

## **Marina Montresor**



Born in Bressanone (Bolzano, Italy) on 27/01/1956

Tel.: +39 081 5833259

Fax: +39 081 7641355

e-mail: marina.montresor@szn.it

Skype: marina.montresor1

**Current Position:** Senior Scientist (ricercatore II° livello)

**Current Affiliation:**

Section Integrated Marine Ecology, Stazione Zoologica Anton Dohrn, Napoli (Italy)

### **Education/Training/Experience**

Institute and Location	Degree / Function	Year	Field of Study
High school	Diploma	1973-1976	Classical studies
Department of Botany and Plant Physiology, University of Padova (Italy)	Laurea	1976-1980	Biological sciences
Department of Botany and Plant Physiology, University of Padova (Italy)	Fellowship	1980-1982	Marine Biology
Public secondary school (Padova, Italy)	Teacher	1982-1983	Mathematics and Biological Sciences
Stazione Zoologica Anton Dohrn, Napoli (Italy)	Fellowship	1983-1989	Macroalgae taxonomy and life cycles; phytoplankton taxonomy and ecology
Woods Hole Oceanographic Institution, USA	Visiting scientist	1989	Dinoflagellates life cycles
Stazione Zoologica Anton Dohrn, Napoli, Italy	Research scientist	1989-2000	Phytoplankton ecology, taxonomy and life cycles
Stazione Zoologica Anton Dohrn, Napoli, Italy	Senior scientist	2000-present	Phytoplankton ecology, taxonomy and life cycles

## **Appointments and awards**

1999-2007: Committee member of the PhD program in Algae Biology (University of Messina, Italy)

2000-2002: Coordinator of the Italian Phycological Working Group

2002-2008: Head of the Marine Botany Laboratory, Stazione Zoologica Anton Dohrn

2008 – 2014: Head of the Laboratory of Ecology and Evolution of Plankton, Stazione Zoologica Anton Dohrn

2003-2005: Member of the Council of the International Society for the Study of Harmful Algae (ISSHA)

2010-2014: Member of the GEOHAB Core Research Project “HABs in fjords and coastal embayments”

2000 - 2005: Associated Editor of Phycologia (Journal of the International Phycological Society)

2005-2007: member of the Editorial Board of Journal of Phycology (Journal of the American Phycological Society)

2007-2014: member of the Editorial Board of Protist

2009-2012: member of the Editorial Board of Estuaries and Coasts

2014-present: member of the Editorial Board of Harmful Algae

## **Other**

Member of the International Phycological Society, the Phycological Society of America, the International Society for the Study of Harmful Algae.

Associate member of The Linnaeus Centre for Marine Evolutionary Biology (CeMEB) at the University of Gothenburg (Sweden)

2000-2001: Teaching ‘Plankton Ecology’ at the University Parthenope (Napoli, Italy)

2015: Teaching ‘Algae Biology’ at the University Federico II (Napoli, Italy)

Organizer and faculty member of the ‘Advanced Phytoplankton Course: Taxonomy and Systematics’ in 1990, 1995, 1998, 2005, 2008, 2012 and 2015.

## **Students’ Supervision**

Supervisor of seven Ph.D. students

## **List of publications (2005-present):**

### ***Peer-reviewed publications***

Ruggiero MV, Sarno D, Barra L, Kooistra WHCF, Montresor M, et al. (2015) Diversity and temporal pattern of *Pseudo-nitzschia* species (Bacillariophyceae) through the molecular lens. *Harmful Algae* 42: 15-24.

Tesson SVM, Montresor M, Procaccini G, Kooistra WHCF (2014) Temporal changes in population structure of a marine planktonic diatom. *PLoS One*.

Scalco E, Stec K, Iudicone D, Ferrante MI, Montresor M (2014) The dynamics of sexual phase in the marine diatom *Pseudo-nitzschia multistriata* (Bacillariophyceae). *Journal of Phycology* 50: 817-828.

