corals along natural CO<sub>2</sub> emissions. 8th International Conference on Coelenterate Biology, Eilat (Israel), 1-5 December.

Airi V, **Gizzi F**, Calegari M, Falini G, Levy O, Dubinsky Z, Goffredo S (2013) Reproductive output in zooxanthellate and azooxanthellate scleractinian corals along a temperature latitudinal gradient. 8th International Conference on Coelenterate Biology, Eilat (Israel), 1-5 December.

Reggi M, Landi V, **Gizzi F**, Fermani S, Sparla F, Goffredo S, Levy O, Dubinsky Z, Dauphin Y, Cuif JP, Falini G (2013) Biomineralization in Mediterranean scleractinian corals. 8th International Conference on Coelenterate Biology, Eilat (Israel), 1-5 December.

#### **IN EXTENSO CONGRESS PROCEEDINGS**

**Gizzi F**, Airi V, Caroselli E, Goffredo S (2014) Population dynamics model of the solitary symbiotic coral *Balanophyllia europaea* (Scleractinia, Dendrophylliidae) at Calafuria. Congress "Codice Armonico", V° Regional Congress of Natural Sciences, "Tuscany Environment", Castiglioncello (Livorno, Italy), 27-29 March 2014. ETS, p. 68-72 (Original language: Italian).

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## **Articles in peer review / impact factor journals**

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Reggi M, Fermani S, Landi V, Sparla F, Caroselli E, **Gizzi F**, Dubinsky Z, Levi O, Cuif JP, Dauphin Y, Goffredo S, Falini G (2014) Biomineralization in Mediterranean corals: The role of the intra-skeletal organic matrix. *Crystal Growth & Design*, 14:4310-4320. doi: 10.1021/cg5003572

Airi V, **Gizzi F**, Falini G, Levy O, Dubinsky Z, Goffredo S (2014) Reproductive efficiency of a Mediterranean endemic zooxanthellate coral decreases with increasing temperature along a wide latitudinal gradient. *PLoS ONE*, 9:e91792. doi: 10.1371/journal.pone.0091792

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## **Other qualifications**

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2016	<b>Nitrox Instructor.</b> Scuba Nitrox Safety International (SNSI).
2013	<b>Defibrillator Instructor.</b> Scuba Nitrox Safety International (SNSI).
2013	<b>Pool lifeguard.</b> National Lifeguard Society.
2013	<b>Basic Life Support Instructor.</b> Scuba Nitrox Safety International (SNSI).
2013	<b>Instructor Air Program.</b> Scuba Nitrox Safety International (SNSI)
2012	<b>Divemaster.</b> Scuba Nitrox Safety International (SNSI)
2011	<b>Rescue Diver.</b> Scuba Nitrox Safety International (SNSI).
2011	<b>Nitrox Diver.</b> Scuba Nitrox Safety International (SNSI).
2010	<b>Speleology.</b> Speleological group of Bologna (Gsb-Usb)
2010	<b>Advanced Open Water Diver.</b> Scuba Nitrox Safety International (SNSI).
2009	<b>Basic Life Support.</b> Scuba Nitrox Safety International (SNSI).
2009	<b>Open Water Diver.</b> Scuba Nitrox Safety International (SNSI).
2002	<b>Driving License</b>

## Languages

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Mother tongue            Italian.  
Other Languages        English. Good reading, writing and speaking.

## Technical skills and competences

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**Scientific diving.** Ability to work in team and organize scientific samplings, acquired primarily from the experience gained during my master thesis and PhD.

**Operative System.** Windows installation and management

**Software.** Good command of most Microsoft Office™ tools (Excel™, Word™, PowerPoint™), knowledge of the relational database management system Microsoft Access™ and statistical analysis software (SPSS, Mark)

Bologna, 18.05.2016

Francesca Gizzi

