

EUROPEAN  
CURRICULUM VITAE  
FORMAT



PERSONAL INFORMATION

Name Massimiliano Rosso  
Address  
Telephone Mobile 4  
ORCID and SCOPUS links  
E-mail  
Nationality  
Date of Birth  
Gender

WORK EXPERIENCE

- Dates (from - to) Since 2022  
• Name ad address of the employer University of Genova, Genova, IT  
• Type of business or sector Academia  
• Occupation or position held **Adjunct Professor**  
• Main activities and responsibilities Course: Tecnologie Innovative Per Il Biomonitoraggio In Ambiente Marino (LM-75)
- Dates (from - to) Since 2021  
• Name ad address of the employer University of Genova, Genova, IT  
• Type of business or sector Academia  
• Occupation or position held **Doctoral Advisory Committee member (PhD Board Member)**  
• Main activities and responsibilities PhD in Security, risk and vulnerability
- Dates (from - to) Since 2020  
• Name ad address of the employer International Union for Conservation of Nature (IUCN), Gland, CH  
• Type of business or sector UN  
• Occupation or position held **Regional Assessor**  
• Main activities and responsibilities Draft conservation status of different cetacean species
- Dates (from - to) Since 2019  
• Name ad address of the employer Institute Of Deep-Sea And Science And Engineering (IDSSE), Chinese Academy of Science, Sanya, China  
• Type of business or sector Academia / Scientific Research  
• Occupation or position held **Invited Researcher**  
• Main activities and responsibilities Contribute to scientific program / training and contribute to megafauna sampling / monitoring
- Dates (from - to) Since 2016  
• Name ad address of the employer Pelagos Agreement, Monaco, MC  
• Type of business or sector Intergovernmental agreements  
• Occupation or position held **National Expert**



## PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE  
OTHER LANGUAGES

ITALIAN  
ENGLISH (C1), PORTUGUESE (C2)

### SCIENTIFIC SKILLS AND COMPETENCES

*Living and working with other people, in multicultural environments, in positions where communication is important and situations where teamwork is essential (for example culture and sports), etc.*

I have been carrying out marine mammals research projects since 2002. I am author or co-author of 40 scientific peer-reviewed publications.

I am proficient in the following sampling techniques (mainly used on megafauna): biopsy sampling (both with crossbow and rifle), Archival Tagging, sat- LIMPET tagging, blow sampling (marine mammals) using both poles and UAVs (multicopters), photogrammetry and photo-id, Passive Acoustic Monitoring. Good skills in the use of R-program, Matlab, SocProg, MARK.

### ORGANISATIONAL SKILLS AND COMPETENCES

*Coordination and administration of people, projects and budgets; at work, in voluntary work (for example culture and sports) and at home, etc.*

Thanks to a strong experience as a field biologist (more than 800 days of field surveys), I had the opportunity to led numerous scientific expeditions in various international projects (e.g. Canada, Alaska, China, Azores & Madeira & and other portuguese seas, Mediterranean Region). I have been project manager of ONR and INTERREG Maritime projects. I have been PI of several projects related to stock assessment and population dynamics of different megafauna populations, with attention to deep-divers species. I had to lead several multicultural teams and, since 2011, I am one of the focal points of the Internship program CETASMUS: so far, around 80 students tutored coming from 22 different countries.

### PUBLICATION INDEXES

Scopus

h-index: 19  
<https://www.scopus.com/authid/detail.uri?authorId=16025360000>

### PATENTS

2020 - UAV pilot - Critical Operations L-CRO, for <25kg UAVs - Issued by ENAC - Italian Civil Aviation Authority

2015 - UAV pilot - Basic Operations VL, for <25kg UAVs - Issued by ENAC - Italian Civil Aviation Authority

2014 - JNCC Marine Mammal Observer (MMO), Joint Nature Conservation Committee

2009 - IUCN Red List Assessor training course, University of British Columbia, CA

2003 - Boating License, for motor / sailing boat <24m - No distance limit from the coast - Issued by the Italian Ministry of Transport

2002 - Qualifying examination for the Italian Register of Biologists, University of Genova, Italy  
Score: 150/150

1996 -PADI open water diver, Savona

1994 - european driving License (type B)

