

Curriculum Vitae of Alessandro BERGAMASCO

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CONTACT INFORMATION	Istituto di Scienze Marine (ISMAR) Consiglio Nazionale delle Ricerche Castello 2737/f - Arsenale Tesa 104 Venezia, 30122 Italy Tel: +39-041-2407954 E-mail: alessandro.bergamasco@ve.ismar.cnr.it								
RESEARCH INTERESTS	<p>Relationships between physical and ecological processes in estuarine, coastal and pelagic environments with particular reference to mutual control mechanisms and global forcings</p> <p><b>Ocean-Biota System: plankton communities in coastal and pelagic environments</b>                  The study of key marine observation sites is crucial to focus on interactions between physical and biological processes within the Ocean-Biota system both in coastal and pelagic environments. Moreover, their maintenance over time makes available, when possible, repeated joint measurements or even time series of parameters in areas of particular relevance for assessing the possible effects of the global changes. The background obtained from the measurements allows to merge knowledge on oceanographic physical forcings and their modeling with that on specific ecological processes such as the structural, dimensional and functional biodiversity of planktonic communities, the structure of the trophic network, the colonization by invasive species. The availability of these informations are at the base of the conservation process.</p> <p><b>Ocean-Land Interface: physical and bio-ecological processes</b>                  Marine and terrestrial environments strictly interlink to each other. They do not interrupt at the shoreline nor at the seabed, and most of the processes acting there require investigation based on the concept of ocean-land continuum through a multi looking observation approach. It is necessary to integrate coastal oceanography, hydrogeology and marine ecology by promoting a really interdisciplinary research approach to process study.</p> <p><b>Design and implementation of Observation sites</b>                  New establishment and maintenance over time of coastal observation sites (automatic, e.g. platforms or traditional ones, e.g. monitoring) to collect timeseries of parameters supporting the assessment of short-term environmental risks and any long-term local cues of the global change. Monitoring and Modeling of coastal and transitional environments; Environmental Informatics (Statistical Analysis, Databases, GIS).</p>								
	<p><b>Laurea in Ingegneria Elettronica</b>, University of Padua, 1991</p>								
APPOINTMENTS	<table border="0"> <tr> <td data-bbox="438 1585 1300 1648">Researcher CNR ISMAR Institute of Marine Sciences, VENEZIA (Italy)</td> <td data-bbox="1300 1585 1439 1648">2019 - ..</td> </tr> <tr> <td data-bbox="438 1648 1300 1711">Researcher CNR IAMC Institute for Coastal Marine Environment, MESSINA (Italy)</td> <td data-bbox="1300 1648 1439 1711">2001 - 2019</td> </tr> <tr> <td data-bbox="438 1711 1300 1774">Senior Project Manager Thetis SpA, VENEZIA</td> <td data-bbox="1300 1711 1439 1774">1996 - 2001</td> </tr> <tr> <td data-bbox="438 1774 1300 1809">Responsible of GIS, modeling and environmental data Lab</td> <td data-bbox="1300 1774 1439 1809">1992 - 1996</td> </tr> </table>	Researcher CNR ISMAR Institute of Marine Sciences, VENEZIA (Italy)	2019 - ..	Researcher CNR IAMC Institute for Coastal Marine Environment, MESSINA (Italy)	2001 - 2019	Senior Project Manager Thetis SpA, VENEZIA	1996 - 2001	Responsible of GIS, modeling and environmental data Lab	1992 - 1996
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EDITORIAL ROLES	<p>Frontiers in Marine Sciences, Associate Editor for Marine Biogeochemistry                  Frontiers Topic Editor:</p> <p>Topic #1: Ocean-Biota system: Integrated Approach to Climate Change Impacts on Plankton Communities in Coastal and Pelagic Environments</p> <p>Topic #2: Ecology of Marine Zooplankton and Micronekton in Polar and Sub-Polar Areas</p>								

