

## Priscilla Licandro



Tel.: +39 081 5833212

Fax: +39 081 7641355

e-mail: [priscilla.licandro@szn.it](mailto:priscilla.licandro@szn.it)

Skype: priscilla.licandro

**Current Position:** ricercatore II° livello, Senior Scientist

### **Current Affiliation:**

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

### Education/Training/Experience

Institute and Location	Degree / Function	Year	Field of Study
Istituto di Scienze Ambientali Marine, University of Genoa, Italy	B. S. (Laurea) in Biological sciences	1987-1992	Diversity and distribution of Antarctic copepods
CNRS, Univ. Paris VI, Villefranche-sur-mer (France).	Master (Tirocinio) in Marine Biology	1993	Long-term variability of copepods in the Bay of Villefranche-sur-mer
University of Genoa (Italy) & Univ. Paris VI, Villefranche-sur-mer (France)	Ph.D. in Oceanography (Marine Environmental Science)	1995-1998	Decadal variations of zooplankton and ichthyoplankton in the Ligurian Sea, in relation with hydrological and climatic factors
Univ. Paris VI, Villefranche-sur-mer (France)	Postdoc	1999-2000	Influence of environmental changes on long-term variability of zooplankton in the NW Mediterranean

Stazione Zoologica Anton Dohrn, Napoli, Italy	Postdoc	2001-2003	Plankton distribution and diversity in Italian Seas: influence of environmental and climate variability
Istituto Centrale per la Ricerca Scientifica e Tecnologica Applicata al Mare (ICRAM), Rome and University of Genoa, Italy	Postdoc	2003-2004	Compilation of a taxonomic guide for the identification of gelatinous zooplankton in Italian Seas
Sir Alister Hardy Foundation for Ocean Science (SAHFOS), Plymouth, UK	Research Fellow	2005-2017	Plankton ecology and impact of long-term plankton variability on fish stocks
Plymouth Marine Laboratory (PML), Plymouth, UK	Visiting scientist	2017-2019	Plankton ecology and impact on fish variability
Stazione Zoologica Anton Dohrn, Napoli, Italy	Senior scientist	2019-present	Zooplankton ecology and taxonomy, environmental impact on fish recruitment

### **Appointments and awards**

2016 – present: Member of the Joint Scientific Committee EU-Mauritania in support of the Sustainable Fisheries Partnership Agreement (SFPA) between Europe and Mauritania.

2012 – 2019: Co-chair of the ICES Working Group on Small Pelagic Fish, their Ecosystems and Climate Impact (WGSPEC).

2018 –present: Editorial board member of Advances in Oceanography & Marine Biology (AOMB).

2013 –present: Editorial board member of Frontiers of Marine Science (Marine Ecosystem Ecology).

2003-2012: Editorial board member of Journal of Plankton Research (Oxford Journals).

### **Other**

2005-present: Member of the ICES WG on Zooplankton Ecology (WGZE), Study Group on Recruitment Variability in North Sea Planktivorous Fish (SGRECVAP), Group of experts 'Study Group on Working Hypotheses Regarding Effects of Climate Change (ICES SGWRECC).

2008-2009: Member of the SCOR Working Group 130 'Automatic Visual Plankton Identification'.

2005-present: Principal Investigator in eight international consortia.

Co-Convener of Sessions at the ICES/PICES 6th Zooplankton Production Symposium, Bergen, Norway (2016) and ASLO meeting, Portland-Oregon, USA (2010). Co-organizer of the International Summer School “The utility of time series observations to assess the ecological and societal implications of climate change” at the Alfred Wegner Institute (AWI), Germany (2014).

### **Teaching and Students' Supervision**

Teaching (>200 hours) in Italian, French and UK universities. Supervisor of two Ph.D. students (dir. of studies, external supervisor), four Master students and two Postdoctoral researchers (past and present)

## **Publications**

Author of 70 publications, including papers on ISI-journals (h index: 20), conference proceedings, chapters of books and policy documents.

