



EMBRC-IT SERVICES BY INSTITUTE OPERATORS

Stazione Zoologica Anton Dohrn

SZN-Naples

Villa Comunale, 80121, Napoli

Webpage: <https://www.szn.it/index.php/it/>

Local Access Officer: Pasquale De Luca; pasquale.deluca@szn.it

Category	Sub-category	Description of the service
Biological resources	Organisms collected in the wild	Collection and rearing of marine model organisms (ascidians, sea urchin, starfish, etc.) from the Gulf of Napoli
Biological resources	Taxonomic services	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
Ecosystem access	Coastal research vessels	Access to research vessels that can operate in the Gulf of Napoli and Italian and off-shore areas: M/B Hippocampus 7 m, M/B Beagle Junior 7m, Oceanographic Research Vessel "Vetoria" 19m. 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.
E-services	Data sets	Access to LTER data: high CO ₂ low pH site, long-term monitoring from LTER MareChiara
Experimental facilities	Wet laboratories	Medical treatment of wounded sea turtles (<i>Caretta caretta</i>); veterinary research, nesting at the Marine Turtles Research Centre Portici
Technology platforms	Bioassays	Access to the screening platform for the bioactive compounds isolation (antimicrobials, anticancer, antibiofilm)
Technology platforms	Imaging	The Advanced Microscopy Centre (AMC) provides the necessary skills to the application of optical microscopy and conventional fluorescence techniques (epifluorescence or confocal).
Technology platforms	Molecular biology and omics	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.
Technology platforms	Structural and chemical analysis	Access to mass spectrometry facility for early-stage molecule dereplication



Technology platforms	Structural and chemical analysis	The Core facility for Environmental Monitoring & Analysis (MAA) offers support for sampling and laboratory activities aimed at determining the main environmental variables
E-services	Data analysis tools and software	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.

Stazione Zoologica Anton Dohrn

SZN-Calabria

Contrada Torre Spaccata, Località Torre Spaccata, 87071 Amendolara (CS)

Webpage: <https://www.szn.it/index.php/it/>

Local Access Officer: Pasquale De Luca; pasquale.deluca@szn.it

Category	Sub-category	Description of the service
Biological resources	Organisms collected in the wild	Collection and rearing of marine model organisms (ascidians, sea urchin, starfish, phanerogams, macroinvertebrates, etc.) from Ionian and Tyrrhenian Calabrian coasts
Biological resources	Taxonomic services	Macro, megabenthos (expertise on Cnidaria and Bryozoa), and microphytobenthos can be taxonomically identified and studied via microscopy and basic molecular biology lab (DNA barcoding) on request.
Ecosystem access	Coastal research vessels	Access to research vessel (M/B Nausica 4 m) for sampling along coastal ecosystems of Ionian Sea. Sampling equipment for plankton collection (WP-2 plankton net), Niskin bottles (5L and 10L), and van Veen grabs (5L and 25L). Scuba facilities for sampling benthic organisms (macro and megafauna), photo and video images.
Experimental facilities	Mesocosms	Access to the indoor mesocosms laboratory for aquatic organisms' maintenance and experiments. The facility consists of 20 independent experimental tanks, each equipped with a temperature and light monitoring and manipulation system. Furthermore, automatic salinity regulation and a pH manipulation system are in progress.
Technology platforms	Imaging	Access to microscopy laboratory equipped with microscopes for sample observation: LEICA S9i dissecting microscope, LEICA DM6B light microscope equipped with fluorescence, Leica DM IL LED inverted microscope. Videocameras are connected to all the microscopes and dissecting microscopes. Preparation of samples for SEM observation using Gold Sputter. SEM observation with Phenom pure G6 Desktop SEM equipped with BSD and SED detectors, hold samples Charge Reduction.



