03/08/2024

# EMBRC-IT 1° Access Call Service List





#### **ACCESS TO ECOSYSTEMS**

SUBCATEGORY	INSTITUTE	SERVICE
Coastal research vessels	CNR-IRBIM-L	Access and sampling of intertidal areas of the Lesina lagoon (small aluminium boat for lagoon waters, 4 m)
Coastal research vessels	CNR-IRSA-T	Access and sampling in the Mar Piccolo of Taranto, Ionian Sea transitional site (sampling of water, sediment, phyto, zooplankton, benthos) on the boat Gerax-Vorax
Coastal research vessels	CNR-ISMAR	Access/ sampling in the Venice lagoon and nearby marine coastal sites (sampling of water, sediment, phyto, zooplankton, benthos, microplastic debris)
Coastal research vessels	CONISMA-UNICAM	Access to marine ecosystems Costa del Piceno S. Nicola a Mare SIC and Riserva Naturale Regionale Sentina (Intertidal sandy habitat, Subtidal rocky / hard habitat, Subtidal soft bottom, Coastal dunes)
Coastal research vessels	ENEA-LS	Access to coastal research vessels for exploration of coastal marine sites in natural areas including Natural Regional Park of Porto Venere and the islands (Palmaria, Tino)and the Cinque Terre National Park and impacted areas (La Spezia port). Access to Smart Bay Santa



		Teresa (https://smartbaysteresa.com).
Coastal research vessels	ISPRA	Access to Coastal research vessel LOA "Astrea" (26m) for biological sampling and oceanographic parameters collection in the Strait of Sicily or at the Mediterranean scale.
Coastal research vessels	OGS	Access to the Gulf of Trieste, including station C1-LTER, with 10 m research vessel MEDUSA, equipped for manual seawater sampling (Niskin bottles, phytoplankton nets, CTD)
Coastal research vessels	SZN	Access to Coastal research vessels (M/B Phoenicia 10m; Oceanographic Boat "Vettoria" 15m) in the Gulf of Napoli; on request collection of planktonic organisms through screenings or samples from Niskin bottles, of benthic organisms with dredging, coring, grab or scuba diving and acquisition of images and films in immersion are available.
Coastal research vessels	UNIMIB-MaRHE	Access to island environments in the Maldives renting the Maldivian Dhoni Boat for Day Trip (capability of 50 people).
Coastal research vessels	UNIVPM-DISVA	Access to research vessels in the Ionian Sea ecosystem. Vessels can be equipped with sensors, sampling equipment and ROV, and the support of UNIVPM scuba divers can be asked on request.
Scientific Diving	UNIMIB-MaRHE	Access to MaHRE Center Scientific Diving Center, with the possibility to rent diving equipment or participate to scuba dive sessions from Dhoni Boat or from the coast





#### **BIOLOGICAL RESOURCES**

SUBCATEGORY	INSTITUTE	SERVICE
Culture collections	CNR-ISP-ME	Access to the Culture Collection of Microorganisms from Cryoenvironments – MICR(Y)O, including microbial strains, mainly bacteria, isolated from different environmental sources in the Arctic and Antarctica.
Culture Collections	OGS	Access to CoSMI Microalgal Culture Collection containing ~100 strains of phytoplanktonic species (Diatoms, Dinoflagellates, Cryptophytes, Prymnesiophytes, Chlorophytes, Prasinophytes, Euglenophytes, Dictyochophytes). Presence of potentially toxic dinoflagellates and diatoms responsible for blooms and species used in aquaculture and ecotoxicology. The complete list of species is available in the CoSMi website: http://cosmi.inogs.it/. Services of isolation from the wild, growth and identification of marine microorganisms by combining morphological observations and molecular analyses upon request
Culture Collections	UNITO	Access to fungal strains of the Mycotheca Universitatis Taurinenesis (MUT)
Organisms collected in the wild	CNR-IRBIM-L	Collect and supply of fauna specimens in Lesina lagoon
Organisms collected in the wild	CNR-IRBIM-M	Collect and supply of bony fishes, cephalopods, crustaceans, and elasmobranchs from GSA10