### ***List of publications of the last 10 years:***

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

- Brun, P., Stamieszkin, K., Visser, A.V., Licandro, P., Payne, M.R. ., Kiorboe, T. (2019). Climate change has altered zooplankton-fuelled carbon export in the North Atlantic. *Nature Ecology and Evolution*, 3:416-423. doi:10.1038/s41559-018-0780-3
- Tsikliras AC, Licandro P, Pardalou A, McQuinn IH, Gröger JP, Alheit J (2019). Synchronization of Mediterranean pelagic fish populations with the North Atlantic climate variability. *Deep-Sea Research II*, 159: 143-151
- Alheit J, Gröger JP, Licandro P, McQuinn IH, Pohlmann T, Tsikliras AC (2019). What happened in the mid-1990s? The coupled ocean-atmosphere processes behind climate-induced ecosystem changes in the Northeast Atlantic and the Mediterranean. *Deep-Sea Research II*, 159: 130-142.
- Pecuchet, L., Reygondeau, G., Cheung, W.W.L., Licandro, P., van Denderen, P.D., Payne, M.R., Lindegren, M. (2018). Spatial distribution of life-history traits and their response to environmental gradients across multiple marine taxa. *Ecosphere* 9(10):e02460. doi:10.1002/ecs2.2460.
- Holm, M.W., Kiorboe, T., Brun, P., Licandro, P., Almeda, R., Hansen, B.W. (2018). Resting eggs in free living marine and estuarine copepods. *J. Plankton Res.* 40:2-15. doi:10.1093/plankt/fbx062
- Blackett,, M., Lucas, C.H., Cook, K., Licandro, P. (2017). Occurrence of the siphonophore *Muggiaea atlantica* in Scottish coastal waters: source or sink? *J. Plankton Res.* 39: 122–137. doi: 10.1093/plankt/fbw082
- McManus, M. C., Licandro, P., and Coombs, S. H. (2016). Is the Russell Cycle a true cycle? Multidecadal zooplankton and climate trends in the western English Channel. *ICES J. Mar. Sci.*, 73: 227-238. doi:10.1093/icesjms/fsv126
- Brun, P., Kiorboe, T., Licandro, P., Payne, M.R. (2016). The predictive skill of species distribution models for plankton in a changing climate. *Global Change Biology*, 22, 3170–3181, doi: 10.1111/gcb.13274.
- Castellani, C., Licandro, P., Fileman, E., Di Capua, I., Mazzocchi, M.G. (2016). *Oithona similis* likes it cool: evidence from two long-term time series. *J. Plankton Res.*, 38: 703-717.
- Licandro, P. , Blackett,, M., Fischer, A., Hosia, A., Kennedy, J., Kirby, R. R., Raab, K., Stern, R. and Tranter, P. (2015). Biogeography of jellyfish in the North Atlantic, by traditional and genomic methods. *Earth Syst. Sci. Data*, 7, 173–191. doi:10.5194/essd-7-173-2015.
- Alvarez-Fernandez, S., Licandro, P., van Damme, C. J. G. and Hufnagl, M. (2015). Effect of zooplankton on fish larval abundance and distribution: a long-term study on North Sea herring (*Clupea harengus*). *ICES J. Mar. Sci.* first published online August 10, 2015 doi:10.1093/icesjms/fsv140.
- Blackett, M., Lucas, C. H., Harmer, R.A., & Licandro, P. (2015). Population ecology of *Muggiaea atlantica* (cnidaria, siphonophora) in the Western English Channel. *Mar. Ecol. Prog. Ser.*, 535: 129-144, doi: 10.3354/meps11423.