- Keeling PJ, Burki F, Wilcox HM, Allam B, Allen EE, et al. (2014) The Marine Microbial Eukaryote Transcriptome Sequencing Project (MMETSP): Illuminating the functional diversity of eukaryotic life in the oceans through transcriptome sequencing. PLoS Biology 12.
- John U, Litaker W, Montresor M, Murray S, Brosnahan ML, et al. (2014) (2302) Proposal to reject the name *Gonyaulax catenella* (*Alexandrium catenella*) (Dinophyceae). Taxon 63: 932-933.
- John U, Litaker W, Montresor M, Murray S, Brosnahan M, et al. (2014) Formal revision of the *Alexandrium tamarensense* species complex (Dinophyceae) taxonomy: the introduction of five species with emphasis on molecular-based (rDNA) classification. Protist 165: 779–804.
- Godhe A, Kremp A, Montresor M (2014) Genetic and microscopic evidence for sexual reproduction in the centric diatom *Skeletonema marinoi*. Protist 165: 401-416.
- Escalera L, Benvenuto G, Scalco E, Zingone A, Montresor M (2014) Ultrastructural features of the benthic dinoflagellate *Ostreopsis cf. ovata* (Dinophyceae). Protist 165: 260–274.
- D'Alelio D, Mazzocchi MG, Montresor M, Sarno D, Zingone A, et al. (2014) The green-blue swing: plasticity of plankton food-webs in response to coastal oceanographic dynamics. Marine Ecology. DOI: 10.1111/maec.12211
- Assmy P, Cisewski B, Henjes J, Klaas C, Montresor M, et al. (2014) Response of the protozooplankton assemblage during the European Iron Fertilization Experiment (EIFEX) in the Antarctic Circumpolar Current. Journal of Plankton Research 36: 1175-1189.
- Adelfi MG, Borra M, Sanges R, Montresor M, Fontana A, et al. (2014) Selection and validation of reference genes for qPCR analysis in the pennate diatoms *Pseudo-nitzschia multiseries* and *P. arenysensis*. Journal of Experimental Marine Biology and Ecology 451: 74-81.
- Tesson SVN, Legrand C, van Oosterhout C, Montresor M, Kooistra WHCF, et al. (2013) Mendelian inheritance pattern and high mutation rates of microsatellite alleles in the diatom *Pseudo-nitzschia multiseries* Protist 164: 89-100.
- Montresor M, Di Prisco C, Sarno D, Margiotta F, Zingone A (2013) Diversity and germination patterns of diatom resting stages at a coastal Mediterranean site. Marine Ecology Progress Series 484: 79-95.
- Lamari N, Ruggiero MV, d'Ippolito G, Kooistra WHCF, Fontana A, et al. (2013) Specificity of lipoxygenase pathways supports species delineation in the marine diatom genus *Pseudo-nitzschia*. PLoS ONE 8: e73281.
- Guillou L, Bachar D, Audic S, Bass D, Berney C, et al. (2013) The Protist Ribosomal Reference database (PR2): a catalog of unicellular eukaryote Small Sub-Unit rRNA sequences with curated taxonomy. Nucleic Acids Research 41: D597-D604.
- Fuchs N, Scalco E, Kooistra WHCF, Assmy P, Montresor M (2013) Genetic characterization and life cycle of the diatom *Fragilaria kerguelensis*. European Journal of Phycology 48: 411-426.
- Botte V, Ribera D'Alcalà M, Montresor M (2013) Hydrodynamic interactions at low Reynolds number: an overlooked mechanism favouring diatom encounters. Journal of Plankton Research 35: 914-918.
- Barra L, Ruggiero MV, Sarno D, Montresor M, Kooistra WHCF (2013) Strengths and weaknesses of microarray approaches to detect *Pseudo-nitzschia* species in the field. Environmental Science and Pollution Research 20: 6705-6718.
- Assmy P, Smetacek V, Montresor M, Klaas C, Henjes J, et al. (2013) Thick-shelled, grazer-protected diatoms decouple ocean carbon and silicon cycles in the iron-limited Antarctic Circumpolar Current. Proceedings of the National Academy of Sciences 110: 20633–20638.
- Smetacek V, Klaas C, Strass VH, Assmy P, Montresor M, et al. (2012) Deep carbon export from a Southern Ocean iron-fertilized diatom bloom. Nature 487: 313-319.
- Scalco E, Brunet C, Marino F, Rossi R, Soprano V, et al. (2012) Growth and toxicity responses of Mediterranean *Ostreopsis cf. ovata* to seasonal irradiance and temperature conditions. Harmful Algae 17: 25-34.