Organisms collected in the wild	CNR-ISMAR	Collection of benthic model organisms (Ciona, mussels, oysters, anemones, polychaetes etc.) and macroalgae from the Venice lagoon and nearby marine coastal waters
Organisms collected in the wild	ENEA-LS	Access to collection of organisms in the wild
Organisms collected in the wild	ISPRA	Access to organisms collection by fishing gear of fishes, by grab or corer of marine benthic invertebrates, algae and phanerogams, by plankton net of planktonic organisms
Organisms collected in the wild	SZN	Collection and rearing of marine model organisms (ascidians, sea urchin, starfish, sea tutles, etc.) from the Gulf of Napoli
Organisms collected in the wild	UNITUS	Access to organisms provision from insular ecosystems (Pontine Islands, Tuscan Archipelago) or costal ecosystems (Latium from San Felice Circeo to Argentario), including plankton sampling, sediment sampling at different dephts and supply of marine model organisms
Rearing of aquaculture animals	CONISMA-UNICAM	Access to aquaculture facility for rearing facilities for fish and macroinvertebrates, including support to fish rearing (e.g., neuroendocrine control of fish reproduction, welfare of farmed fish , food quality safety of fishery production)
Taxonomic services	CNR-IRSA-T	Access to the Herbarium TAR for observation and loan
Taxonomic services	CNR-IRSA-V	DNA taxonomy, statistics
Taxonomic services	CNR-ISP-ME	Access to taxonomic services of bacteria from extreme environments, microbial



		communities and bacterial isolates provided from users.
Taxonomic services	CNR-ISP-RM	Taxonomic fingerprint of main microbial groups (Gram positive, Gram-negative bacteria and Fungi)
Taxonomic services	OGS	Access to service of Identification, sorting and characterization through visual (morphology) and molecular approaches of Microzooplankton, Phytoplankton and Macrozoobenthos
Taxonomic services	SZN	The Marine Organism Taxonomy (MOTax) Unit is a specialized counselling centre which exploits advanced resources, skills and expertise that are available today at the SZN for the taxonomy and identification of various groups of marine organisms providing qualitative and quantitative analysis of phytoplankton, zooplankton and benthos samples with morphological and molecular characterization
Taxonomic services	UNIME	Access to LabsTREAM - TAXOMAR facility for taxonomic identification of marine macrozoobenthic organisms, teleost, and elasmobranchs
Taxonomic services	UNITO	Access to taxonomy facilities of UNITO: the MUT fungal taxonomy lab for Isolation, identification and characterization through visual (morphology) and DNA barcoding of marine taxa; the zooplankton taxonomy lab for isolation, identification and characterization (taxa and species level) of Holoplankton, Meroplankton and Ichtyoplankton.





### **EXPERIMENTAL FACILITIES**

SUBCATEGORY	INSTITUTE	SERVICE
Aquaria and tanks	CNR-ISP-ME	Tanks available for manipulative experiments on arctic marine invertebrates. Climate controlled room with experimental seawater tanks for maintenance and experiments on marine organisms, microcosms, in Ny-Ålesund (Svalbard, Norway)
Aquaria and tanks	ENEA-LS	Access to aquaria (50 L) and tanks (10L) available for manipulative experiments on coralline algae and calcifying marine invertebrates/ecosystems
Aquaria and Tanks	UNIVPM-DISVA	Access to aquarium facilities for aquatic organisms' maintenance and experiments under controlled conditions and multiple stressors on target species. Specialized aquaria for Mediterranean, Tropical (including sea anemones, stony corals, and soft corals) and Polar marine species are available.
Climate controlled rooms	CNR-ISP-ME	Access to Facility for controlled microorganisms' cultivation, including incubator vessels at high pressure, environmental remediation technologies testing (e.g. bioremediation and sediment remediation), laboratory for cultivation of aerobic microbial communities, screening of bacterial isolates for their antibiotic susceptibility and enzymatic profiles, plastic-associated microbiota (plastisphere) structural and functional characterization.



Wet laboratories	CNR-ISP-RM	Microcosms - Lab-scale experiments using synthetic and real environmental matrices to evaluate the persistence of pollutants (half-life time - DT50), their bioaccumulation, and the effects on microbial communities or specific target organisms (ecotoxicological test)
Wet laboratories	CNR-ISP-VE	Access to Ultra-Clean Labs.
Wet laboratories	SZN	Medical treatment of wounded sea turtles (Caretta caretta); veterinary research, post-mortem examination, nesting at the Marine Turtles Research Centre Portici
Wet laboratories	UNIME	Access to ZEBRALAB facility for IN VIVO Studies on teleosts.





