

PHD PROGRAMME TABLE 37TH CYCLE

Section “Available Positions and Scholarship” integrated on 08/06/2021

PROGRAMME’S NAME	INNOVATIVE TECHNOLOGIES AND SUSTAINABLE USE OF MEDITERRANEAN SEA FISHERY AND BIOLOGICAL RESOURCES (FISHMED-PHD)
ASSOCIATED PARTNERS <i>pursuant to art. 2, para 2, lett. d) of the M.D. n. 45/2013</i>	Consiglio Nazionale delle Ricerche – CNR
DURATION	3 years
PROGRAMME START DATE	01/11/2021
LANGUAGE	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	8
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	Comparative genomics of Mediterranean bivalve mollusks
2	PhD Scholarship	Totally funded by the University of Bologna general budget	Climatic variability and fisheries in the Mediterranean Sea
3	PhD Scholarship	Totally funded by the University of Bologna general budget	"Zero pollution": marine circular polyculture; experiments and modelling
4	PhD Scholarship	Funded partly by the University of Bologna general budget and cofunded by the Department of Pharmacy and Biotechnology and by the Department of Veterinary Medical Sciences	Sustainability performance of the aquaculture sector in the circular economy framework
5	PhD Scholarship	Funded by the National Research Council	Microbiome: fish health, food safety and environmental sustainability
6	PhD Scholarship	Funded by the National Research Council	Biotechnology: prospecting and recovery of mineral raw materials from marine and non-conventional sources
7	PhD Scholarship	Funded by the National Research Council	New technologies: quality and safety of seafood and sustainability of fisheries
8	PhD Scholarship	Funded within the Research training projects “Big Data per una regione europea più ecologica, digitale e resiliente” (Fondo POR FSE – Resolution n. 752 of 24/05/2021)	BioBank for mussels and clams of the Adriatic Sea: an integrated biological approach to support farming management

Admission Exams

	DATE AND TIME	RESULTS
Qualifications and research proposal evaluation	Applicants' participation is not required	Available from 28/05/2021 **
Oral examination	Time: starting from 16/06/2021 – 10 am CEST* Place: Remotely, using Microsoft Teams	Available from 21/06/2021 **

* 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 evaluation. **During the oral examination applicants may express their interest in one or more positions linked to specific research topics, under the condition that their research proposal is coherent with the topic-specific scholarship.**

** 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

(only documents in Italian, English, French, German and Spanish shall be considered as valid and be assessed by the Admission Board)

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)
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 research topics, max n.3, from the list at the bottom of the present document, that cover the research proposal. - it cannot exceed 20,000 characters, including spaces and formulas, if present. This figure does not include: the title, the outline, references and images (such as graphs, diagrams, tables etc - where present); - It must include: the state of the art; description of the project; expected results; lead-time for implementation; outline of the proposed findings assessment criteria references
Thesis Abstract	Abstract of the second cycle degree thesis . Applicants who are yet to obtain their second cycle degree may submit the draft of their thesis (abstracts cannot exceed 5,000 characters, including spaces and formulas, if present. The above figure does not include: title, outline, images such as graphs, diagrams, tables etc. if present).
Reference Letter/s	No more than 2 reference letters signed by Italian and/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 for the scientific research. Letters shall be uploaded following the procedure on Studenti Online , 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"> - Scientific Publications in full text (i.e. monographs, articles on scientific journals, volume chapters) max n.5 - Minor Publications in full text (conference proceedings etc.) max n.5 - Abstracts and papers presented at conferences, in full text max n.5
Other documents	<ul style="list-style-type: none"> - University Master Courses (Master Universitari di I e II livello) - Postgraduate vocational training programmes and/or specialisation programmes relevant to the PhD Programme - Research activity - whether basic, applied, translational, etc. - carried out in any capacity, including when covered by research grants, and as a staff member of research units - Specialisation thesis abstract (max 1500 characters) - Working experience - Apprenticeships - Language proficiency certificates - Periods of study abroad, outside the country 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 evaluation

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

Qualifications evaluation	University degree final mark. Graduands shall be evaluated according to the Weighted Average Mark (WAM).	15 points max
	Publications	10 points max
	Personal Statement	6 point max
	Reference Letter/s and other titles	4 points max
Research proposal evaluation	Scientific value and innovative nature of the proposal	9 points max
	Description and 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 proficiency	5 points max
Research proposal presentation	35 points max
General knowledge of issues encompassed by the PhD Programme	10 points max

The oral examination includes the presentation of the research proposal and is intended 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 Admission Board will assess the applicant's proficiency in the English language. **The oral examination is carried out in Italian and/or 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".

Final Ranking List and Enrollment

Considering the expressions of interest for the topic-specific positions, the Admission Board will establish if the applicants can be considered eligible for the allocation of the positions linked to specific research subjects, considering their skills, experience and aptitude. For the awarding or replacement of topic-specific positions, sub-ranking lists shall be drawn up. In case of vacancies, after having scrolled all the sub-ranking list for the topic-specific position, eligible applicants from the general ranking list shall be contacted.

After the publication of the results of the oral examination, the final ranking list will be available on the [University website](#), selecting the relevant PhD Programme → "More information", section "Notices" at the bottom of the page.

Following the publication of the final ranking list, successful applicants shall enroll on [Studenti Online](#) by the deadline indicated on the [University website](#), selecting the relevant PhD Programme → “More information”.

If a successful applicant withdraws from a position, the following applicant in the ranking list, who is also eligible for the specific position, will be contacted. During the replacement procedure, the new terms of enrollment shall be communicated via e-mail to the chosen applicant.

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 variability of genes and pathways involved in lipid metabolism across Italy and the Mediterranean area: focus on genetics, nutrition and health;
- Natural resources and environmental economics;
- Fisheries economics, product marketing and fishery chain;
- 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.