Experimental facilities	Wet laboratories	Access to the microplastic laboratory equipped with FTIR-microscopy that couples the capability of FTIR to provide a chemical analysis of samples, with the magnification power of an IR microscope. The laboratory is also equipped with a stereomicroscope, a filtration ramp, an analytical balance and a chemical hood
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Stazione Zoologica Anton Dohrn

SZN-Sicily-ME

Villa Pace - Contrada Porticatello 29 - 98167 Messina

Webpage: <https://www.szn.it/index.php/it/>

Local Access Officer: Pasquale De Luca; pasquale.deluca@szn.it

Category	Sub-category	Description of the service
Ecosystem access	Research vessel	Logistic support for sampling activities in the Strait of Messina, Lake Faro, Hydrothermal vents of Aeolian Archipelago; on request collection of water samples with Niskin bottles, of benthic organisms with dredging, coring, grab or scuba diving and acquisition of images and films in immersion are available.
Biological resources	Organisms collected in the wild	Collection and rearing of marine species (mesopelagic species) from the Strait of Messina
E-services	Data sets	Access to physico-chemical datasets in the Lake Faro, Capo Peloro (Messina)
Experimental facilities	Molecular Biology and Omics	Access to instruments for molecular analysis and nucleic acid quantization
Technology platforms	Structural and chemical analysis	Spectrophotometric analysis of chlorophyll "a". Dissolved oxygen analysis by Winkler titrimetric method. Determination of phytoplankton from marine and brackish environments.
Biological resources	Taxonomic services	Access to SZN cephalopod beaks' collection and support in taxonomic identification of cephalopods (e.g. identification of beaks retrieved in stomachs of marine predators such as marine mammals, large pelagic fish, etc).
Experimental facilities	Wet laboratories	Access to lab for microplastics extraction and analysis from environmental matrices, gastrointestinal tracts of fish and cephalopods, and in tissues of marine organisms. Application of chemical digestion approach and filtration by Polymer identification by Infrared Transformed of Fourier FTIR
Dry laboratories	Sample analysis	Access to instruments (microscopes, grinding/polishing machine, IsoMet Low Speed Saw) and support for otolith/statolith extraction, preparation and age determination in fish and cephalopods.

Stazione Zoologica Anton Dohrn

SZN-Sicily-PA

Lungomare Cristoforo Colombo (complesso Roosevelt)- 90149 Palermo

Webpage: <https://www.szn.it/index.php/it/>



Local Access Officer: Pasquale De Luca; pasquale.deluca@szn.it

Category	Sub-category	Description of the service
Ecosystem access	Research vessel	Access to research vessel (M/B Lampuga 6 m) for sampling along coastal ecosystems of Sicilian sea (Marine Protected Area). Scuba facilities for visual census, sampling benthic organisms (macro and megafauna), photo and video images.

Consiglio Nazionale delle Ricerche Istituto per lo studio degli impatti Antropici e Sostenibilità in ambiente marino

CNR-IAS-CG

Via del Mare, 3 - Capo Granitola, 91021, Campobello di Mazara (TP)

Webpage: <https://www.ias.cnr.it/>

Local Access Officer: Giorgio Tranchida; giorgio.tranchida@cnr.it

Category	Sub-category	Description of the service
Ecosystem access	Coastal research vessels	Coastal research vessels for biological sampling and oceanographic parameters collection in the Strait of Sicily or at the Mediterranean scale
E-services	Data sets	Provision of oceanographic and pelagic data sets (1998 to date)
Technology platforms	Remote sensing and telemetry	Recording and analysis of underwater sounds and acoustic surveys for biomass assessment of small-sized pelagic fish

Consiglio Nazionale delle Ricerche Istituto per lo studio degli impatti Antropici e Sostenibilità in ambiente marino

CNR-IAS-O

Località Sa Mardini, 09072, Torregrande, Oristano

Webpage: <https://www.ias.cnr.it/>

Local Access Officer: Stefano Marras; stefano.marras@cnr.it

Category	Sub-category	Description of the service
Biological resources	Organisms collected in the wild	Provision of marine/brackish water model organisms
Experimental facilities	Wet laboratories	Laboratories dedicated to ecophysiological and behavioural studies with marine invertebrates. Anoxic and temperature controlled conditions can be provided.

