

Curriculum



Nome Name:	Daniele
Cognome Surname:	Brigolin

ORCID:	https://orcid.org/0000-0002-4590-8616
Scopus Author ID:	6505669500
WOS Author ID:	n.d.
Sito WEB WEB site:	https://iuav.unifind.cineca.it/get/person/015818

POSIZIONE PROFESSIONALE ATTUALE / CURRENT PROFESSIONAL POSITION:

Posizione attuale Current position:	In servizio
Qualifica Qualification:	Professore Associato (L. 240/10)
Ateneo/Ente/Azienda University/Institution/Company:	Università IUAV di VENEZIA
Nazione Ateneo/Ente/Azienda University/Institution/Company Country:	ITA
Anno inizio Start Year:	2022
Anno fine End Year:	n.d.

PRECEDENTI ESPERIENZE LAVORATIVE (ULTIMI 10 ANNI) / PREVIOUS WORK EXPERIENCE (LAST 10 YEARS):

LINGUE / LANGUAGES:

Lingua Language:	Italiano
Scrittura Writing:	madrelingua
Comunicazione Communication:	madrelingua

Lingua Language:	Inglese
Scrittura Writing:	C1
Comunicazione Communication:	C1

Lingua Language:	Spagnolo
Scrittura Writing:	C1
Comunicazione Communication:	C1

Lingua Language:	Francese
Scrittura Writing:	A2
Comunicazione Communication:	A2

AREA/SETTORE SCIENTIFICO-DISCIPLINARE / AREA/SECTOR SCIENTIFIC-DISCIPLINARY

Area scientifico-disciplinare Area scientific-disciplinary:	Scienze biologiche
Area scientifico-disciplinare codice Area scientific-disciplinary code:	05
Settore scientifico-disciplinare codice Sector scientific-disciplinary code:	-Ecologia
Settore scientifico-disciplinare codice Sector scientific-disciplinary code:	-BIOS-05/A

DESCRIZIONE DEI PRINCIPALI RISULTATI SCIENTIFICI CONSEGUITI NEGLI ULTIMI 10 ANNI (CON ANNESSO ELENCO DI MASSIMO 10 PUBBLICAZIONI) / DESCRIPTION OF THE MAIN SCIENTIFIC RESULTS ACHIEVED IN THE LAST 10 YEARS (WITH ATTACHED LIST OF MAXIMUM 10 PUBLICATIONS):

<p>Descrizione Description:</p>	<p><i>My research activity primarily focused on the direct and indirect effects of human activities on the functioning of ecosystems characterized by varying levels of naturalness, including urbanized areas. I have paid particular attention to the adaptive management of Mediterranean lagoons and coastal systems, in the context of climate change and in relation to different types of pressures and interventions, such as fishing, aquaculture, morphological modifications, and restoration activities. More recently, I have also become interested in the application of environmental accounting methods, such as life cycle assessment, for studying food value chains (with applications in the domains of aquaculture and food waste recycling). Thanks to the highly interdisciplinary nature of my University Department, I had the possibility to conduct my research in close contact with colleagues from other research areas (Economics; Urban design and regional planning; Administrative Law). The applications I have developed, which are described in the publications and research projects listed below, are based on a quantitative understanding of the functioning of lagoon and coastal marine systems, which I have deepened using mathematical models, experimental data collected in situ, and satellite data. Specific research lines of my research include: - Studying the functioning of food webs in Mediterranean lagoons and coastal areas, both through the reconstruction of matter and energy flows characterizing individual habitats and using ecological network analysis techniques to derive synthetic indicators. In this area, I am particularly interested in exploring the links between habitat diversity, ecosystem functions, and services provided; - Investigating biogeochemical/ecological processes associated with the degradation of organic matter in soft-bottom coastal marine habitats, through the application of mathematical models of early diagenesis, bioturbation, and bioirrigation, as well as experimental measurements specifically collected in situ. These tools are useful for evaluating the contribution of habitats to regulating services; - Validating dynamic models that describe metabolism and life history traits of individual species in response to environmental conditions, by comparing them with eco-physiological experimental data. This work has involved species of both commercial and conservation interest; - Applying the various modeling approaches mentioned above, in combination with satellite data and GIS tools, for the implementation of the ecosystem approach to aquaculture, particularly regarding the estimation of ecological carrying capacity and the selection of marine space for these activities.</i></p>
-------------------------------------	--

PUBBLICAZIONI / PUBLICATIONS:

<p>Anno della pubblicazione Year of publication:</p>	<p>2024</p>
--	-------------