- Melle, W., Runge, J. A., Head, E., Plourde, S., Castellani, C., Licandro, P., ... Chust, G. (2015). Biogeography of key mesozooplankton species in the North Atlantic, by manual counting methods, and egg production of *Calanus finmarchicus*. *Earth System Science Data*, 7(2), 223-230. DOI: 10.5194/essd-7-223-2015
- Villarino, E., Chust, G., Licandro, P., Butenschön, M., Ibaibarriaga, L., Larrañaga, A., Irigoien, X. (2015). Modelling the future biogeography of North Atlantic zooplankton communities in response to climate change. *Mar. Ecol. Prog. Ser.*, 531: 121–142, 2015, doi: 10.3354/meps11299.
- Alheit, J., Licandro, P., Coombs, S., Garcia, A., Giráldez, A., Garcia Santamaría, M.T., Slotte, A. & Tsikliras, A.C. (2014). Atlantic Multidecadal Oscillation (AMO) modulates dynamics of small pelagic fishes and ecosystem regime shifts in the eastern North and Central Atlantic. *J. Mar. Syst.*, 131: 21-35.
- Blackett, M., Licandro, P., Coombs, S. H., & Lucas, C. H. (2014). Long-term variability of the siphonophores *Muggiae atlantica* and *M. kochi* in the Western English Channel. *Progr. Oceanog.*, 128: 1-14. doi: <http://dx.doi.org/10.1016/j.pocean.2014.07.004>.
- Chust, G., Castellani, C., Licandro, P., Ibaibarriaga, L., Sagarminaga, Y., & Irigoien, X. (2014). Are Calanus spp. shifting poleward in the North Atlantic? A habitat modelling approach. *ICES J. Mar. Sci.*, 71: 241-253.
- Mitra, A., Castellani, C., Gentleman, W. C., Jónasdóttir, S. H., Flynn, K. J., Bode, A., Halsband, C., Kuhn, P., Licandro, P., et al., (2014). Bridging the gap between marine biogeochemical and fisheries sciences; configuring the zooplankton link. *Progr. Oceanog.*, 129 (B): 176-199.
- Melle, W., Runge, J., Head, E., Plourde, S., Castellani, C., Licandro, P., et al., (2014). The North Atlantic Ocean as habitat for *Calanus finmarchicus*: Environmental factors and life history traits. *Progr. Oceanog.*, 129 (B): 244-284.
- Nicolas, D., Rochette, S., Llope, M., & Licandro, P. (2014). Spatio-Temporal Variability of the North Sea Cod Recruitment in Relation to Temperature and Zooplankton. *PLoS ONE*, 9(2), e88447. doi: 10.1371/journal.pone.0088447.
- Silva, T., Gislason, A., Licandro, P., Marteinsdóttir, G., Ferreira, A. S. A., Gudmundsson, K., & Astthorsson, O. S. (2014). Long-term changes of euphausiids in shelf and oceanic habitats southwest, south and southeast of Iceland. *J. Plankton Res.*, 36: 1262-1278.
- Batistić, M., Lučić, D., Carić, M., Garić, R., Licandro, P., Jasprica, N., (2013). Did the alien calycophoran *Muggiae atlantica* outcompete its native congeneric *M. kochi* in the marine lakes of Mljet Island (Croatia)? *Marine Ecology*, 34 (Suppl. 1): 3-13.
- Raab K., Llope M., Nagelkerke L.A.J., Rijnsdorp A.D., Teal, R.L., Licandro, P., et al., (2013). Influence of temperature and food availability on juvenile European anchovy *Engraulis encrasicolus* at its northern boundary. *Mar. Ecol. Prog. Ser.*, 488: 233-245.
- Raittos, D.E., Walne, A., Lavender, S.J., Licandro, P., Reid, P.C., Edwards, M.A 60-year ocean colour data set from the Continuous Plankton recorder. *J. Plankton Res.*, 35: 158-164.
- Llope, M., Licandro, P., Chan, K.-S., Stenseth, N.C. (2012). Spatial variability of the plankton trophic interaction in the North Sea: a new feature after the early 1970s. *Glob. Change Biol.*, 18: 106–117, doi: 10.1111/j.1365-2486.2011.02492.
- Licandro, P., Souissi, S., Ibanez, F., Carré, C. (2011). Long-term variability and environmental preferences of calycophoran siphonophores in the Bay of Villefranche (North-Western Mediterranean). *Progr. Oceanogr.*, 97-100: 152-163.

