

## RESEARCH INTERESTS

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Taxonomy of marine crustaceans and molluscs  
Benthic marine faunal biodiversity and ecology

## EDUCATION

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2018 (in progress)

### Doctoral degree (Ph.D.) in Marine Biology and Environmental Research

Senckenberg Research Institute and Natural History Museum, Frankfurt am Main, Germany  
Goethe University, Frankfurt am Main, Germany

- Research project: The influence of Larsen-C ice-cover on macrobenthic peracarid crustacean assemblages on the Antarctic shelf.

Supervisor: Pr. Dr. Angelika Brandt

Co-supervisor: Dr. Katrin Linse

(2014 - 2017)

### M.Sc. in Marine Biology (110/110 *Summa cum laude*)

Università Politecnica delle Marche, Ancona, Italy

- Thesis title: "Investigating antarctic polychaetes (Terra Nova Bay, Ross Sea) and diversity of their associated microbiome".

Supervisor: Pr. Dr. Cinzia Corinaldesi

#### Skills acquired:

- DNA extraction methods using different kits, DNA amplification techniques (PCR)
- Agarose gel electrophoresis, gel purification of PCR products
- Sequence analysis, alignment and phylogenetic trees construction using different software, tools and online databases (e.g. Geneious, QIIME, Gblock Server, NCBI, BLAST, BoldSystems)
- Taxonomic diversity analysis and statistical methods (e.g. diversity indices, SIMPER analysis, PERMANOVA test)

(2008 - 2012)

### Bachelor's degree in Biological Science

Università degli studi di Catania, Italy.

- Thesis title: "Fresh-water animal communities from the Nature Reserve Grotta di Entella (Palermo, Italy)"

Supervisor: Pr. Dr. Rosario Grasso

#### Skills acquired:

- Sorting and identification of the stygofauna
- Use of devices for the physicochemical analysis and acquisition of environmental parameters

## SCIENTIFIC AND PROFESSIONAL EXPERIENCE

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2018 (in progress)

### Erasmus+ Traineeship

University of Vienna, Department of Paleontology, Austria

- Historical ecology of Lessepsian migration
- Effects of high-CO<sub>2</sub> conditions on marine molluscs from Ischia island (Tyrrhenian Sea, Italy)
- The malacofauna of Kakoskali cave (Cyprus, Eastern Mediterranean)
- Annotated catalogue of the types of triphorids from the Muséum National d'Histoire Naturelle, Paris

Supervisor: Dr. Paolo G. Albano

#### Main activities and skills:

- Identification of marine molluscs
- Use of Scanning Electron Microscope, digital photography and imaging software
- Multivariate analysis and use of R (beginner)
- Principles of invasion ecology
- Scientific paper writing

**(2016 - 2018) Curatorial activities**

Università Politecnica delle Marche, Ancona, Italy  
Curation of the zoological collection

**2016 Training course in Applied Marine Ecology**

Avamposto MARE, Tricase, Italy.

Supervisor: Prof. Cinzia Corinaldesi

Skills acquired:

Core sampling, sampling transects and visual census

Sorting and identification of marine organisms

**(2016) Internship**

Institute of Marine Science - National Research Council (ISMAR - CNR), Ancona, Italy.

Supervisor: Dr. Sabrina Colella

Skills acquired:

- Laboratory analysis of the Norway Lobster *Nephrops norvegicus* to study the reproductive biology using a macroscopic survey
- Image elaboration and measurement techniques to study the morphometric variations of appendix masculina in *N. norvegicus*

**COLLABORATIONS**

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- 2017** Dr. Taviani Marco, National Research Council (CNR) Bologna, Italy: study of the deep and shallow-water malacofauna of the Adriatic Sea (in progress)
- 2017** Prof. Cerrano Carlo, Università Politecnica delle Marche, Ancona Italy: study of coralligenous assemblages at Ustica Island (in progress)
- 2016** Dr. Reitano Agatino, Museo Civico di Storia Naturale, Comiso, Italy: study of the malacological assemblages from uppermost Early Pleistocene of Augusta, Italy (in progress)
- 2015** Dr. Reitano Agatino, Museo Civico di Storia Naturale, Comiso, Italy: study of the malacological assemblages from the Pliocene of Altavilla (1 book in progress)

**FIELDWORK SKILLS**


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Sampling of the marine benthic fauna  
Sediments sampling, sieving and sorting

**OTHER SKILLS**


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**Languages:** Italian, native speaker; English B2