	<p>Water, Associate Editor</p> <p>Reviewer for Frontiers in Marine Science, Journal of Marine Systems, Journal of Plankton Research, Estuarine, Coastal and Shelf Science, Scientific Reports, Water, Journal of Marine Science and Engineering</p>
PROFESSIONAL EXPERIENCE	<p>Visiting scientist at: Southampton Oceanography Centre, University of Wales (Cardiff), University of Copenhagen</p>
EXPERIENCE IN INTERNATIONAL ORGANISATIONS AND PANELS	<p>Member of the National Commission CNR-IGBP (International Geosphere and Biosphere Programme)</p> <p>LOICZ (Land-Ocean Interactions in Coastal Zone) National Focal Point</p> <p>Member of Steering Committee of ELOISE (European Land-Ocean Interaction Studies) as Project Coordinator of EU-MASTIII Project F-ECTS</p> <p>Steering Committee Member of several EU Interreg projects (Italy-Croatia; Italy-Slovenia)</p>
RESEARCH PROJECTS IN THE LAST 3 YEARS	<p><b>Project ORCHESTRA (JPIO Ocean Noise, 2023-..)</b> <b>ecOsysteM Responses to Constant offsHorE Sound specTRA</b> Lab experiments and field studies across basins (North Sea – Adriatic Sea) to compare behavioural and physiological impacts on copepod key species and communities and to test anthropogenic underwater noise interference with communication, orientation, mating, predator avoidance and foraging activity.</p> <p><b>Project TRECap - Interreg Italy-Slovenia (2023-..)</b> <b>TREtamara Capitalization</b> Integrated management of marine-coastal habitats of high ecological value in North Adriatic (monitoring of underwater biogenic habitats).</p> <p><b>Project HIETE (2020-2023)</b> <b>The Holocene Imprint on the future Evolution of Transitional Environments</b> Modeling-experimental interdisciplinary approach to quantify the ongoing consolidation / subsidence process in the Holocene deposits in the Venice Lagoon in relation to the current sedimentation rates and SeaLevelRise.</p> <p><b>Project TRETAMARA - Interreg Italy-Slovenia (2020-2022)</b> <b>Treze, Tegnùe e Ambienti Marini dell’alto Adriatico: proposte di gestione</b> Setup of national and transnational guidelines for the integrated management of marine-coastal habitats of high ecological value in North Adriatic through targeted actions with high innovative content</p> <p><b>Project MoST - Interreg Italia-Croatia (2019-2022)</b> <b>Monitoring Sea-water intrusion in coastal aquifers and Testing pilot projects for its mitigation</b></p> <p><b>Project Venezia 2021 (2019-2022)</b> <b>Venezia 2021-Scientific Research Programme for a “regulated” lagoon</b> Line 3.1 - Subsidence of the Venice lagoon and morphological evolution linked to erosive and depositional processes combined with Relative Sea Level Rise Line 3.3 - Primary production, microbial, benthic, planktonic and lagoon nectonic communities.</p>
LANGUAGES	<p>English, French, Italian (mother tongue)</p>
HARDWARE AND SOFTWARE	<p>Design and maintenance of marine/underwater equipment, probes, sensors Design and deployment of fixed observation sites (buoys, pilons)</p>