- Anderson DM, Alpermann TJ, Cembella AD, Collos Y, Masseret E, et al. (2012) The globally distributed genus *Alexandrium*: Multifaceted roles in marine ecosystems and impacts on human health. *Harmful Algae* 14: 10-35.
- Zingone A, Forlani G, Percopo I, Montresor M (2011) Morphological characterization of *Phaeocystis antarctica* (Prymnesiophyceae). *Phycologia* 50: 650-660.
- von Dassow P, Montresor M (2011) Unveiling the mysteries of phytoplankton life cycles: patterns and opportunities behind complexity. *Journal of Plankton Research* 33: 3-12.
- Salgado P, Troncoso VA, Montresor M, Salamanca M, Lange CB (2011) First record of *Lingulodinium polyedrum* (Dinophyceae) resting cysts in coastal sediments from the inner Sea of Chiloé, Los Lagos Region, Southern Chile (~41°-43°S). *Gayana Botánica* 68: 106-109.
- Siokou-Frangou I, Christaki U, Mazzocchi MG, Montresor M, Ribera d'Alcalà M, et al. (2010) Plankton in the open Mediterranean Sea: a review. *Biogeosciences* 7: 1-44.
- Siano R, Montresor M, Probert I, Not F, de Vargas C (2010) *Pelagodinium* gen. nov. and *P. bēii* comb. nov., a dinoflagellate symbiont of planktonic foraminifera. *Protist* 161: 385-399.
- Sarno D, Zingone A, Montresor M (2010) A massive and simultaneous sex event of two *Pseudo-nitzschia* species. *Deep Sea Research Part II: Topical Studies in Oceanography* 57: 248-255.
- Kooistra WHCF, Sarno D, Hernández-Becerril DU, Assmy P, Di Prisco C, et al. (2010) Comparative molecular and morphological phylogenetic analyses of taxa in the Chaetocerotaceae (Bacillariophyta). *Phycologia* 5: 471-500.
- Garces E, Montresor M, Lewis J, Rengefors K, Anderson DM, et al. (2010) Phytoplankton Life Cycles and Their Impacts on the Ecology of Harmful Algal Blooms. *Deep-Sea Research Part II-Topical Studies in Oceanography* 57: 159-161.
- D'Alelio D, Ribera d'Alcalà M, Dubroca L, Sarno D, Zingone A, et al. (2010) The time for sex: a biennial life cycle in a marine planktonic diatom. *Limnology and Oceanography* 55: 106-114.
- Siano R, Kooistra WHCF, Montresor M, Zingone A (2009) Unarmoured and thin-walled dinoflagellates from the Gulf of Naples, with the description of *Woloszynskia cincta* sp. nov. (Dinophyceae, Suessiales). *Phycologia* 48: 44-65.
- Sánchez GE, Sarno D, Montresor M, Siano R, Lange CB (2009) Germinación de estados de resistencia de diatomeas y dinoflagelados en sedimentos marinos de dos Áreas de Surgencia de Chile. *Gayana Botánica* 66: 239-255.
- Kremp A, Rengefors K, Montresor M (2009) Species specific encystment patterns in three Baltic cold-water dinoflagellates: the role of multiple cues in resting cyst formation. *Limnology and Oceanography* 54: 1125-1138.
- d'Ippolito G, Lamari N, Montresor M, Romano G, Cutignano A, et al. (2009) 15S-Lipoxygenase metabolism in the marine diatom *Pseudo-nitzschia delicatissima*. *New Phytologist* 183: 1064-1071.
- D'Alelio D, Amato A, Luedeking A, Montresor M (2009) Sexual and vegetative phases in the planktonic diatom *Pseudo-nitzschia multistriata*. *Harmful Algae* 8: 225-232.
- D'Alelio D, Amato A, Kooistra WHCF, Procaccini G, Casotti R, et al. (2009) Internal Transcribed Spacer polymorphism in *Pseudo-nitzschia multistriata* (Bacillariophyceae) in the Gulf of Naples: recent divergence or intraspecific hybridization? *Protist* 160: 9-20.
- Levialdi Ghiron JH, Amato A, Montresor M, Kooistra WCHF (2008) Plastid inheritance in the planktonic raphid pennate diatom *Pseudo-nitzschia delicatissima* (Bacillariophyceae). *Protist* 159: 91-98.
- Elbrächter M, Gottschling M, Hildebrand-Habel T, Keupp H, Kohring R, et al. (2008) Establishing an agenda for calcareous dinoflagellates (Thoracosphaeraceae, Dinophyceae) including a nomenclatural synopsis of generic names. *Taxon* 57: 1289-1303.

