

PHD PROGRAMME TABLE 38TH CYCLE

PROGRAMME'S NAME	INNOVATIVE TECHNOLOGIES AND SUSTAINABLE USE OF MEDITERRANEAN SEA FISHERY AND BIOLOGICAL RESOURCES (FISHMED-PHD)
ASSOCIATED PARTNERS <i>Pursuant to art. 3 para 2 lett. b) of the MD n. 226/2021</i>	Consiglio Nazionale delle Ricerche – CNR
DURATION	3 years
PROGRAMME START DATE	01/11/2022 (DD/MM/YYYY)
LANGUAGES	Italian, English
MANDATORY STAY ABROAD	3 months
COORDINATOR	Prof. Stefano Goffredo (s.goffredo@unibo.it)
CURRICULA	N/A
RESEARCH TOPICS	Detailed list at the bottom of the present document
PhD POSITIONS	7
ADMISSION PROCEDURE	Qualifications and research proposal evaluation Oral examination

Available Positions and Scholarships

Pos. n.	Financial Support	Description	Positions linked to research topics
1	PhD Scholarship	Totally funded by the University of Bologna general budget	Modeling metacommunity microbiomes to boost marine ecosystem services
2	PhD Scholarship	Co-funded by the University of Bologna general budget, the Department of Veterinary Medical Sciences and the Department of Agricultural and Food Sciences	Socio-economic aspects of marine resources sustainability
3	PhD Scholarship	Funded by Consiglio Nazionale delle Ricerche - CNR	Trawling activity from vessel transmitted information, as a tool for Ecosystem Approach to Fishery Management
4	PhD Scholarship	Funded by Consiglio Nazionale delle Ricerche - CNR	Interannual variability of physical and biogeochemical parameters in relation to main rivers runoff in the Adriatic Sea. Effects of climate change on biota
5	PhD Scholarship	Funded by Consiglio Nazionale delle Ricerche - CNR	Dynamic management of an off-shore dumping area of harbor-dredged sediments: effects on the benthic environment
6	PhD Scholarship	Funded by Consiglio Nazionale delle Ricerche - CNR	Integrating key ecosystem components into stock assessment models for fishery management
7	PhD Scholarship	Funded by Consiglio Nazionale delle Ricerche - CNR	Analysis of Adriatic zooplankton and micronecton through acoustic multifrequency techniques

Admission Exams

	DATE AND TIME	RESULTS
Qualifications and research proposal evaluation	Applicants' participation is not required	Available from 22/06/2022**
Oral examination	Date: starting from 30/06/2022 – 10.00 a.m. CEST* Place: In presence, Aula Magna (ground floor), Marine Biology and Fisheries Laboratory, Viale Adriatico 1/N, Fano (PU). Remotely, using Microsoft Teams	Available from 06/07/2022**

* In case that the oral examination cannot be completed in one day due to the large number of applicants, the oral examination detailed schedule shall be made available on the webpage [Studenti Online](#) together with the results of the qualifications and research proposal evaluation. **During the oral examination, applicants may express their interest in one or more positions linked to specific research topics.**

** The **results of the admission exams** will be available on the webpage [Studenti Online](#) (select “summary of the requests in progress” > “see detail” and open the .pdf file at the bottom of the page). **No personal written communication will be sent to applicants concerning the examinations results.**

Required and Supporting Documents to be attached to the application

All the documents listed below **shall be drawn up in English or in Italian**. In case of documents originally issued in any other language (e.g. identity document, qualifications), an official English translation is required.

Only qualifications obtained **during the last 5 calendar years** shall be taken into consideration, except for the University Degree. The Admission Board will assess the relevance of the supporting documents to the PhD Programme.