Citazione Citation:	Donati, Elisa, Ponti, Marco Guido, Turicchia, Eva, Airoldi, Laura, Mazzotta, Monica, Bernardi, Jacopo, Cali, Federico, Mazzoldi, Carlotta, Russo, Enrico, Pranovi, Fabio, Fabbri, Federico, Brigolin, Daniele (2024). Spatial multi-criteria analysis based on food web model results: application to a marine conservation area. ECOLOGICAL INDICATORS, vol. 168, ISSN: 1470-160X, doi: 10.1016/j.ecolind.2024.112776
------------------------	--

Anno della pubblicazione Year of publication:	2023
Citazione Citation:	Bertolini, Camilla, Pastres, Roberto, Brigolin, Daniele (2023). Modelling CO2 budget of mussel farms across the Mediterranean Sea. AMBIO, vol. 52, p. 2023-2033, ISSN: 0044-7447, doi: 10.1007/s13280-023-01900-w

Anno della pubblicazione Year of publication:	2024
Citazione Citation:	Ferretto, Laura, Lucertini, Giulia, Brigolin, Daniele (2024). LCA for territorial metabolism analysis: An application to organic waste management planning. JOURNAL OF CLEANER PRODUCTION, vol. 441, ISSN: 0959-6526, doi: 10.1016/j.jclepro.2024.141051

Anno della pubblicazione Year of publication:	2022
Citazione Citation:	Chary, Killian, Brigolin, Daniele, Callier, Myriam D. (2022). Farm-scale models in fish aquaculture - An overview of methods and applications. REVIEWS IN AQUACULTURE, vol. 14, p. 2122-2157, ISSN: 1753-5123, doi: 10.1111/raq.12695

Anno della pubblicazione Year of publication:	2021
Citazione Citation:	Brigolin, Daniele, Rabouille, Christophe, Demasy, Clément, Bombled, Bruno, Monvoisin, Gaël, Pastres, Roberto (2021). Early Diagenesis in Sediments of the Venice Lagoon (Italy) and Its Relationship to Hypoxia. FRONTIERS IN MARINE SCIENCE, vol. 7, ISSN: 2296-7745, doi: 10.3389/fmars.2020.575547

Anno della pubblicazione Year of publication:	2020
Citazione Citation:	Porporato, Erika M. D., Pastres, Roberto, Brigolin, Daniele (2020). Site Suitability for Finfish Marine Aquaculture in the Central Mediterranean Sea. FRONTIERS IN MARINE SCIENCE, vol. 6, ISSN: 2296-7745, doi: 10.3389/fmars.2019.00772

Anno della pubblicazione Year of publication:	2018
Citazione Citation:	Brigolin, Daniele, RABOUILLE, CHRISTOPHE, BOMBLED, BRUNO ANDRE EUGENE, Colla, Silvia, Vizzini, Salvatrice, Pastres, Roberto, Pranovi, Fabio (2018). Modelling biogeochemical

	processes in sediments from the north-western Adriatic Sea: response to enhanced particulate organic carbon fluxes. BIOGEOSCIENCES, vol. 15, p. 1347-1366, ISSN: 1726-4189, doi: 10.5194/bg-15-1347-2018
--	--

Anno della pubblicazione Year of publication:	2018
Citazione Citation:	Sarà, Gianluca, Gouhier, Tarik C., Brigolin, Daniele, Porporato, Erika M. D., Mangano, Maria Cristina, Mirto, Simone, Mazzola, Antonio, Pastres, Roberto (2018). Predicting shifting sustainability trade-offs in marine finfish aquaculture under climate change. GLOBAL CHANGE BIOLOGY, vol. 24, p. 3654-3665, ISSN: 1354-1013, doi: 10.1111/gcb.14296

Anno della pubblicazione Year of publication:	2024
Citazione Citation:	Pacifico, Andrea Mattia, Brigolin, Daniele, Mulazzani, Luca, Semeraro, Mara, Malorgio, Giulio (2024). Managing marine aquaculture by assessing its contribution to ecosystem services provision: The case of Mediterranean mussel, Mytilus galloprovincialis. OCEAN & COASTAL MANAGEMENT, vol. 259, ISSN: 0964-5691, doi: 10.1016/j.ocecoaman.2024.107456