Consiglio Nazionale delle Ricerche Istituto di Scienze Polari

CNR-ISP-BO

Via P. Gobetti, 101 - 40129 Bologna

Webpage: <https://www.isp.cnr.it/index.php/en/>



Local Access Officer: Stefano Miserocchi; stefano.miserocchi@cnr.it

Category	Sub-category	Description of the service
Technology platforms	Remote sensing and telemetry	Access to Oceanographic parameters of marine observatory in Kongsfjorden, Svalbard Island
E-services	Data sets	MDI Oceanographic Mooring and Climate change Tower Datasets from the Kongsfjorden area (Svalbard)
Technology platforms	Structural and chemical analysis	Analyses on organic tissues and sediments: CHN Elemental composition, delta13C, delta 15N, organic matter tracers

Consiglio Nazionale delle Ricerche Istituto di Scienze Polari

CNR-ISP-RM

Via Salaria km 29,300, 00015, Montelibretti, Roma

Webpage: <https://www.isp.cnr.it/index.php/en/>

Local Access Officer: Francesca Spataro; francesca.spataro@cnr.it

Category	Sub-category	Description of the service
Experimental facilities	Wet laboratories	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)
Technology platforms	Structural and chemical analysis	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
Biological resources	Taxonomic services	Taxonomic fingerprint of main microbial groups (Grampositive, Gram-negative bacteria and Fungi)

Consiglio Nazionale delle Ricerche Istituto di Scienze Polari

CNR-ISP-ME

Via S. Raineri n.86, 98122, Messina

Webpage: <https://www.isp.cnr.it/index.php/en/>

Local Access Officer: Maurizio Azzaro; maurizio.azzaro@cnr.it

Category	Sub-category	Description of the service
Biological resources	Taxonomic services	Access to taxonomic services of bacteria from extreme environments, microbial communities and bacterial isolates provided from users.



Experimental facilities	Climate controlled rooms	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.
Technology platforms	Bioassays	Access to facility for microbial enzymatic activities testing (leucin aminopeptidase, beta-glucosidase, and alkaline phosphatase); Respiratory (ETS) activity, Carbon substrates utilization profiles (Biolog Ecoplates)
Technology platforms	Molecular biology and omics	Cultivation and genomic analysis of microorganisms isolated from extreme environments
Technology platforms	Remote sensing and telemetry	Polar acoustic measurements for maritime traffic and marine megafauna assessment

Consiglio Nazionale delle Ricerche Istituto di Scienze Polari

CNR-ISP-VE

Via Torino n.155, 30172 Mestre, Venezia

Webpage: <https://www.isp.cnr.it/index.php/en/>

Local Access Officer: Giulio Cozzi; giulio.cozzi@cnr.it

Category	Sub-category	Description of the service
Experimental facilities	Wet laboratories	Access to Ultra-Clean Labs
Technology platforms	Structural and chemical analysis	Access to lab for environmental analytical chemistry and micro/nano plastics characterisation

Consiglio Nazionale delle Ricerche Istituto per le Risorse Biologiche e le Biotecnologie Marine

CNR-IRBIM-LE

Via Pola 4, 71010 Lesina (Fg)

Webpage: <https://www.irbim.cnr.it/en/>

Local Access Officer: Antonietta Specchiulli; antonietta.specchiulli@cnr.it

Category	Sub-category	Description of the service
Biological resources	Organisms collected in the wild	Collect and supply of fauna specimens in Lesina lagoon
Technology platforms	Remote sensing and telemetry	Access to inshore stations of intertidal areas of the Lesina lagoon
Ecosystem access	Coastal research vessels	Access and sampling of intertidal areas of the Lesina lagoon (small aluminium boat for lagoon waters, 4 m)