	Oceanographic data analysis and processing software, Statistical tools (R, Statgraphics), Community analysis (Primer, R packages), Modeling (DHI Mike-21), mapping software (ArcView, QGis), Linux, Bash, g-fortran, C++, common office productivity packages, networking (common web tools, cloud)
SCIENTIFIC SKILLS	Design and development of experimental setup in estuarine and coastal settings Coastal Oceanography, Signal processing for timeseries studies Statistical analysis for Community Ecology, Dispersal, Physical Biological coupling, Climate change, Transitional waters, Polar environments
LIST OF RELEVANT PAPERS	<p>Minutoli R., Bergamasco Al.*, Guglielmo L., Swadling K. M., Bergamasco An., Veneziano F., Geraci A., Granata A., Species diversity and spatial distribution of pelagic amphipods in Terra Nova Bay (Ross Sea, Southern Ocean), submitted to Polar Biology on April 3rd 2023</p> <p>Camatti E., Aciri F., De Lazzari A., Nurra N., Pansera M., Schroeder A., Bergamasco A., Natural or anthropogenic variability? A long-term pattern of the zooplankton communities in an ever-changing transitional ecosystem, <i>Frontiers in Marine Sciences</i>, accepted on 24 may 2023</p> <p>Bergamasco A., Cucco A., Guglielmo L., Minutoli R., Quattrocchi G., Guglielmo R., Palumbo F., Pansera M., Zagami G., Vodopivec M., Malej A., Granata A. (2022). Observing and modeling long-term persistence of <i>P. noctiluca</i> in coupled complementary marine systems (Southern Tyrrhenian Sea and Messina Strait), <i>Scientific Reports</i> 12, 14905 (2022). <a href="https://doi.org/10.1038/s41598-022-18832-2">https://doi.org/10.1038/s41598-022-18832-2</a></p> <p>Caroppo, C.; Azzaro, F.; Bergamasco, A.*; Caruso, G.; Decembrini, F. (2022). Phytoplankton and Bacterial Communities' Patterns in a Highly Dynamic Ecosystem (Central Mediterranean Sea). <i>Water</i>, 14, 2057. <a href="https://doi.org/10.3390/w14132057">https://doi.org/10.3390/w14132057</a></p> <p>Granata A., Weldrick C.K., Bergamasco A., Saggiomo M., Grillo M., Bergamasco Al.*, Swadling K.M. and Guglielmo L. (2022). Diversity in zooplankton and sympagic biota during a period of rapid sea ice change in Terra Nova Bay, Ross Sea, Antarctica, <i>Diversity</i>, 14, 425 <a href="https://doi.org/10.3390/d14060425">https://doi.org/10.3390/d14060425</a></p> <p>Decembrini F., Caroppo C., Caruso G., Bergamasco A. Linking microbial functioning and trophic pathways to ecological status in a coastal Mediterranean ecosystem, <i>Water</i> 2021, 13, 1325. <a href="https://doi.org/10.3390/w13091325">https://doi.org/10.3390/w13091325</a></p> <p>Pansera, M., Camatti, E., Schroeder, A. Zagami, G., Bergamasco, A. The non-indigenous <i>Oithona davisae</i> in a Mediterranean transitional environment: coexistence patterns with competing species. <i>Scientific Reports</i> 11, 8341 (2021) <a href="https://doi.org/10.1038/s41598-021-87662-5">https://doi.org/10.1038/s41598-021-87662-5</a></p> <p>Decembrini F., Caroppo C., Bergamasco A. (2020) Influence of lateral advection on phytoplankton size-structure and composition in a Mediterranean coastal area, <i>Continental Shelf Research</i>, 209, 104216, doi: 10.1016/j.csr.2020.104216</p> <p>Granata A., Bergamasco A., Battaglia P., Milisenda G., Pansera M., Bonanzinga V., Arena G., Andaloro F., Giacobbe S., Greco S., Guglielmo R., Spanò N., Zagami G., Guglielmo L. (2020) Vertical distribution and diel migration of zooplankton and micronekton in Polcevera submarine canyon of the Ligurian mesopelagic zone (NW Mediterranean Sea), <i>Progress in Oceanography</i>, Available online 13 February 2020, 102298, doi: 10.1016/j.pocean.2020.102298</p> <p>Guglielmo, R., Bergamasco, A., Minutoli, R. et al. (2019) The Otranto Channel (South Adriatic Sea), a hot-spot area of plankton biodiversity: pelagic polychaetes. <i>Scientific Reports</i> 9, 19490 doi:10.1038/s41598-019-55946-6</p>

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- Guglielmo L., C. Brugnano, R. Guglielmo, A. Granata, R. Minutoli, R. Sitran, G. Zagami, A. Bergamasco (2015) MicroNESS: an innovative opening-closing multinet for under pack-ice zooplankton sampling, *Polar Biology*, 38 (12), pp 2035–2046, doi: 10.1007/s00300-015-1763-3
- Decembrini F., Bergamasco A., Mangoni O. (2014) Seasonal characteristics of size-fractionated phytoplankton community and fate of photosynthesized carbon in a sub-Antarctic area (Straits of Magellan), *Journal of Marine Systems*, 136, pp. 31-41
- Giordano D., Profeta A., Busalacchi B., Minutoli R., Guglielmo L., Bergamasco A., Granata A. (2014) (Online Version), Summer larval fish assemblages in the Southern Tyrrhenian Sea (Western Mediterranean Sea), *Marine Ecology*, DOI: 10.1111/maec.12123
- Guglielmo L., Minutoli R., Bergamasco A., Granata A., Zagami G., Antezana T., 2011, Short-term changes in zooplankton community in Paso Ancho basin (Strait of Magellan): functional trophic structure and diel vertical migration, *Polar Biology*, 34 (9), pp. 1301-1317, doi: 10.1007/s00300-011-1031-0
- Granata A., Cubeta A., Minutoli R., Bergamasco A., Guglielmo L., 2011, Distribution and abundance of fish larvae in the Northern Ionian Sea (Eastern Mediterranean), *Helgoland Marine Research*, 65 (3), pp. 381-398, (Online 25 oct 2010), doi: 10.1007/s10152-010-0231-2
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- Sitran R., Bergamasco A., Decembrini F., Guglielmo L., 2007, Temporal succession of tintinnids in the Northern Ionian Sea, Central Mediterranean, *Journal of Plankton research*, 29 (6), pp. 495-508.