### **TECHNOLOGY PLATFORMS**

SUBCATEGORY	INSTITUTE	SERVICE
Bioassays	CNR-ISMAR	Access to ecotoxicology, chemistry labs (for genotoxicity, biochemical, cellular, histochemical and physiological biomarkers, histological and metal /organics for bioaccumulation analyses)
Bioassays	CNR-ISP-ME	Access to facility for microbial enzymatc activities testing (leucin aminopeptidase, beta-glucosidase and alkaline phosphatase); Respiratory (ETS) activity, Carbon substrates utilization profiles (Biolog Ecoplates)
Bioassays	CONISMA-UNICAM	Access to toxicogenomics platform on fish cellular models (including E-Screen, YES and YAS assay, biosensors platform "On-surface" binding studies using a biosensor- based approach for detecting environmental contaminants in real matrices)
Bioassays	ENEA-NA	Access to ecotoxicology platform for bioassay with marine microalgae, marine crustracea (chronic and actute), echinoderms (semichronic and acute) and bioluminescent bacteria on water and sediment matrices
Bioassays	SZN	Access to the screening platform for the bioactive compounds isolation (antimicrobials, anticancers, antibiofilms)
Bioassays	UNIME	Access to PHARMALAB and ZEBRALAB screening platforms. PHARMALAB: screening of immunomodulatory,



		neuroprotective, analgesic, anti- fungal, anti-inflammatory, anticancer, antimicrobial, and antimalarial properties of newfound molecules on cell lines (in vitro) or aquatic animals (in vivo). ZEBRALAB: screening platform for zebrafish embryo toxicity test assays
Bioassays	UNIVPM-DISVA	Access to Ecotoxicological Assays platform, including analyses of the main cellular biomarkers (i.e. biotransformation, detoxification, oxyradical metabolism and oxidative stress, peroxisomal proliferation, impairment and toxicity to cellular membranes, lysosomes, other organelles and DNA) and ecotoxicological bioassays (bacterial bioluminescence, algal growth, embryotoxicity, mortality)
Imaging	SZN	The Advanced Microscopy Centre (AMC) provides the necessary skills to the application of optical microscopy and conventional fluorescence techniques (epifluorescence or confocal).
Imaging	UNIME	Access to LabsTREAM - TAXOMAR facility for teleost otolith analysis facility with Zeiss EVO-10 EM, including external texture organization analysis
Molecular biology and omics	CNR-ISP-ME	Cultivation and genomic analysis of microorganisms isolated from extreme environments
Molecular biology and omics	SZN	The Molecular Sequencing & Analysis Center (SMAC) offers services, training and consulting in the field of Molecular Biology, from the execution of complex procedures to specific consultancy and development services and on- demand protocols.



Molecular Biology and Omics	UNIME	Access to LabsTREAM - GAO facility for genomic identification of aquatic organisms
Molecular Biology and Omics	UNITO	Access to fungal molecular biology lab for metabarcoding, metagenomic and WGS of marine taxa
Molecular Biology and Omics	UNIVPM-DISVA	Access to the Molecular Biology Core Facility for the production of recombinant proteins from marine organisms, including protein structure resolution and modelling.
Remote sensing and telemetry	CNR-IRBIM-L	Access to inshore stations of intertidal areas of the Lesina lagoon
Remote sensing and telemetry	CNR-ISMAR	Access to Aqua Alta offshore oceanographic tower equipped with meteomarine and hydrographic sensors, wet lab, underwater videocameras and available to install sensors/automatic samplers
Remote sensing and telemetry	CNR-ISP-BO	Access to Oceanographic parameters of marine observatory in Kongsfjorden, Svalbard Island
Remote sensing and telemetry	CNR-ISP-ME	Polar acoustic measurements for maritime traffic and marine megafauna assessment
Remote sensing and telemetry	CONISMA-UNICAM	Access to remote sensing equipment (including: multiparametric probe; mantra trap for microplastic collection; GIS and telemetry. Environmental data acquisition systems ; sediment analysis ; bathymetric surveys and side scan sonar)
Remote sensing and telemetry	CONISMA-POLIBA	Access to the POLIBA Laboratory of Coastal Engeneering (LIC) equipped with multiple 90x50x1,20 meters tanks and sensors equipped for physical modeling of coastal and offshore phenomena.