Technology platforms	Structural and chemical analysis	Environmental analysis of nutrients, chlorophyll a, and chromophores fraction
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Consiglio Nazionale delle Ricerche Istituto per le Risorse Biologiche e le Biotecnologie Marine

CNR-IRBIM-ME

Spianata San Raineri n. 86, 98122, Messina

Webpage: <https://www.irbim.cnr.it/en/>

Local Access Officer: Anna Perdichizzi; anna.perdichizzi@cnr.it

Category	Sub-category	Description of the service
Biological resources	Organisms collected in the wild	Collect and supply of bony fishes, cephalopods, crustaceans, and elasmobranchs from GSA10

Consiglio Nazionale delle Ricerche Istituto di Scienze Marine

CNR-ISMAR

Arsenale - Tesa 104, Castello 2737/F, 30122, Venezia

Webpage: http://www.ismar.cnr.it/index_html-1?set_language=en&cl=en

Local Access Officer: Lucia Bongiorno; lucia.bongiorno@ve.ismar.cnr.it

Category	Sub-category	Description of the service
Biological resources	Organisms collected in the wild	Collection of benthic model organisms (Ciona, mussels, oysters, anemones, polychaetes etc.) and macroalgae from the Venice lagoon and nearby marine coastal waters
Technology platforms	Bioassays	Access to ecotoxicology, chemistry labs (for genotoxicity, biochemical, cellular, histochemical, and physiological biomarkers, histological and metal /organics for bioaccumulation analyses)

Consiglio Nazionale delle Ricerche Istituto di Ricerca sulle Acque

CNR-IRSA-V

Corso Tonolli n. 50, 28922, Pallanza

Webpage: https://www.irsa.cnr.it/wp/?page_id=807&lang=en

Local Access Officer: Antonella Petrocelli; antonella.petrocelli@ve.ismar.cnr.it

Category	Sub-category	Description of the service
Biological resources	Taxonomic services	DNA taxonomy, statistics
E-services	Data sets	Access to the dataset on animals found in subterranean waters

Consiglio Nazionale delle Ricerche



Istituto di Ricerca sulle Acque

CNR-IRSA-T

Via Roma n. 3, 74123, Taranto

Webpage: https://www.irsar.cnr.it/wp/?page_id=807&lang=en

Local Access Officer: Antonella Petrocelli; antonella.petrocelli@ve.ismar.cnr.it

Category	Sub-category	Description of the service
Biological resources	Taxonomic services	Access to the Herbarium TAR for observation and loan
Technology platforms	Structural and chemical analysis	Access to a service of identification, characterization and quantification of several types of bioactive compounds in marine animal and vegetal organisms through a HPLC serie Agilent 1260 Infinity II Bioinert . Trained staff is available
Ecosystem access	Submersibles	Access in the Mar Piccolo of Taranto for hydrographic underwater surveys and bathymetry (e.g., benthic communities mapping) through a surface drone CODEVINTEC-CK-14 USV equipped with a module for autonomous navigation and remote control with WiFi connection, multibeam echo sounder, sound speed sensor. Staff trained for this purpose is available
Ecosystem access	Coastal research vessels	Access and sampling in the Mar Piccolo of Taranto, Ionian Sea transitional site (sampling of water, sediment, phytoplankton, zooplankton, benthos) on the boat Gerax-Vorax

Università di Camerino – URDIS

CONISMA – UNICAM

V.le Alfredo Scipioni n.6, 63074, San Benedetto del Tronto

Webpage: <https://urdis.unicam.it/URDIS.html>

Local Access Officer: Paolo Cocci; paolo.cocci@unicam.it

Category	Sub-category	Description of the service
E-services	Data sets	Access to database of ecological data measured at the Riserva Naturale Regionale Sentina from 2014, SIC Grottammare from 2014
Technology platforms	Bioassays	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)
Technology platforms	Remote sensing and telemetry	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)

Università di Urbino

CONISMA – UNIURB



Campus E. Mattei, Via Ca le Suore 2/4 , 61029 Urbino (PU)

Webpage: <https://www.marine-ecology.uniurb.it>

Local Access Officer: Antonella Penna; antonella.penna@uniurb.it

Category	Sub-category	Description of the service
Ecosystem access	Coastal research vessels	Coastal research vessel "Athena" used for ecosystem access to NW Adriatic Sea for plankton sampling and SCUBA activities Access to NW Adriatic Sea for sampling and diving.

