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**Current Position:** Ricercatore III° livello

**Current Affiliation:**

Integrative Marine Ecology Department, Stazione Zoologica Anton Dohrn, Napoli (Italy)

**Education/Training/Experience**

<b>Institute and Location</b>	<b>Degree / Function</b>	<b>Year</b>	<b>Field of Study</b>
Stazione Zoologica Anton Dohrn, Napoli, Italy	Researcher	2021-present	Ecology of phytoplankton, species identification and morpho-functional traits approach, confocal microscopy and bioimaging
Agency for the Environmental Prevention and Protection, Lecce, Italy	Professional technician	2016-2021	Sampling, identification and counting phytoplankton in marine environments, ecology of non-indigenous and bloom-forming species
University of Salento, Lecce, Italy	Postdoc	2009-2016	Species identification and morpho-functional community structure of phytoplankton, confocal microscopy and bioimaging
National Research Council (CNR) - Institute of Marine Sciences (ISMAR), Italy	Research Fellowship	2006-2009	Coastal lagoon ecology, nutrient dynamics and eutrophication processes
University of Naples Federico II, Italy.	PhD	2008	Hydrological spatio-temporal variability and nutrient dynamics of coastal lagoons
University of Naples Parthenope, Italy	Degree in Environmental Science	2004	Dynamic interactions at the Bocca Piccola of Capri (Mediterranean Sea)

**Appointments and awards**

2014 – Prize winner “Premio Brusarosco” at Elena Litchman’s Lab, Kellogg Biological Station - Michigan State University (with Prof. Elena Litchman). Topic: Trait based approach to phytoplankton community ecology

2008 - University of Algarve, Portugal (with Prof. Alice Newton). Topic: Physiography, hydrology and trophic status of coastal lagoons.

2005 - Plymouth Marine Laboratory, UK (with Dr. Roger Harris). Topic: Microzooplankton grazing on phytoplankton communities in coastal waters at L4 off-shore long term station

2021 - Highlight in Science Magazine. Size, shape, and diversity in phytoplankton. Vol 371 Issue 6530, 2021

2017 – Cover photo for Journal of Plankton Research. 3D-reconstructed images by confocal microscopy of various phytoplankton showing their wonderful morphological traits variation.

### **Other**

Member of Società Italiana di Ecologia (SItE), Member of Gruppo Italiano di Algologia, Member of *Elena Litchman's Lab* at Kellogg Biological Station - Michigan State University

Referee for several peer-reviewed journals

Participation in numerous sampling oceanographic cruises and daily monitoring activity.

2016 - 2021 Responsible for the accredited test Identification and Counting of Phytoplankton according UNI EN 15204 at Laboratorio di Biologia delle Acque, Agency for the Environmental Prevention and Protection

2015 – 2016 Scientific responsible of the *Confocal Microscopy and Image Analysis* at BIOforIU Research Infrastructure for study Biodiversity at University of the Salento  
<http://bioforiu.unisalento.it/it-it/staff/nodo1unisalento/learoselli.aspx>

2015 – 2018 Coordination for development and implementation of a *Virtual Research Environment Phytoplankton* at LifeWatch-ERIC Research Infrastructure  
<http://www.lifewatchservicecentre.eu/web/guest/phyto-vre>

### **Students' Supervision**

Supervisor e co-supervisor of several Masters degree students at University of Salento, Italy

### **Publications**

List of publications of the last 10 years (2012-present):

Peer-reviewed publications:

1. Ryabov A., Kerimoglu O., Litchman E., Olenina I., Roselli L., Basset A., Stanca E., and Blasius B. (2021). Shape matters: the relationship between cell geometry and diversity in phytoplankton. *Ecology Letters*. doi: 10.1111/ele.13680.
2. Durante G.\*, Roselli L.\*, De Nunzio G., Piemontese U., Marsella G., Basset A. (2020). Plankton Tracker: A novel integrated system to investigate the dynamic sinking behavior in phytoplankton. *Ecological Informatics*, 60, 101166.  
\* These authors contributed equally
3. **Roselli L.**, Vadrucci M.R., Belmonte M., Ciciriello P., Rubino F., Ungaro N., Caroppo C. (2020). Two-stages bloom of *Margalefidinium* cf. *polykrikoides* in a Mediterranean shallow bay (Ionian Sea, Italy). *Marine Pollution Bulletin*, 151 110825.
4. Durante G., Basset A., Stanca E., **Roselli L.** (2019). Allometric scaling and morphological variation in sinking rate of phytoplankton. *Journal of Phycology* DOI: 10.1111/jpy.12916.