REQUIRED DOCUMENTS	
Identity document	Valid identity document with photo (i.e. identity card, passport)
Curriculum Vitae	No specific CV format is required
Degrees	Documents attesting the awarding of the first and second cycle degrees, the exams taken and the marks obtained (see Art. 3 of the Call for Applications)
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SUPPORTING DOCUMENTS	
Research proposal	Multi-annual research proposal, with special emphasis on the activities to be completed during the first-year course . The proposal must meet the following requirements: <ul style="list-style-type: none"> - it must mention on the cover page the main research area and topics the applicant is interested to and the proposal is about; - it cannot exceed 20,000 characters, including spaces and formula possibly used. This figure does not include: the title of proposal, the outline, references and images (such as graphs, diagrams, tables, etc. - if present); - it must include: the state of the art; description of the proposal; expected results; articulation of the proposal and implementation times; references.
Thesis abstract	Abstract of the second cycle degree thesis . Graduated applicants may submit the draft of the thesis. Abstracts cannot exceed 5,000 characters, including spaces and formula possibly used. The above figure does not include: the title of the thesis, the outline, references, and images such as graphs, diagrams, tables etc.
Reference letter/s	No more than 2 reference letters signed by Italian or international academics and professionals in the research field, which do not form part of the Admission Board, attesting the suitability of the applicant and his/her interest in the scientific research. Letters shall be uploaded following the procedure detailed in the Call for Applications (Art. 3.2)
Personal Statement	The statement shall include the reasons prompting the applicant to attend the PhD Programme and those relevant experiences and research interests , that make the applicant suitable for the specific PhD Programme (3000 characters maximum, including spaces).
Publications	<ul style="list-style-type: none"> - Full text publications (i.e. monographs, articles on scientific journals) – max n. 5 - Full text minor publications (conference papers, etc.) – max n. 5

	- Full text abstracts and posters presented during national and international conferences, etc. – max n. 5
Other documents	<ul style="list-style-type: none"> - Postgraduate vocational training programmes relevant to the PhD Programme main research topics - Research activity of any kind - whether basic, applied, translational, etc. - carried out in any capacity, including when covered by research grants, and as a staff member of research projects - Work activity - Curricular or non-curricular professional internships - Documents attesting the applicant's foreign languages proficiency - Periods of study abroad, completed by applicants outside their countries of origin (e.g. Erasmus programme or other similar mobility programmes) - Other qualifications attesting the suitability of the applicants (scholarships, prizes, etc.)

Evaluation criteria*

Scores will be expressed in points out of 100, as follows.

1. Qualifications and research proposal evaluation

Minimum score for admission to the oral examination: 30 points, Maximum score: 50 points

Qualifications evaluation	First (Bachelor's) and second cycle (Master's) degree final mark. Graduands shall be evaluated according to the Weighted Average Mark (WAM)	15 points max
	Publications	10 points max
	Personal statement	6 points max
	Reference letter/s and other evaluable documents	4 points max
Research proposal evaluation	Scientific value and ground-breaking nature of the proposal	9 points max
	Structure of the proposal	3 points max
	Proposal feasibility	3 points max

2. Oral examination

Minimum score for eligibility: 30 points, Maximum score 50 points

English language proficiency	5 points max
Research proposal presentation	35 points max
General knowledge of issues encompassed by the PhD Programme	10 points max

Oral examination aims to assess the suitability of the applicant for scientific research as well as the general knowledge of issues encompassed by the PhD Programme (see the list of [research topics](#) at the bottom of the present document).

During the oral examination, the applicant's English language proficiency shall be assessed.

The oral examination is carried out in English.

* Possible further evaluation criteria will be available on the [University website](#), selecting the relevant PhD Programme > "More information", at the bottom of the page in the section "Notices".

Research Topics

- Marine microbial metagenomes: study of microbial metagenomes from marine organisms (holobionts) and environments as indicators of ecosystems and organism health and functionalities
- Marine environment: relationship between environment and organisms; autecology and synecology, biological cycles of the species being harvested, and food webs
- Modeling gene regulation, biomineralization, growth, and population dynamics in marine calcifiers and fish species
- Genomic methods and life history traits as tools for fisheries management
- Fishery stock assessment methods
- Fishing innovative techniques and Technologies
- Marine microbial food webs, and food security
- Influence of contaminants (chemical and microbiological) on reproductive cycles, on food quality and on human biodiversity
- Bioremediation of impacted marine ecosystems (surface and subsurface water and sediments)
- Aquaculture, restocking and relative environmental impact

- Human genetic and epigenetic variability of genes involved in lipid metabolic and pollutant detoxification pathways in Italy and the Mediterranean area: a focus on nutrition and health
- Natural resources and environmental economics
- Evaluation of natural resources and ecosystem services
- Protection of the environment and resources: legal bases, organizational, and innovative elements and tools for ecosystem-based fishery management
- Community legislation on fisheries, national rules in the Mediterranean countries and EUSAIR
- International Fisheries Organizations operating in the Mediterranean: objectives and functioning
- Sustainable exploitation of marine bio-resources (microbes, biomass and fish processing by-products and wastes)
- Citizen Science: communication, volunteer involvement, spatial and temporal large-scale monitoring, dissemination, environmental education