

CURRICULUM VITAE Updated the 07/02/2023

PERSONAL INFORMATION Riccardo Virgili



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Sex Male | Date of birth 19/09/1994 | Nationality Italian

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PROFESSIONAL EXPERIENCES

16/11/2020–16/05/2022

Research scholarship in FEAMP (Fondo europeo per gli affari marittimi e la pesca).
Borsa di ricerca 36/2020 funded by PO-FEAMP Campania 2014/2020.

Research activity in zoology and ecology of marine non-indigenous (NIS) and cryptogenic species from Campania, with a focus on the Gulf of Naples. Identification of the organisms through integrated approach (morphological and DNA barcoding). Investigation of the introduction pathways of alien species through metabarcoding of NIS. Review of literature and citizen-science records of NIS from Campania and other Mediterranean sectors.

Task leader: Dr. Fabio Crocetta (Stazione Zoologica Anton Dohrn).

Stazione Zoologica Anton Dohrn

Via Francesco Caracciolo, 333, 80122 Napoli (Italy)

INTERNSHIPS AND COLLABORATIONS

01/06/2019–01/06/2020

Internship at Molecular Invertebrate Systematics and Ecology laboratory (MISE).

Research on molecular phylogeny and taxonomic revision of the genus *Dorometra* Clark, 1917 (Crinoidea: Comatulida: Antedonidae).

Supervisor: Prof. James D. Reimer

University of the Ryukyus

Nishihara-cho, Nakagami-kun, Okinawa, Japan.

08/2017–10/2017

Dive guide

Raja Laut Dive Resort. Bunaken Island, Sulawesi (Indonesia)

Assisting diving team and managing resort activities.

EDUCATION AND TRAINING

11/2022–ongoing

PhD Student

University of Naples Federico II and Stazione Zoologica Anton Dohrn

Supervisor: Prof. Angelo Fontana (University of Naples Federico II)

Co-supervisor: Dr. Fabio Crocetta (Stazione Zoologica Anton Dohrn)

External supervisor: Xavier Turon Barrera

09/2016–02/2019

Master’s degree in Marine Biology (LM - 6)

(final examination:
14/02/2019)

Courses/exams attended in English, Italian

Final mark: 110/110 *cum laude*

Università Politecnica delle Marche

P.zza Roma, 22, 60121, Ancona (Italy)

Title of the thesis “Assessment of tropical crinoids diversity and census of their symbiotic communities at Bangka Island (North Sulawesi, Indonesia)”.

Supervisor: Prof. Carlo Cerrano (Università Politecnica delle Marche)

Co-supervisor: Prof. Massimo Ponti (Alma Mater Studiorum - Università di Bologna)

09/2013–10/2016

Bachelor’s degree in Biological Sciences (L - 13)

(final examination:
24/10/2016)

Courses/exams attended in Italian

Final mark: 110/110 *cum laude*

Università Politecnica delle Marche

P.zza Roma, 22, 60121, Ancona (Italy)

Title of the thesis “Coloration and defense in nudibranchs: a study on *Felimare fontandraui*”

Supervisor: Prof. Stefania Puce (Università Politecnica delle Marche)

09/2008–06/2013

High School Diploma in Classical Studies

Final mark: 95/100

Liceo Classico Giacomo Leopardi

Galleria Luzio, 6, 62100, Macerata (Italy)

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

SELF-ASSESSMENT GRID

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills Good communication skills gained through my experiences abroad both from professional and personal experiences.

Organisational / managerial skills Good team-work skills developed during projects. Good managerial skills obtained from supervising undergrad students during their internship/thesis period both in laboratory and during thesis preparation. Excellent risk management skills in marine fieldwork, developed during dive guide and many years of sea-related recreational activities.

Job-related skills Sampling: excellent skills to recognize marine flora and fauna (particularly benthic) developed during professional and recreational activities. Good skills in hand picking technique especially for benthic marine organisms and seaweed. Excellent underwater photography skills. Good skills in underwater sampling methodologies like photoquadrats, laying transects, visual census, grid/cages placement, airlift. Proficiency in the use of benthic dredge and dredge sample management.