## MOST RELEVANT PUBLICATIONS

1. Dias, E., Dromby, M., Ferreira, R. et al. Trophic ecology of common bottlenose dolphins in a pelagic insular environment inferred by stable isotopes. *Hydrobiologia* (2023). <https://doi.org/10.1007/s10750-023-05294-4>
2. Tenan, S., Moulins, A., Tepsich, P., Bocconcelli, A., Verga, A., Ballardini, M., Nani, B., Papi, D., Motta, G., Aguilar, A. S., & Rosso, M. (2023). Immigration as the main driver of population dynamics in a cryptic cetacean. *Ecology and Evolution*, 13, e9806. <https://doi.org/10.1002/ece3.9806>
3. Romani-Cremaschi, Umberto; Zoppi, Simona; Mattioda, Virginia; Audino, Tania; Marsili, Letizia; Varello, Katia; et al. (2023): Morganela morganii septicemia and concurrent renal crassicaudiasis in a Cuvier's beaked whale (*Ziphius cavirostris*) stranded in Italy. *Frontiers. Collection*. <https://doi.org/10.3389/fmars.2022.1058724>
4. Mingming Liu, Mingli Lin, Xiaoyu Huang, Zixin Yang, Francesco Caruso, Matteo Bains, Alessandro Bocconcelli, Massimiliano Rosso, Songhai Li (2023). Floating macro-litter pollution in the northern South China Sea, *Environmental Pollution*, 316:2, ISSN 0269-7491, <https://doi.org/10.1016/j.envpol.2022.120527>.
5. Oliveira-Rodrigues, C., Correia, A.M., Valente, R. et al. Assessing data bias in visual surveys from a cetacean monitoring programme. *Sci Data* 9, 682 (2022). <https://doi.org/10.1038/s41597-022-01803-7>
6. A.B. Onoufriou, O.E. Gaggiotti, N. Aguilar de Soto, M. L. McCarthy, P. A. Morin, M. Rosso, M. Dalebout, N. Davison, R. W. Baird, C. S. Baker, S. Berrow, A. Brownlow, D. Burns, F. Caurant, D. Claridge, R. Constantine, F. Demaret, S. Dreyer, M. Đuras, J. W. Durban, A. Frantzis, L. Freitas, G. Genty, A. Galov, S. S. Hansen, A. C. Kitchener, V. Martin, A. A. Mignucci-Giannoni, V. Montano, A. Moulins, C. Olavarria, M. M. Poole, C. Reyes Suárez, E. Rogan, C. Ryan, A. Schiavi, P. Tepsich, J. Urban R., K. West, M. Tange Olsen, E. L. Carroll. 2022. Biogeography in the deep: Hierarchical population genomic structure of two beaked whale species. *Global Ecology and Conservation*, 40(2022) e02308. <https://doi.org/10.1016/j.gecco.2022.e02308>
7. Bigal, Eyal, Ori Galili, Itai van Rijn, Massimiliano Rosso, Christophe Cleguer, Amanda Hodgson, Aviad Scheinin, and Dan Tchernov. 2022. "Reduction of Species Identification Errors in Surveys of Marine Wildlife Abundance Utilising Unoccupied Aerial Vehicles (UAVs)" *Remote Sensing* 14, no. 16: 4118. <https://doi.org/10.3390/rs14164118>
8. Zongyao Yang, Xueying Yu, Simon Dedman, Massimiliano Rosso, JingminZhu, Jiaqi Yang, Yuxiang Xia, YichaoTian, Guangping Zhang, JingzhenWang (2022). UAV remote sensing applications in marine monitoring: Knowledge visualization and review. *Science of The Total Environment*, 838:1 (September), 155939. <https://doi.org/10.1016/j.scitotenv.2022.155939>
9. \*Tian, Y., Yang, Z., Yu, X., Jia, Z., Rosso, M., et al. (2022). Can we quantify the aquatic environmental plastic load from aquaculture? *Water Research*, 219(April), 118551. <https://doi.org/10.1016/j.watres.2022.118551>
10. \*Coomber, F. G., Falcone, E. A., Keene, E. L., Cárdenas-Hinojosa, G., Huerta-Patiño, R., & Rosso, M. (2022). Multi-regional comparison of scarring and pigmentation patterns in Cuvier's beaked whales. *Mammalian Biology*, (0123456789). <https://doi.org/10.1007/s42991-022-00226-6>
11. Liu, M., Lin, W., Lin, M., Caruso, F., Rosso, M., Zhang, P., Dong, L., Dai, L., Li, S. (2022). Sperm whales (*Physeter macrocephalus*) in the northern South China Sea: Evidence of a nursing ground? *Deep Sea Research Part I: Oceanographic Research Papers*, 184(April), 103767. <https://doi.org/10.1016/j.dsr.2022.103767>
12. David, L., Arcangeli, A., Tepsich, P., Di-Meglio, N., Roul, M., Campana, I., Gregorietti, M., Moulins, A., Rosso, M., Crosti, R. (2022). Computing ship strikes and near miss events of fin whales along the main ferry routes in the Pelagos Sanctuary and adjacent west area, in summer. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 32(3), 442-456. <https://doi.org/10.1002/aqc.3781>
13. \*Galli, M., Tepsich, P., Bains, M., Panti, C., Rosso, M., Vafeiadou, A., Moulins, Fossi, M. C. (2022). Microplastic abundance and biodiversity richness overlap: Identification of sensitive areas in the Western Ionian Sea. *Marine Pollution Bulletin*, 177(March), 113550.