- Assmy P, Hernández-Becerril DU, Montresor M (2008) Morphological variability and life cycle traits of the type species of the diatom genus *Chaetoceros*, *C. dichaeta*. Journal of Phycology 44: 152-163.
- Amato A, Montresor M (2008) Morphology, phylogeny, and sexual cycle of *Pseudo-nitzschia manni* sp. nov. (Bacillariophyceae): a pseudo-cryptic species within the *P. pseudodelicatissima* complex. Phycologia 47: 487-497.
- Amato A, Kooistra WHCF, Leviaudi Ghiron JH, Mann DG, Pröschold T, et al. (2007) Reproductive isolation among sympatric cryptic species in marine diatoms. Protist 158: 193-207.
- Assmy P, Henjes J, Smetacek V, Montresor M (2006) Auxospore formation in the silica-sinking oceanic diatom *Fragilariopsis kerguelensis* (Bacillariophyceae). Journal of Phycology 42: 1002-1006.
- Zingone A, Garcés, E., Reguera B, Anderson DM, Bates SS, et al. (2005) EU-LIFEHAB: Expanding the discussion on the life cycles of harmful algae. In: Steidinger KA, Landsberg, J. H., Tomas CR, Vargo GA, editors. Harmful Algae 2002 Proceedings of the Xth International Conference on Harmful Algae. St. Petersburg, Florida: Florida Fish and Wildlife Conservation Commission and Intergovernmental Oceanographic Commission of UNESCO. pp. 546-548.
- Siano R, Montresor M (2005) Morphology, ultrastructure and feeding behaviour of *Protoperidinium vorax* sp. nov. (Dinophyceae, Peridiniales). European Journal of Phycology 40: 221-232.
- Assmy P, Henjes J, Schmidt V, Smetacek V, Montresor M (2005) The wax and wane of an iron-induced diatom bloom in the Southern Ocean. Berichte zur Polar und Meeresforschung 500: 89-100.
- Amato A, Orsini L, D'Alelio D, Montresor M (2005) Life cycle, size reduction patterns, and ultrastructure of the pennate planktonic diatom *Pseudo-nitzschia delicatissima* (Bacillariophyceae). Journal of Phycology 41: 542-556.

### ***Book chapters***

- Montresor M, Bastianini M, Cucchiari E, Giacobbe MG, Penna A, et al. (2010) Stadi di resistenza del fitoplancton. In: Soccal G, Buttino I, Cabrini M, Mangoni O, Penna A et al., editors. Metodologie di studio del plancton marino. Roma: ISPRA. pp. 258-273.
- Honsell G, Montresor M, Romagnoli T, Sarno D, Totti C, et al. (2010) Osservazione del fitoplancton al microscopio elettronico a scansione (SEM) e a trasmissione (TEM). In: Soccal G, Buttino I, Cabrini M, Mangoni O, Penna A et al., editors. Metodologie di studio del plancton marino. Roma: ISPRA. pp. 235-241.
- Montresor M, Lewis J (2006) Phases, stages, and shifts in the life cycles of marine phytoplankton. In: Subba Rao DV, editor. Algal cultures, analogues of blooms and applications. Enfield: Science Publishers. pp. 91-129.