5. **Roselli L.**, Vadrucchi M.R., Fanelli F., Ungaro N., Caroppo C. (2019) First bloom event of the small dinoflagellate *Prorocentrum shikokuense* in the Mediterranean Sea: cryptogenic or introduced? *Marine Pollution Bulletin*, 139 197-204.
6. Vadrucchi M.R., **Roselli L.**, Castelluccia D., Di Festa T., Donadei D., Florio M., Longo E., D'Arpa S., Maci F., Ranieri S., Spinelli M., Pastorelli A., Ungaro N. (2018). PhytoNumb3rs: An easy-to-use computer toolkit for counting microalgae by the Utermöhl method. *Ecological Informatics*, 46 147-155.
7. Newton A., Brito A.C., Icely D.J., Derolez V., Clara I., Angus A., Schernewski G., Inácio M., Lillebø A.I., Sousa A.I., Béjaoui B., Solidoro C., Tosic M., Cañedo-Argüelles M., Yamamuro M., Reizopoulou S., Tseng H., Canu D., **Roselli L.**, Maanan M., Cristina S., Ruiz-Fernández A.C., de Lima R.F., Kjerfve B., Rubio-Cisneros N., Pérez-Ruzafa A., Marcos C., Pastres R., Pranovi F., Snoussi M., Turpie J., Tuchkovenko Y., Dyack B., Brookes J., Povilanskas R., Khokhlov V. (2018). Assessing, quantifying and valuing the ecosystem services of coastal lagoons. *Journal for Nature Conservation*, 44 50-65.
8. Caroppo C., **Roselli L.**, Di Leo A. (2018). Hydrological conditions and phytoplankton community in the Lesina lagoon (southern Adriatic Sea, Mediterranean). *Environmental Science and Pollution Research*, 25 (2) 1784-1799.
9. **Roselli L.** and Litchman E. (2017). Phytoplankton traits, functional groups and community organization. *Journal of Plankton Research*, 39 (3): 491-493.
10. **Roselli L.**, Litchman E., Stanca E., Cozzoli F., Basset A. (2017). Individual trait variation in phytoplankton communities across multiple spatial scales. *Journal of Plankton Research*, 39 (3): 577-588.
11. Bernardi Aubry. F., Pugnetti A., **Roselli L.**, Stanca E., Acri F., Finotto S. Basset A. (2017). Phytoplankton morphological traits in a nutrient-enriched, turbulent Mediterranean microtidal lagoon. *Journal of Plankton Research* 39 (3) 564-576.
12. Rosati I., Bergami C., Stanca E., **Roselli L.**, Tagliolato P., Oggioni A., Fiore N., Pugnetti A., Zingone A., Boggero A., Basset A. (2017). A thesaurus for phytoplankton trait-based approaches: Development and applicability. *Ecological Informatics*, 42 129–138.
13. Manzo C., Fabbrocini A., **Roselli L.**, D'Adamo R. (2016). Characterization of the fish assemblage in a Mediterranean coastal lagoon: Lesina Lagoon (central Adriatic Sea). *Regional Studies in Marine Science*, 8: 192-200.
14. **Roselli L.** and Basset A. (2015). Decoding size distribution patterns in marine and transitional water phytoplankton: from community to species level. *Plos One*, 10 (5) e0127193.

15. **Roselli L.**, Paparella F., Stanca E., Basset A. (2015). New data-driven method from 3D confocal microscopy for calculating phytoplankton cell biovolume. *Journal of Microscopy*, 258 (3) 200-211.
16. Renzi M., **Roselli L.**, Giovani A., Focardi SE., Basset A. (2014). Early warning tools for ecotoxicity assessment based on *Phaeodactylum tricornutum*. *Ecotoxicology* 23 (6): 1055- 1072.
17. Dromph K.M., Agusti S., Basset A., Franco J., Henriksen P., Icely J., Lehtinen S., Moncheva S., Revilla M., **Roselli L.**, Sørensen K., (2013). Sources of uncertainty in assessment of marine phytoplankton communities. *Hydrobiologia*, 704:253–264.
18. **Roselli L.**, Stanca, E., Paparella, F., Mastrolia, T., Basset, A. (2012). Determination of *Coscinodiscus cf. granii* biovolume by confocal microscopy: comparison of calculation models. *Journal of Plankton Research*, 35: 135-45.
19. **Roselli L.**, Canedo-Arguelles M., Costa Goela P., Vitorino S.C., Rieradevall M., D’Adamo R., Newton, A. (2012). Do lagoon physiography and hydrology determine the physico- chemical properties and trophic status of coastal lagoons? A comparative approach. *Estuarine, Coastal and Shelf Science*, 117: 29-36.
20. Lugoli F. Garmendiad M., Lehtinen S., Kauppila P., Moncheva S., Revilla M., **Roselli L.**, Slabakova N., Valencia V., Dromph K.M., Basset, A. (2012). Application of a new multi- metric phytoplankton index to the assessment of ecological status in marine and transitional waters. *Ecological Indicators*, 23: 338-355.
21. Ludovisi, A., **Roselli, L.**, Basset, A. (2012). Testing the effectiveness of exergy-based tools on a seasonal succession in a coastal lagoon by using a size distribution approach. *Ecological Modelling* 245: 125– 135.