- <https://doi.org/10.1016/j.marpolbul.2022.113550>
14. \*Alves, F., Rosso, M., Li, S., and Nowacek, D., P. A sea of possibilities for marine megafauna. *Science*, 375(6579): 391-392. 1 2022. <https://www.science.org/doi/10.1126/science.abn6022>
  15. Lanfredi, C., Arcangeli, A., David, L., Holcer, D., Rosso, M. & Natoli, A. 2021. *Grampus griseus* (Mediterranean subpopulation). The IUCN Red List of Threatened Species 2021: e.T16378423A190737150. <https://dx.doi.org/10.2305/IUCN.UK.2021-3.RLTS.T16378423A190737150.en>
  16. Emma L. Carroll, Michael R. McGowen, Morgan L. McCarthy, Felix G. Marx, Natacha Aguilar, Merel L. Dalebout, Sascha Dreyer, Oscar E. Gaggiotti, Sabine S. Hansen, Anton van Helden, Aubrie B. Onoufriou, Robin W. Baird, C. Scott Baker, Simon Berrow, Danielle Cholewiak, Diane Claridge, Rochelle Constantine, Nicholas J. Davison, Catarina Eira, R. Ewan Fordyce, John Gatesy, G. J. Greg Hofmeyr, Vidal Martín, James G. Mead, Antonio A. Mignucci-Giannoni, Phillip A. Morin, Cristel Reyes, Emer Rogan, Massimiliano Rosso, Mónica A. Silva, Mark S. Springer, Debbie Steel and Morten Tange Olsen. 2021. Speciation in the deep: genomics and morphology reveal a new species of beaked whale *Mesoplodon eueu*. *Proc. R. Soc. B* **288**:20211213. <https://doi.org/10.1098/rspb.2021.1213>
  17. Francesca Grossi, Elise Lahaye, Aurélie Moulins, Anna Borroni, Massimiliano Rosso, Paola Tepsich (2021). Locating ship strike risk hotspots for fin whale (*Balaenoptera physalus*) and sperm whale (*Physeter macrocephalus*) along main shipping lanes in the North-Western Mediterranean Sea. *Ocean & Coastal Management*, 212:105820. <https://doi.org/10.1016/j.ocecoaman.2021.105820>.
  18. Ham, G. S., Lahaye, E., Rosso, M., Moulins, A., Hines, E. & Tepsich, P. (2021). Predicting summer fin whale distribution in the Pelagos Sanctuary (north-western Mediterranean Sea) to identify dynamic whale–vessel collision risk areas. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 1– 21. <https://doi.org/10.1002/aqc.3614>
  19. Correia AM, Sousa-Guedes D, Gil Á, Valente R, Rosso M, Sousa-Pinto I, Sillero N and Pierce GJ (2021) Predicting Cetacean Distributions in the Eastern North Atlantic to Support Marine Management. *Front. Mar. Sci.* 8:643569. doi: 10.3389/fmars.2021.643569