**Diving certification:** PADI "Open Water Diver" Certification

**Informatic skills:** MS Office package (Word, Excel, Power Point), Imaging software (Adobe Photoshop; Helicon Focus; Zen lite; Leica Application Suite 4.2), statistical analysis software e.g. PRIMER 6+, R (beginner), bioinformatic pipeline e.g. Geneious, QIIME (beginner)

**Italian driving license:** B, A1

**CONFERENCES**

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- 8 "Changes and Crisis in the Mediterranean". Accademia Nazionale dei Lincei, Rome, 17 October 2017. V. Micaroni, F. Strano, **D. Di Franco**, et al. Project "Biodiversity MARE Tricase": biodiversity research, monitoring and promotion at MARE Outpost (Apulia, Italy). [Oral presentation]

- 7 "52nd European Marine Biology Symposium". Grand Hotel Bernardin (Portorož, Slovenia), 25-29 September 2017.  
V. Micaroni, F. Strano, **D. Di Franco** and F. Boero. "Biodiversity MARE Tricase" programme: promoting coastal and marine biodiversity at MARE outpost (Tricase Porto, Apulia, Italy). [Poster presentation]
- 6 "XXVII Italian Society of Ecology (S.It.E.)": the ecological research in a changing world. Complesso SS. Marcellino e Festo (Naples, Italy), 12th - 15th September 2017.  
Buschi E., Stefanni S., Musco L., Munari C., **Di Franco D.**, Dell'Anno A., Corinaldesi C. - Exploring the biodiversity of polychaetes and their microbiomes at Terranova Bay (Ross Sea, Antarctica). [Oral presentation and Poster]
- 5 "The Italian Seas Coralligenous WorkShop". Convention Center, Ustica Island (Palermo, Italy), 5th - 8th September 2017.  
C. Cerrano, A. Bastari, B. Calcinai, **D. Di Franco**, M. Palma, D. Pica, U. Pantaleo, M. Ponti, L. Valisano - Characterization of coralligenous assemblages at Ustica Island. A preliminary assessment. [Oral presentation]
- 4 "48° Italian Society of Marine Biology (SIBM) Congress": ecosystem services, natural capital and environmental accounting. The marine biologist role". National Research Council (CNR), (Rome, Italy), 7th - 9th June 2017.  
Micaroni V., Strano F., **Di Franco D.**, De Felice J., Langeneck J., Gravili C., Bertolino M., Rindi F., Froggia C., Nicoletti L., Medagli P., Zuccarello V., Arzeni S., Giangrande A., Bo M., Betti F., Mastrototaro F., Lattanzi L., Piraino S., Boero F. - Biodiversity MARE Tricase programme: biodiversity research, monitoring and promotion at Avamposto MARE (Tricase LE, Italy). [Poster presentation]
- 3 "MoTax Workshop (Marine Organisms Taxonomy)": la tassonomia degli Organismi Marini: creazione di un servizio nazionale integrato a supporto dell'Infrastruttura EMBRC - European Marine Biological Resource Centre. Anton Dohrn Zoological Station (Naples, Italy), 26th - 27th October 2016.  
V. Micaroni, F. Strano, **D. Di Franco**, A. Berti. Biodiversity Mare Tricase - A biodiversity inventory of the coastal area of Tricase (Apulia, Lecce, Italy) in the Otranto Channel. [Oral presentation]
- 2 "1° National Joint Congress SITE-UZI-SIB": Biodiversity: concepts, new tools and future challenges. Università degli studi di Milano-Bicocca (Milan, Italy), 30th - 2nd September 2016.  
V. Micaroni, F. Strano, J. Felice, **D. Di Franco**, G. Luzzati, C. Gravili, V. Zuccarello, P. Medagli, S. Arzeni, A. Giangrande, A. Terlizzi, G. Belmonte, S. Piraino, F. Boero. Project Biodiversity Mare Tricase - A biodiversity inventory of the coastal area of Tricase (Apulia, Lecce, Italy) in the Otranto Channel. [Poster presentation]
- 1 "5° Regional Congress of Sicilian Speleology", Federazione Speleologica Regionale Siciliana, Castello Rampinzeri, Santa Ninfa (TP), Italy, 23th - 24th November 2013.  
Grasso R., Spena MT., **Di Franco D.**, Catalano A., Messina V., Polito C., Di Maggio G., Cottarelli V. Epikarst e vaschette di stillicidio: contributo alla conoscenza della meiofauna stigobia della Grotta di Entella (PA). [Oral presentation and Poster]

## PRIZES

2016

"U.Z.I. Prize for Young Researchers 2016" given by Italian Zoological Society (U.Z.I.) and Scientific Committee for Italian Fauna (C.S.F.I). Prize for the best poster on Italian Fauna at 1° National Joint Congress SITE-UZI-SIB.