Politecnico di Bari

CONISMA – POLIBA

Area Universitaria di Valenzano S.P. Valenzano Casamassima, Km.3, 70010, Valenzano, Bari

Webpage: <http://www.en.poliba.it/research/coastal-engineering-laboratory-lic>

Local Access Officer: Michele Mossa; m.mossa@poliba.it

Category	Sub-category	Description of the service
Ecosystem access	Coastal research vessels	Field stations for environmental data monitoring in the Taranto area
Technology platforms	Remote sensing and telemetry	Access to the POLIBA Laboratory of Coastal Engineering (LIC) equipped with multiple 90x50x1,20 meters tanks and sensors equipped for physical modeling of coastal and offshore phenomena

Università del Salento

CONISMA – UNISALENTO

S.P.6 Lecce-Monteroni, Lecce

Webpage: <https://www.disteba.unisalento.it>

Local Access Officer: Stefano Piraino; stefano.piraino@unisalento.it

Category	Sub-category	Description of the service
Biological resources	Rearing of aquaculture animals	Access to rearing facilities for fish and macroinvertebrates, including aquaria, tanks, and lab-controlled system for manipulative experiments on marine invertebrates and support to fish rearing
Biological resources	Organisms collected in the wild	Collection and rearing of marine organisms (model and non-model, benthic and planktonic taxa) including rare taxa, such as hemichordate pterobranchs. integrative (morphological, ontogenetic, molecular) taxonomy on marine invertebrates and fish. Environmental DNA sampling and analysis.
Ecosystem access	Coastal research vessels	14 m Research vessel equipped with ROV (0-120 m depth operational range), onboard SCUBA tank refill station, underwater SCUBA scooters, multi-parameter probe Hydrolab HL7 SN; Air and NITROX SCUBA diving facilities. Rubber boats for coastal sampling.
E-services	Data sets	benthic communities, gelatinous plankton



Technology platforms	Structural and chemical analysis	Metabolic studies & Metabolomic lab
Experimental facilities	Aquaria and tanks	Aquaria and tanks and lab-controlled system for manipulative experiments on marine invertebrates; Rearing facilities for fish and macroinvertebrates, aquaculture facilities and support to fish rearing

Istituto Nazionale di Oceanografia e di Geofisica Sperimentale

OGS

Trieste

Via Auguste Piccard n. 54, 34151, Trieste

Webpage: <https://www.ogs.it/en>

Local Access Officer: Mauro Celussi; mcelussi@inogs.it

Category	Sub-category	Description of the service
Biological resources	Culture collections	Access to CoSMi – Collection of Sea Microorganisms, including phytoplanktonic species (Diatoms, Dinoflagellates, Cryptophytes, Prymnesiophytes, Chlorophytes, Prasinophytes, Euglenophytes, Dictyochophytes). Presence of potentially toxic dinoflagellates and diatoms responsible for blooms
Biological resources	Taxonomic services	Access to the service of Identification of plankton and benthos samples with morphological characterization: 1) qualitative and quantitative analysis of phytoplankton and microzooplankton samples; 2) sorting, qualitative and quantitative analysis of macrozoobenthos samples
Ecosystem access	Coastal research vessels	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)
Technology platforms	Imaging	Access to imaging facilities that provide the necessary skills to the employment of optical microscopy, fluorescence techniques (epifluorescence and laser scanning confocal) and flow cytometry

Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile

ENEA-LS

Località Pozzuolo, Via Santa Teresa, 19032, Lerici (LS)