  20. \*Songhai Li and Massimiliano Rosso (2021). Lack of knowledge threatens beaked whales. *Science* Vol. 371, Issue 6531, pp. 791. DOI: 10.1126/science.abg8922
  21. \*Bertulli CG, Rasmussen MH, Rosso M (2021). Fission–fusion dynamics of a pelagic delphinid in the arctic: the white-beaked dolphin (*Lagenorhynchus albirostris*). *Integrative Zoology* 16, 512-26. DOI: 10.1111/1749-4877.12524
  22. \*Karaa, S, Jerbi, H, Marouani, S and Rosso, M. (2021). First records of Cuvier's beaked whale (*Ziphius cavirostris*, G. Cuvier 1823) strandings along the Tunisian coast. *Mar Biodivers Rec* 14, 2 <https://doi.org/10.1186/s41200-020-00197-y>
  23. \*Rosso M, Lin M, Caruso F et al. (2020). First live sighting of Deraniyagala's beaked whale (*Mesoplodon hotaula*) or ginkgo-toothed beaked whale (*Mesoplodon ginkgodens*) in the western Pacific (South China Sea) with preliminary data on coloration, natural markings and surfacing patterns. *Integrative Zoology* 16, 451–61. DOI: 10.1111/1749-4877.12507
  24. Lin, M, Liu, M, Caruso, F, Rosso, M et al. (2020). A pioneering survey of deep-diving and off-shore cetaceans in the northern South China Sea. *Integrative Zoology* 1– 11. DOI: 10.1111/1749-4877.12508
  25. \*Baini, M., Panti, C., Fossi, M.C. et al. First assessment of POPs and cytochrome P450 expression in Cuvier's beaked whales (*Ziphius cavirostris*) skin biopsies from the Mediterranean Sea. *Sci Rep* 10, 21891 (2020). <https://doi.org/10.1038/s41598-020-78962-3>
  26. Tepsich P, Schettino I, Atzori F, Azzolin M, Campana I, Carosso L, Cominelli S, Crosti R, David L, Di-Méglio N, Frau F, Gregoriotti M, Mazzucato V, Monaco C, Moulins A, Paraboschi M, Pellegrino G, Rosso M, Roul M, Saintignan S, Arcangeli A. 2020. Trends in summer presence of fin whales in the Western Mediterranean Sea Region: new insights from a long-term monitoring program. *PeerJ* 8:e10544 <http://doi.org/10.7717/peerj.10544>
  27. Tepsich P, Borroni A, Zorgno M, Rosso M and Moulins A (2020) Whale Watching in the Pelagos Sanctuary: Status and Quality Assessment. *Front.*