- Mazzocchi, M.G., Licandro, P., Dubroca, L., Di Capua, I., Saggiomo, V. (2011). Zooplankton associations in a Mediterranean long-term time-series. *J. Plankton Res.*, 33: 1163-1181.
- Licandro, P., Conway, D. V. P., Daly Yahia, M. N., Fernandez de Puelles, M. L., Gasparini, S., Hecq, J. H., Tranter, P. and Kirby, R. R., (2010). A blooming jellyfish in the northeast Atlantic and Mediterranean. *Biol. Lett.*, 6: 688-691 doi:10.1098/rsbl.2010.0150.
- Licandro, P. and Icardi, P., (2009). Basin scale distribution of zooplankton in the Ligurian Sea (north-western Mediterranean) in late autumn. *Hydrobiologia*, 617: 17-40.
- Molinero, J.C., Vukanic, V., Lucic, D., Ibanez, F., Nival, P., Licandro, P., Calbet, A., Christou, E.D., Daly-Yahia, N., Fernandez de Puelles, M.L., Mazzocchi, M.G. and Siokou-Frangou, I., (2009). Mediterranean marine copepods: basin-scale trends of the calanoid *Centropages typicus*. *Hydrobiologia*, 617: 41-53.
- Payne, M.R., Hatfield, E.M.C., Dickey-Collas, M., Falkenhaug, T., Gallego, A., Gröger, J., Licandro, P., Llope, M., Munk, P., Röckmann, C., Schmidt, J.O., Nash, R., (2009). Recruitment in a changing environment: the 2000s North Sea herring recruitment failure. *ICES J. Mar. Sci.*, 66: 272-277.

### **Book Chapters:**

- Licandro P., Fischer A., Lindsay D.J. 2017. Cnidaria: Scyphozoa and Non-Colonial Hydrozoa. In: *Marine Plankton*. C. Castellani and M. Edwards (eds.), Oxford University Press, pp. 198-231.
- Licandro P., Carré C., Lindsay D.J. 2017. Cnidaria: Colonial Hydrozoa (Siphonophorae). In: *Marine Plankton*. C. Castellani and M. Edwards (eds.), Oxford University Press, pp. 232-250.
- Licandro P., Lindsay D.J. 2017. Ctenophora. In: *Marine Plankton*. C. Castellani and M. Edwards (eds.), Oxford University Press, pp. 251-263.
- Licandro P., Brunetta M. 2017. Chordata: Thaliacea. In: *Marine Plankton*. C. Castellani and M. Edwards (eds.), Oxford University Press, pp. 584-598.
- Boero, F., Licandro P. 2010. La raccolta del plancton gelatinoso [The collection of gelatinous plankton]. In: G. Socal, I. Buttino, M. Cabrini, O. Mangoni, A. Penna, C. Totti (eds), *Metodologie di studio del plancton marino* [Methods for the study of Marine Plankton], pp. 497-501. ISPRA, Roma  
[http://www.isprambiente.gov.it/site/\\_contentfiles/00006900/6989\\_MLG\\_56\\_2010.pdf](http://www.isprambiente.gov.it/site/_contentfiles/00006900/6989_MLG_56_2010.pdf)
- Licandro, P. 2010. Checklist of the flora and fauna in Italian Seas: Tunicata. *Biologia Marina Mediterranea*, 17(suppl.1): 636-639.
- Boero F., Gravili, C., Licandro, P. 2008. Checklist of the flora and fauna in Italian Seas: Hydrozoa. *Biologia Marina Mediterranea* 15 (suppl.1) :71-91.