Webpage: <https://www.enea.it/en>

Local Access Officer: Chiara Lombardi; chiara.lombardi@enea.it

Category	Sub-category	Description of the service
Biological resources	Organisms collected in the wild	Access to collection of organisms in the wild



Ecosystem access	Coastal research vessels	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).
Technology platforms	Remote sensing and telemetry	Remote Sensing (RS) and Geographic Information System (GIS) techniques for mapping coastal marine habitats.
E-services	Data sets	Access to physical-chemical-biological data sets from the Gulf of La Spezia, including LTER Data Macro Site IT 15 and IoUT Smart Bay Santa Teresa observatory
Technology platforms	Structural and Chemical Analysis	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
Technology platforms	Structural and Chemical Analysis	Access to and support for sedimentology facilities and benchtop instrumentation for granulometric analyses.
E-services	Environmental data sets	Access to Smart Bay S. Teresa Observatory (https://smartbaysteresa.com): High-resolution monitoring stations located in mollusc farming in the Gulf of La Spezia. In-situ high resolution multi proxy probes acquiring physio-chemical data (i.e., temperature, pH, pCO ₂ , oxygen) and data validation via analytical facilities (carbonate environment, oxygen and chlorophyll). Access long term biological and environmental data sets for the area (Gulf of La Spezia) including those from LTER Data Macro Site IT 15.
Biological resources	Rearing of aquaculture animals	Natural Bay (Baia S. Teresa) - in proximity of the mollusc aquaculture - for in situ experiments (short experiments). Scuba diving facilities (tanks and compressor for refill) available and boat.

Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile

ENEA-NA

Research Center Arcades, P.le Enrico Fermi n. 1, 80055, Portici (Na)

Webpage: <https://www.enea.it/en>

Local Access Officer: Chiara Lombardi; chiara.lombardi@enea.it

Category	Sub-category	Description of the service
Technology platforms	Structural and Chemical Analysis	Access and support for sedimentological and granulometric analyses
Technology platforms	Bioassays	Access to ecotoxicology platform for bioassay with marine microalgae, marine crustacea (chronic and acute), echinoderms (semi-chronic and acute) and bioluminescent bacteria on water and sediment matrices

Istituto Superiore per la Protezione e la Ricerca Ambientale



ISPRA

Via Vitaliano Brancati n. 48, 00144, Roma

Webpage: <https://www.isprambiente.gov.it/en>

Local Access Officer: Chiara Maggi; chiara.maggi@isprambiente.it

Category	Sub-category	Description of the service
Biological resources	Organisms collected in the wild	Access to organisms' collection by fishing gear of fishes, by grab or corer of marine benthic invertebrates, algae and phanerogams, by plancton net of planctonic organisms
Technology platforms	Structural and chemical analysis	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 includes mass spectrometry (high and low resolution), optical emission spectroscopy, Isotope Ratio analyses, atomic fluorescence, HPLC-Orbitrap (metabolomic analysis, untargeted contaminants analysis), HPLC-MS/MS)
Biological resources	Taxonomic services	Taxonomic identification of marine macrobenthic organisms, teleosts and elasmobranchs

Università degli Studi di Cagliari

UNICA

Cittadella Universitaria Monserrato - S.P. 8 Monserrato - Sestu Km 0,700 - 09042 Monserrato (CA)