Molecular Biology Skills: proficiency in the following barcoding techniques: DNA extraction with different methods (Phenol-Chloroform extraction, Qiagen DNEasy extraction kit and Guanidine extraction), Nanodrop yield quality check, PCR and PCR optimization methods, gel preparation and electrophoresis, different clean-up methods (ExoL-Sap, PolyEthylene Glycol precipitation, QiAquick Gel Extraction Kit, MagSafe beads).

Bioinformatics Skills: proficient user of sequences managing software (Geneious R11, Unipro Ugene, AliView, BioEdit) and related Sanger's sequences processing: quality check, trimming, amplicons assembling and primer designing with different software (AliView, BioEdit, SeaView, Unipro Ugene).

Proficiency in the Phylogenetics workflow: data partitioning and evolutionary model analysis through JmodelTest 2 and PartitionFinder2. Maximum likelihood phylogeny through raxML, iqtree2 (both terminal and browser), and Bayesian analysis computing MrBayes v.3.2.5 and BEAST v.1.10.4. Use of species delimitation methods like ABGD, bPPT, GMYC and BPP.

Knowledge of Next Generation Sequencing (NGS) data management and quality check (FastQC) related to metabarcoding pipelines. Use of pipelines FROGS, and metabarcoding tools as vsearch, MetaMate, Megan. Knowledge of R statistical environment and multivariate analysis (PCA, nMDS).

Taxonomy Skills: focused on marine invertebrates, in particular crinoids (family Antedonidae) and Mediterranean ascidians. I have a good general knowledge of Mediterranean and tropical littoral benthic organisms. I am also interested in tunicates biology and systematics. Other research interests: Mediterranean NIS fouling species.

Computer skills ECDL (European Computer Driving License) obtained in 05/2012.
Proficient user of Microsoft Word, Excel, PowerPoint.
Proficient user of graphic software (Lightroom cc, Photoshop, Corel) and video making (iMovie, Final Cut Pro).
Knowledge of geographic information software QGIS

- Diving certifications** PADI Divemaster (No.406748; obtained in 10/2019), more than 550 dives
PADI Enriched Air Nitrox (No.1709AW9807; obtained in 10/2019)
Emergency First Response (No.1505EV2642; obtained in 10/2019)
PADI Advanced OpenWater Diver
PADI Junior Advanced OpenWater Diver
PADI OpenWater Diver
PADI Junior OpenWater Diver
- Driving licence** A1 (motorbike)
B (car)
- Further skills** Underwater photographer focused on macro photography and video making
Advanced use of dark room and film development

ADDITIONAL INFORMATION

Indexed publications
 (*corresponding author)