Anno della pubblicazione Year of publication:	2021
Citazione Citation:	Anelli Monti, M., Brigolin, D., Franzoi, P., Libralato, S., Pastres, R., Solidoro, C., Zucchetta, M., Pranovi, F. (2021). Ecosystem functioning and ecological status in the Venice lagoon, which relationships?. ECOLOGICAL INDICATORS, vol. 133, ISSN: 1470-160X, doi: 10.1016/j.ecolind.2021.108461

DESCRIZIONE DEI PRINCIPALI PROGETTI DI RICERCA E PREMI CONSEGUITI NEGLI ULTIMI 10 ANNI (CON ANNESSO ELENCO DI MASSIMO 10 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, PRINCIPAL INVESTIGATOR O COORDINATORE LOCALE DI PROGETTI DI RICERCA COMPETITIVI NAZIONALI O INTERNAZIONALI, SIGNIFICATIVI PREMI CONSEGUITI PER LA PROPRIA ATTIVITÀ DI RICERCA)/ DESCRIPTION OF THE MAIN RESEARCH PROJECTS AND AWARDS AWARDED IN THE LAST 10 YEARS (WITH ATTACHED LIST OF MAXIMUM 10 ACHIEVEMENTS, INCLUDING, FOR EXAMPLE, PRINCIPAL INVESTIGATOR OR LOCAL COORDINATOR OF NATIONAL OR INTERNATIONAL COMPETITIVE RESEARCH PROJECTS, SIGNIFICANT AWARDS AWARDED FOR YOUR RESEARCH ACTIVITY):

Descrizione	From 2022 (Università IUAV Venezia, Dept.
-------------	--

Description:	<p><i>Architecture and Arts: Associate Professor) Acted as a senior researcher in the following projects: MediGreen (EASME-DG Mare); MSP-Green (EASME-DG Mare); REMAP (EASME-DG Mare); Regina-MSP (EASME-DG Mare); BEBLUE (Interreg ITA-SLO); POSEIDONE (Interreg ITA-SLO); PNRR-Interconnected Nord-Est Innovation Ecosystem (iNEST); Worked as a senior researcher in the technical team supporting the Italian Ministry of Transports (MIT) for the design of Italian MSPD plans (MSP-IT project). Currently coordinating the project supporting the definition of Allocated Zones for Aquaculture plan in Emilia Romagna Region. 2019-2022 (University teaching and research Università IUAV Venezia, Dept. Architecture and Arts: Researcher, Ecology (BIOS-05/A, ex BIO/07) Worked as unit coordinator for ITA-CRO Interreg project CASCADE “Costal and marine waters integrated monitoring systems for ecosystems protection AnD management”. Responsible investigator for the project BIOMAC on LCA of food by-products recycling (IUAV-Agricom Srl co-financed). Involved as a senior researcher in projects MSP-MED (Maritime Spatial Planning in the Mediterranean Sea - EASME-DG Mare) and worked as a senior researcher in the technical team supporting the Italian Ministry of Transports (MIT) for the design of Italian MSPD plans (MSP-IT project). Responsible of 1 line of research within the ReCité project, FSE call 2020 - Veneto Region, on LCA of organic waste. From 2017 to 2020. Research grant – project scientific coordinator Università Ca' Foscari Venezia, Dept. Environmental Sciences, Informatics and Statistics research contract (Assegno di ricerca SSD/BIO07) for coordinating the INTERREG V-A Italy-Slovenia project BLUEGRASS - Boosting the long-term development of green agrifood through aquaponic sustainable solutions (7 international partners – the project was financed based on a proposal submitted by D. Brigolin as coordinator).</i></p>
--------------	---

Descrizione Description:	2017-2020. Project coordinator. INTERREG V-A Italy-Slovenia project BLUEGRASS - Boosting the long-term development of green agrifood through aquaponic sustainable solutions (7 international partners).
-----------------------------	--

Descrizione Description:	2019-2021. Local unit coordinator. Italy-Croatia Interreg project CASCADE “Costal and marine waters integrated monitoring systems for ecosystems protection AnD management
-----------------------------	--

Descrizione Description:	2025-on Project coordinator. AZA-RER project, supporting the definition of Allocated Zones for Aquaculture plan in Emilia Romagna Region (involved: Iuav, CNR-Ismar, Emilia Romagna Region)
-----------------------------	---

Descrizione Description:	Representative expert for Italy on the TAG (technical advisory group) on spatial planning of aquaculture, organized by GFCM (General
-----------------------------	--

	Fisheries Commission for the Mediterranean). Invited by Ministry of Agriculture and Fisheries (MASAF).
--	--

Descrizione Description:	Chair invited member in the ICES working group on "Ecological Carrying Capacity" WGECCA
-----------------------------	---

DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI DI SVILUPPO DI RETI E RELAZIONI SCIENTIFICHE NAZIONALI E INTERNAZIONALI (CON ANNESSO ELENCO DI MASSIMO 5 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, PARTECIPAZIONE O ORGANIZZAZIONE DI CONVEGNI NAZIONALI E INTERNAZIONALI; CONTRIBUTI A CONSORZI DI RICERCA) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF DEVELOPMENT OF NATIONAL AND INTERNATIONAL SCIENTIFIC NETWORKS AND RELATIONS (WITH ATTACHED LIST OF MAXIMUM 5 RESULTS, INCLUDING, FOR EXAMPLE, PARTICIPATION OR ORGANIZATION OF NATIONAL AND INTERNATIONAL CONFERENCES; CONTRIBUTIONS TO RESEARCH CONSORTIA):

Descrizione Description:	<i>Member (chair-invited) of the ICES working group on ecological carrying capacity of aquaculture (WGECCA). National Focal Point (Italy) on Technical Advisory Group on Spatial Planning for Aquaculture (FAO-GFCM). Invited expert the MSP4Biodiversity working group (Italian National biodiversity future centre). Member of the research units in sustainable design, and food planning at luav University. Currently working with national and international colleagues on projects (see references on projects description) falling within the following contexts of application: assessment of aquaculture-environment interactions and spatial planning of aquaculture; marine/maritime spatial planning; marine Natura 2000 network implementation; environmental footprint of food productions.</i>
-----------------------------	--

Descrizione Description:	Co-chair at the session on aquaculture-environment interactions at Aquaculture Europe Conference in 2022 (organized by European Aquaculture Society)
-----------------------------	--

Descrizione Description:	Member (chair-invited) of the ICES working group on ecological carrying capacity of aquaculture (WGECCA)
-----------------------------	--

Descrizione Description:	Currently working with national and international colleagues on projects (see references on projects description) falling within the following contexts of application: assessment of
-----------------------------	---

	aquaculture-environment interactions and spatial planning of aquaculture; marine/maritime spatial planning; marine Natura 2000 network implementation; environmental footprint of food productions.
--	---

DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI DI SUPPORTO ALLA COMUNITÀ SCIENTIFICA (CON ANNESSO ELENCO DI MASSIMO 5 RISULTATI, INCLUDENDO, A TITOLO DI ESEMPIO, RESPONSABILITÀ DI DIREZIONE DI COMITATI EDITORIALI; INCARICHI DI VALUTAZIONE DELLA RICERCA PRESSO ISTITUZIONI NAZIONALI O INTERNAZIONALI; RESPONSABILITÀ ISTITUZIONALI ALL'INTERNO DELL'ISTITUZIONE DI APPARTENENZA O DI ALTRE ISTITUZIONI) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF SUPPORT TO THE SCIENTIFIC COMMUNITY (WITH ATTACHED LIST OF MAXIMUM 5 RESULTS, INCLUDING, FOR EXAMPLE, MANAGEMENT RESPONSIBILITIES OF EDITORIAL COMMITTEES; RESEARCH EVALUATION ROLES AT NATIONAL OR INTERNATIONAL INSTITUTIONS; INSTITUTIONAL RESPONSIBILITIES WITHIN THE INSTITUTION OF AFFILIATION OR OTHER INSTITUTIONS):

Descrizione Description:	
-----------------------------	--

DESCRIZIONE DEI PRINCIPALI RISULTATI CONSEGUITI NEGLI ULTIMI 10 ANNI IN TERMINI VALORIZZAZIONE DELLE CONOSCENZE (CON ANNESSO ELENCO DI MASSIMO 3 RISULTATI, RELATIVI ALLA PARTECIPAZIONE DEL CANDIDATO ALLE ATTIVITÀ DI VALORIZZAZIONE DELLE CONOSCENZE) / DESCRIPTION OF THE MAIN RESULTS ACHIEVED IN THE LAST 10 YEARS IN TERMS OF KNOWLEDGE VALORIZATION (WITH ATTACHED LIST OF MAXIMUM 3 RESULTS, RELATING TO THE CANDIDATE'S PARTICIPATION IN KNOWLEDGE VALORIZATION ACTIVITIES):

Descrizione Description:	
-----------------------------	--

Informazioni aggiornate alla data di candidatura 20-05-2025

Daniele Brigolin

Il presente curriculum costituisce allegato e parte integrante dell'incarico sottoscritto