Webpage : https://web.unica.it/unica/it/dip_scienzevitaamb_1.page

Local Access Officer: Piero Addis; piero.addis@unica.it

Category	Sub-category	Description of the service
Biological resources	Marine model organisms	Pilot-scale production of sea urchin (embryo, larvae, juveniles, adult). Collection of broodstock, and wild samples of other marine invertebrates. Adjustable Life Support System will be available for the study of resistance and plasticity towards several environmental stressors
Biological resources	Marine model organisms	Pilot Hatchery for sea urchin; Life Support System for juveniles/adults. Biotechnologies (hatchery tanks) and Expertise in rearing larval stage of sea urchins (<i>Paracentrotus lividus</i>), including food-web production in bioreactors. Holding aquaria comply all the requirements of Legislative Decree 26/2014 on animals welfare
Technology platforms	Imaging	Environmental Scanning Electron Microscopy (ESEM)
Experimental facilities	Wet laboratories	PIT Tagging technologies. Tagging equipment (BIOMARK) and expertise for tagging wild and reared aquatic invertebrates (PIT tags, tag implanters, underwater readers, pass-by aquatic antennas, tissue sampling unit, software & drivers)
Biological resources	Taxonomic services	Fish Analytical Laboratory. Fish otolith examination and analysis; morphometry, shape analysis, external texture organization, fish age determination, fish stock assessment



Università degli Studi della Tuscia

UNITUS

Via S.M. in Gradi n.4, 01100 Viterbo

Webpage: <https://unitusorienta.unitus.it/en/homepage/>

Local Access Officer: Roberta Cimmaruta; cimmaruta@unitus.it

Category	Sub-category	Description of the service
Biological resources	Organisms collected in the wild	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 depths and supply of marine model organisms
Biological resources	Rearing of aquaculture animals	Experimental aquaculture, including crustacean hatchery. The facilities enable studies on aquatic species' growth, stress, sustainability, disease, larval rearing, live feeds, and algae for aquaculture applications.
Technology platforms	Molecular biology and omics	The Genomic and Molecular Laboratory (GEM-Lab) offers services of Molecular Ecology on marine organisms with a specialization on ecto- and endo-parasites of marine fish and crustaceans. The facilities include: Wet and dry labs for dissections and samples processing; Microscopy lab with optic and fluorescence microscopy enabling the analysis of phenotypes associated with specific genotypes or gene expression responses; Molecular lab fully furnished for gene based analyses (DNA extraction PCR, RT-PCR, sequencing on MinION platform, bioinformatic analysis) besides Gene expression studies and Genomic libraries construction; Environmental DNA analyses (DNA filtering, storage, sampling preparation/sequencing).

Università degli Studi di Ferrara

Via Fossato di Mortara 17, 44121 Ferrara (Italy)

Webpage: <https://docpas.unife.it/it>

Local Access Officer: Michele Mistri; msm@unife.it

Category	Sub-category	Description of the service
Ecosystem access	Sampling equipment	Access to equipment for environmental sampling in the Po Delta (Underwater drone, manta trawl, van veen grab, corers, water samplers).
Biological resources	Rearing of aquaculture animals	Access to rearing facility of bivalves of commercial interest (clams, oysters, mussels) for aquaculture application and studies (physiological responses, SFG, pollutants accumulation).
Biological resources	Organisms collected in the wild	Oysters, mussels, clams, fish, macrobenthos and macroalgae from Po Delta lagoons



Technology platforms	Molecular Biology and Omics	Access to (multidimensional) Liquid Chromatography - High Resolution Mass Spectrometry (LC-HR-MS) Platform. We offer access to a state-of-the-art liquid chromatography - high resolution mass spectrometry (LC-HR-MS) platform for conducting comprehensive metabolomics and proteomics studies of non-volatile compounds
Technology platforms	Molecular Biology and Omics	Access to (multidimensional) Gas Chromatography - High Resolution Mass Spectrometry (GC-HR-MS) Platform. We offer access to a state-of-the-art gas chromatography - high resolution mass spectrometry (GC-HR-MS) platform for conducting comprehensive metabolomics and proteomics studies of volatile compounds (volatilome)