1. **Virgili R**, Crocetta F (2023) The neonative *Seriola rivoliana* in the Tyrrhenian Sea (central-western Mediterranean). In: New Alien Mediterranean Biodiversity Records, Mediterranean Marine Science. in press
2. Rizzo L, Minichino R, **Virgili R**, Tanduo V, Osca D, Manfredonia A, Consoli P, Colloca F, Crocetta F (2022) Benthic litter in the continental slope of the Gulf of Naples (central-western Mediterranean Sea) hosts limited fouling communities but facilitates molluscan spawning. *Marine Pollution Bulletin*. 181: 113915. doi: 10.1016/j.marpolbul.2022.113915 (Q1)
3. Riccardi A, Colletti A, **Virgili R***, Cerrano C (2022) Diversity and behavior of sea slugs (Heterobranchia) in the rocky tide pools of Conero Riviera (western Adriatic Sea). *The European Zoological Journal*. 89(1): 856-869. doi: 10.1080/24750263.2022.2095047 (Q2)
4. Tanduo V, **Virgili R**, Crocetta F (2022). Integrative taxonomy confirms the presence of the enigmatic *Lysmata olavoi* Fransen, 1991 (Decapoda: Lysmatidae) in the Mediterranean Sea. *Journal of the Marine Biological Association of the United Kingdom*. 102(3-4), 260-265. doi: 10.1017/S0025315422000455 (Q3)
5. **Virgili R***, Tanduo V, Katsanevakis S, Terlizzi F, Villani G, Fontana A, Crocetta F (2022). The Miseno Lake (Central-Western Mediterranean Sea): an overlooked reservoir of non-indigenous and cryptogenic ascidians in a marine reserve. *Frontiers in Marine Science*. 9:866906. doi:10.3389/fmars.2022.866906 (Q1)
6. Kytinou E, Zotou M, **Virgili R**, Crocetta V, Katsanevakis S (2022). The Indo-Pacific nudibranch *Baeolidia moebii* Bergh, 1888 in Greece, with the first documented spawning aggregation in the Mediterranean Sea. *BiolInvasions Records*. 11(2): 461–472. doi:10.3391/bir.2022.11.2.19 (Q2)
7. Della Sala G, Coppola D, **Virgili R**, Vitale GA, Tanduo V, Teta R, Crocetta F, De Pascale D (2022). Identification and metabolomics of *Botrylloides niger* Herdman, 1886 (Asciacea: Styelidae), a non-indigenous species invading the Mediterranean Sea. *Frontiers in Marine Science*. 9: 865751. doi:10.3389/fmars.2022.865751 (Q1)
8. Tanduo V, **Virgili R**, Osca D, Crocetta F (2021). Hiding in fouling communities: a native spider crab decorating with a cryptogenic bryozoan in a Mediterranean. *Journal of Marine Science and Engineering*. 9(5): 495. doi:10.3390/jmse9050495 (Q2)
9. Crocetta F, Shokouros-Oskarsson M, Doumpas N, Giovos I, Kalogirou S, Langeneck J, Tanduo V, Tiralongo F, **Virgili R**, Kleitou P (2021). Protect the natives to combat the aliens: Could *Octopus vulgaris* Cuvier, 1797 be a natural agent for the control of the lionfish invasion in the Mediterranean Sea? *Journal of Marine Science and Engineering*. 9(3): 308. doi:10.3390/jmse9030308 (Q2)
10. **Virgili R***, Cerrano C, Ponti M, Lasut MT, Reimer JD (2020). Crinoid diversity and their symbiotic communities at Bangka Island (North Sulawesi, Indonesia). *Marine Biodiversity*. 50: 90. doi:10.1007/s12526-020-01097-1 (Q2)

**Other publications/
Disclosure activities**

1. 06/2022-ongoing. Permanent photography exposition on “Benthic invertebrates from Gulf of Naples and their biochemical purposes” at BIOTECH department of the Stazione Zoologica Anton Dohrn (Via Ammiraglio Acton, 55, Naples, Italy).
2. Colletti A, Riccardi A, Martini F, Toso Y, **Virgili R**, Luongo G (2021). Calendario 2022 Laurea Magistrale in Biologia Marina dell’Università Politecnica delle Marche. Reef Check Italia ed. ISBN 978-88-944253-6-9
3. **Virgili R**, Riccardi A, Pulido Mantas T, Zacchetti L, Colletti A (2019). Calendario 2020 Laurea Magistrale in Biologia Marina dell’Università Politecnica delle Marche. Reef Check Italia ed. ISBN 978-88-906783-9-4
4. Colletti A, Zacchetti L, **Virgili R**, Acierno A, Riccardi A, Da Ros Z, Pelamatti T (2018). Calendario 2019 Laurea Magistrale in Biologia Marina dell’Università Politecnica delle Marche. Reef Check Italia ed. ISBN 978-88-906783-5-6
5. 03/2019–04/2019. Four presentations on the Marine Biodiversity of the Conero Riviera at Arasub Civitanova Marche (Italy). Topics: The Conero Mount geomorphological aspects, Rocky reefs, incoherent bottoms, threats and future of the Conero Regional Park

Honours and awards

Systematics Research Fund 2019/2020 by The Councils of the Linnean Society of London and The Systematics Association for the benefit of systematics research.
Topic: Molecular phylogeny and taxonomic revision of the genus *Dorometra* (Crinoidea)