Remote sensing and telemetry	UNITO	Access to acoustic sensors and Autonomous Recording Units (ARUs) for the Passive Acoustic Monitoring (PAM) of the marine wildlife
Structural and chemical analysis	CNR-IRBIM-L	Environmental analysis of nutrients, chlorophyll a, Dissolved Organic Carbon and its chromophoric fraction
Structural and chemical analysis	CNR-ISP-BO	Analyses on organic tissues and sediments: CHN Elemental composition, delta13C, delta 15N, organic matter tracers
Structural and chemical analysis	CNR-ISP-RM	Access to structural and chemical analysis labs of ISP-ROMA, including: CLPP microbiology lab for evaluation of the structure and metabolic properties of natural microbial communities in relation to contamination data; MICROCHEM facility for the determination of legacy and emerging organic contaminants in environmental matrices and the assessment of environmental risk associated with contamination data measured in situ at polar areas and mid- latitudes
Structural and chemical analysis	CNR-ISP-VE	Access to lab for environmental analytical chemistry and micro/nano plastics characterisation
Structural and Chemical Analysis	ENEA-LS	Access to radioecology and geochronology technological platform, including gamma spectrometry for sediment core dating and for reconstruction of recent changes in micro and macro benthic organisms in sediment samples
Structural and chemical analysis	ENEA-NA	Access to sedimentology facilities and support for and benchtop instrumentation for granulometric analyses



Structural and chemical analysis	ISPRA	Access to Environmental Analytical Chemistry Labs (inorganic and organic chemistry, water, sediment and biota chemical-physical analysis and microplastic extraction, isolation and identification from biotic matrices; equipment include: mass spectrometry (high and low resolution), optical emission spectroscopy, Isotope Ratio analyses, atomic fluorescence, HPLC-Orbitrap (metabolomic analysis, untargeted contaminants analysis), HPLC-MS/MS)
Structural and chemical analysis	SZN	Access to mass spectrometry facility for early-stage molecule dereplication
Structural and Chemical Analysis	UNIME	Access to UNIME Structural analysis facilities: LabsTREAM - LAM facility for the extraction (water, sediment and biological matrices) and analysis of microplastics; MeIT - METALS facility for determination of the aminoacid profile and biogenic amines, essential and toxic metals (heavy metals) by ICP-MS and other chromatographic techniques; Access to MeIT - LIPIDS facility for the investigation of the lipid profile of extracts of marine species
Structural and Chemical Analysis	UNITO	Access to facility for fungal fermentation and profiling of their bioactive compounds
Structural and chemical analysis	UNIVPM-DISVA	Access to Mass Spectrometry facility including: Liquid Chromatography-MS, Gas Chromatography-MS, ICP-MS, Atomic Absorption Spectrophotometry, HPLC with fluorescence and diode array detectors.





## **E-SERVICES**

SUBCATEGORY	INSTITUTE	SERVICE
Data analysis tools and software	SZN	Access to The High Performance Computing and Bioinformatics platform, implementing bioinformatic dedicated services and training. Service offered are aimed to testing and offering dedicated strategies and resources, databases, scientific computational platforms for marine genomics.
Data Analysis Tools and Software	UNIVPM-DISVA	Access to advanced bioinformatic laboratory and data mining facility and risk assessment models for the elaboration of large datasets of chemical and biological data
Data sets	CNR-IRSA-V	Access to the dataset on animals found in subterranean waters
Data sets	CNR-ISP-BO	MDI Oceanographic Mooring and Climate change Tower Datasets from the Kongsfjorden area (Svalbard)
Data sets	CONISMA-UNICAM	Access to database of ecological data measured at the Riserva Naturale Regionale Sentina from 2014, SIC Grottammare from 2014



Data sets	Access to physical-chemical- biological data sets for the area (Gulf of La Spezia) including those from LTER Data Macro Site IT 15 and Smart Bay Santa Teresa
	observatory



## **SUPPORTING FACILITIES**

SUBCATEGORY	INSTITUTE	SERVICE
In-house lodging		Access to accommodation full board in shared or private room (accommodation, meal, bed linen, towels) at the MaHRE Center