28. Correia AM, Gil Á, Valente RF, Rosso M, Sousa-Pinto I, Pierce GJ. Distribution of cetacean species at a large scale-Connecting continents with the Macaronesian archipelagos in the eastern North Atlantic. *Divers Distrib.* 2020;00:1–14. <https://doi.org/10.1111/ddi.13127>
29. Centelleghé C, Carraro L, Gonzalvo J, Rosso M, Esposti E, Gili C, et al. (2020) The use of Unmanned Aerial Vehicles (UAVs) to sample the blow microbiome of small cetaceans. *PLoS ONE* 15(7): e0235537. <https://doi.org/10.1371/journal.pone.0235537>
30. Songhai Li, Mingli Lin, Francesco Caruso, Lijun Dong, Wenzhi Lin, Massimiliano Rosso, Alessandro Bocconcelli (2020). Overfishing threatens cetaceans in the South China Sea. *Science* 368(6495):1074-1075. DOI: 10.1126/science.abc7557
31. Alves, F., Dromby, M., Baptista, V. et al. Ecophysiological traits of highly mobile large marine predators inferred from nucleic acid derived indices. *Sci Rep* 10, 4752 (2020). <https://doi.org/10.1038/s41598-020-61769-7>
32. \*Correia, A.M., Gandra, M., Liberal, M. et al. A dataset of cetacean occurrences in the Eastern North Atlantic. *Sci Data* 6, 177 (2019). <https://doi.org/10.1038/s41597-019-0187-2>
33. Correia, A.M. et al. Distribution and habitat modelling for short-beaked common dolphins (*Delphinus delphis*) in Eastern North Atlantic Ocean. *JMBA*. 99(6), 1443–1457 (2019). DOI: <https://doi.org/10.1017/S0025315419000249>
34. \*Francesco Caruso, Virginia Sciacca, Ignazio Parisi, Salvatore Viola, Giovanni de Vincenzi, Alessandro Bocconcelli, T. Aran Mooney, Laela Sayigh, Songhai Li, Francesco Filiciotto, Aurelie Moulins, Paola Tepsich, and Massimiliano Rosso. 2019. Acoustic recordings of rough-toothed dolphin (*Steno bredanensis*) offshore Eastern Sicily (Mediterranean Sea). *JASA* 146, EL286 (2019); <https://doi.org/10.1121/1.5126118>
35. Cañadas, N. Aguilar De Soto, M. Aissi, A. Arcangeli, M. Azzolin, A. B-Nagy, G. Bearzi, I. Campana, C. Chicote, C. Cotte, R. Crosti, L. David, A. Di Natale, C. Fortuna, A. Frantzis, P. Garcia, M. Gazo, R. Gutierrez-Xarxa, D. Holcer, S. Laran, G. Lauriano, T. Lewis, A. Moulins, B. Mussi, G. Notarbartolo Di Sciara, S. Panigada, X. Pastor, E. Politi, M. Pulcini, J.A. Raga, L. Rendell, M. Rosso, P. Tepsich, J. Tomás, M. Tringali, Th. Roger (2018). The challenge of habitat modelling for threatened low density species using heterogeneous data: The case of Cuvier's beaked whales in the Mediterranean, *Ecological Indicators*, Volume 85, February 2018, Pages 128-136, ISSN 1470-160X, <https://doi.org/10.1016/j.ecolind.2017.10.021>.
36. Morgado, C., Martins, A., Rosso, M., Moulins, A., and Tepsich, P. (2017). Fin Whale Presence and Distribution in the Pelagos Sanctuary: Temporal and Spatial Variability Along 2 Fixed-Line Transects Monitored in 2009-2013. *International Journal of Marine and Environmental Sciences*, 1(December): 1-14. 2017.
37. Carroll, E. L., Reyes, C., Gaggiotti, O. E., Olsen, M. T., Maaholm, D. J., Rosso, M., Davison, N. J., Martín, V., Schiavi, A., and Aguilar de Soto, N. (2016). Pilot study to assess the utility of ddRAD sequencing in identifying species-specific and shared SNPs among Blainville's (*Mesoplodon densirostris*) and Cuvier's (*Ziphius cavirostris*) beaked whales. *International Whaling Commission*, Report number: SC/66b/DNA/03. DOI: 10.13140/RG.2.1.2286.5527
38. Azzellino, A., S. Airoidi, S. Gaspari, C. Lanfredi, A. Moulins, M. Podestà, M. Rosso, And P. Tepsich (2016). Chapter Seven-Risso's Dolphin, *Grampus griseus*, in the Western Ligurian Sea: Trends in Population Size and Habitat Use. *Advances in Marine Biology* 75: 205-232. DOI: 10.1016/bs.amb.2016.07.007
39. Podestà, M., A. Azzellino, A. Cañadas, A. Frantzis, A. Moulins, M. Rosso, P. Tepsich, And C. Lanfredi (2016). Chapter Four-Cuvier's Beaked Whale, *Ziphius cavirostris*, Distribution and Occurrence in the Mediterranean Sea: High-Use Areas and Conservation Threats. *Advances in Marine Biology* 75: 103-140. DOI: 10.1016/bs.amb.2016.08.003
40. \*Coomber F.G., Moulins A., Tepsich P. And M. Rosso (2016). Sexing free-ranging adult Cuvier's beaked whales (*Ziphius cavirostris*) using natural marking thresholds and pigmentation patterns. *Journal of Mammalogy* Mar 2016, gyw033; DOI: 10.1093/jmammal/gyw033