Università degli Studi di Messina

UNIME

Piazza Pugliatti n. 1, 98122, Messina

Webpage: <https://international.unime.it/>

Local Access Officer: Serena Savoca; serena.savoca@unime.it

Category	Sub-category	Description of the service
Biological resources	Taxonomic services	Access to LabsTREAM – TAXOMAR facility for taxonomic identification of marine macrozoobenthic organisms, teleost (otolith analysis facility with Zeiss EVO-10 EM, including external texture organization analysis), and elasmobranchs
Technology platforms	Bioassays	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
Technology platforms	Structural and chemical analysis	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
Experimental facilities	Wet laboratories	Access to ZEBRALAB facility for IN VIVO Studies on teleosts
Technology platforms	Imaging	Access to LabsTREAM – TAXOMAR facility for teleost otolith analysis facility with Zeiss EVO-10 EM, including external texture organization analysis
Biological resources	Marine model organisms	Sicilian Zebrafish Resource Center (SZRC), research facility for zebrafish production and use as model organism in preclinical research.



Biological resources	Rearing of aquaculture animals	Aquaculture Teaching Facility, research, and teaching facility for teleosts reproduction
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Università degli Studi di Milano Bicocca

UNIMIB

University: Piazza dell'Ateneo Nuovo, 1, 20126, Milano

MaRHE Center: Magoodhoo, Maldives

Webpage: <https://marhe.unimib.it/>

Local Access Officer: Paolo Galli; paolo.galli@unimib.it

Category	Sub-category	Description of the service
Supporting facilities	In-house lodging	Access to accommodation full board in shared or private room (accommodation, meal, bed linen, towels) at the MaHRE Center
Ecosystem access	Scientific diving	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
Ecosystem access	Coastal research vessels	Access to island environments in the Maldives renting the Maldivian Dhoni Boat for Day Trip (capability of 50 people).
Biological resources	Organisms collected in the wild	Collection of benthic, nektonic organisms and corals with supplementary services on request.

Università degli Studi di Torino

UNITO

Viale Mattioli, 25, Turin 10125

Webpage: <https://dbiosen.campusnet.unito.it/do/home.pl>

Local Access Officer: Livio Favaro, Anna Poli; livio.favaro@unito.it , anna.poli@unito.it

Category	Sub-category	Description of the service
Biological resources	Culture collections	Access to fungal strains of the Mycotheca Universitatis Taurinensis (MUT)
Technology platforms	Remote sensing and telemetry	Access to acoustic sensors and Autonomous Recording Units (ARUs) for the Passive Acoustic Monitoring (PAM) of the marine wildlife
Biological resources	Organisms collected in the wild	Collection and characterization of mesozooplanktonic communities
Biological resources	Taxonomic services	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 Ichthyoplankton.
Experimental facilities	Mesocosms	Marine seagrass systems



E-services	Data analysis tools and software	Big Data Analysis & Server testing. Development of software and toolboxes for bioacoustics and ethological studies
Technology platforms	Structural and Chemical Analysis	Access to facility for fungal fermentation and profiling of their bioactive compounds
Technology platforms	Molecular Biology and Omics	Access to fungal molecular biology lab for metabarcoding, metagenomic and WGS of marine taxa

Università Politecnica delle Marche

UNIVPM

Piazza Roma n. 22, 60121, Ancona

Webpage: https://www.univpm.it/Entra/Universita_Politecnica_delle_Marche_Home/L/1

Local Access Officer: Cristina Gambi; c.gambi@univpm.it

Category	Sub-category	Description of the service
Ecosystem access	Coastal research vessels	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.
Experimental facilities	Aquaria and tanks	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.
Technology platforms	Molecular biology and omics	Access to the Molecular Biology Core Facility to produce recombinant proteins from marine organisms, including protein structure resolution and modelling.
Technology platforms	Structural and chemical analysis	Access to Mass Spectrometry facility including Liquid Chromatography-MS, Gas Chromatography-MS, ICP-MS, Atomic Absorption Spectrophotometry, HPLC with fluorescence and diode array detectors.
Technology platforms	Bioassays	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)
E-services	Data analysis tools and software	Access to advanced bioinformatic laboratory and data mining facility and risk assessment models for the elaboration of large datasets of chemical and biological data