41. Coomber, F.G., D'incà, M., Rosso, M., Tepsich, P., Notarbartolo Di Sciara, G., Moulins, A. (2016). Description of the vessel traffic within the north Pelagos Sanctuary: Inputs for Marine Spatial Planning and management implications within an existing international Marine Protected Area. *Marine Policy* 69,102-116. doi.org/10.1016/j.marpol.2016.04.013
42. Wang X., Wu F., Turvey S.T., Rosso M., Zhao L. And Zhu Q. (2016). Seasonal group characteristics and occurrence patterns of Indo-Pacific humpback dolphins (*Sousa chinensis*) in Xiamen Bay, Fujian Province, China. *Journal of Mammalogy* Jan 2016, gyw002; DOI: 10.1093/jmammal/gyw002
43. Cominelli S., Moulins A., Rosso M., Tepsich P. 2016. Fin whale seasonal trends in the Pelagos Sanctuary, Mediterranean Sea. *Journal of Wildlife Management* 80(3):490-499. DOI: 10.1002/jwmg.1027.
44. \*Bertulli C., Rasmussens M.H., Rosso M. 2016. An assessment of the natural marking patterns used for photo-identification of common minke whales (*Balaenoptera acutorostrata*) and white-beaked dolphins (*Lagenorhynchus albirostris*) off Iceland. *JMBA* 96(4), 807-819. DOI: 10.1017/S0025315415000284.
45. Wang X., Wu F., Turvey S.T., Rosso M., Cuihua T., Ding X. And Q. Zhu. 2015. Social organization and distribution patterns inform conservation management of a threatened Indo-Pacific humpback dolphin population. *Journal of Mammalogy* 96:964-97. DOI:10.1093/jmammal/gyv097.
46. Campana, R. Crosti, D. Angeletti, L. Carosso, L. David, N. Di-Méglio, A. Moulins, M. Rosso, P. Tepsich, A. Arcangeli. 2015. Cetacean response to summer maritime traffic in the Western Mediterranean Sea. *Marine Environmental Research*, 109:1-8. doi:10.1016/j.marenvres.2015.05.009.
47. Correia, A.M., Tepsich, P., Rosso, M., Caldeira, R., Sousa Pinto, I., 2015. Cetacean occurrence and spatial distribution: habitat modelling for offshore waters in the Portuguese EEZ (NE Atlantic). *Journal of Marine Systems*, 143:73-85.
48. Aissi M, Arcangeli A, Crosti R, Daly Yahia MN, Loussaief B, Moulins A, Pellegrino G, Rosso M, Tringali LM, Tepsich P, 2015. *Russian Journal of Marine Biology*, 41(5)343-350.
49. Tepsich, P., Rosso, M., Halpin, P.N., Moulins, A., 2014. Habitat preferences of two deep-diving cetacean species in the northern Ligurian Sea. *Mar. Ecol. Prog. Sér.* (508:247-260). <https://doi.org/10.3354/meps10851>
50. Rosso M., Ballardini M., Moulins A., Würtz M., 2011. Natural markings of Cuvier's beaked whale *Ziphius cavirostris* in the Mediterranean Sea. *African Journal of Marine Science*, 33(1)45-57.
51. Gnone G., Rosso M. Et Al., 2011. Distribution, abundance and movements of the bottlenose dolphin (*Tursiops truncatus*) in the Pelagos Sanctuary MPA (North-West Mediterranean Sea). *Aquatic Conservation: Marine and Freshwater Ecosystems*, 21: 372-388. doi: 10.1002/aqc.1191.
52. Rosso M., Moulins A. And Würtz M., 2008. Colour patterns and pigmentation variability on striped dolphin *Stenella coeruleoalba* (Meyen, 1833) in North-Western Mediterranean sea. *JMBA*, 88(6):1211-1219.
53. Moulins A., Rosso M., Ballardini M., And Würtz M., 2008. Partition of the Pelagos Sanctuary (north-western Mediterranean Sea) into hotspots and coldspots for cetacean sightings. *JMBA*, 88(6):1273-1281.
54. Moulins A., Rosso M., Nani B., And Würtz M., 2007. Aspects of distribution of Cuvier's beaked whale (*Ziphius cavirostris*) in relation to topographic features in the Pelagos Sanctuary northwestern Mediterranean sea). *JMBA*, 87(1):177-186. <https://doi.org/10.1017/S0025315407055002>

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Place, date

Savona, 30/01/2024

Signature