

PHD PROGRAMME TABLE 37TH CYCLE

Section "Available Positions and Scholarship" integrated on 22/04/2021

PROGRAMME'S NAME	CELLULAR AND MOLECULAR BIOLOGY
DURATION	3 years
PROGRAMME START DATE	01/11/2021
LANGUAGES	Italian, English
MANDATORY STAY ABROAD	3 months
COORDINATOR	Prof. Giovanni Capranico (giovanni.capranico@unibo.it)
CURRICULA	N/A
RESEARCH TOPICS	Detailed list at the bottom of the present document
PHD POSITIONS	10
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	
2	PhD Scholarship	Totally funded by the University of Bologna general budget	
3	PhD Scholarship	Totally funded by the University of Bologna general budget	
4	PhD Scholarship	Totally funded by the University of Bologna general budget	
5	PhD Scholarship	Totally funded by the University of Bologna general budget	
6	Research Grant	Provided by the Department of Pharmacy and Biotechnology. The research grant will have a duration of 36 months and a gross percipient amount of € 26,174.00	Tumor metastasis and microenvironment: models and mechanisms
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Admission Exams

	DATE AND TIME	RESULTS
Qualifications and Research Proposal evaluation	Applicants' participation is not required	Available from 22/06/2021**
Oral examination	Date: starting from 28/06/2021 – 9 am CEST* Place: Remotely, using Microsoft Teams	Available from 12/07/2021**

* 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.**

** 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 first page the research topic/s of the PhD Programme associated to 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: state of the art; project’s description; expected results; timeline of the proposed research activities; outline of the proposed findings assessment criteria; references. The research projects that successful applicants shall carry out during their PhD career may possibly differ from the project proposed at the application stage. This shall be defined together with the supervisor and approved by the Academic Board.
Thesis abstract	Abstract of the second cycle degree thesis . Graduands 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)
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).
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).
Publications	List of publications (i.e. monographs, articles on scientific journals, volume chapters), minor publications (conference papers, etc.) and abstracts and posters presented during academic conferences
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 - Specialisation thesis abstract (max 400 characters) - Teaching activity carried out at university level - 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

	<ul style="list-style-type: none"> - Working activity - Internship activity - 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)
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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 and second cycle degree final mark. Graduands shall be evaluated according to the Weighted Average Mark (WAM)	10 points max
	Publications	3 points max
	Other documents relevant to the PhD Programme main topics (CV, periods of study or training abroad, internships of more than one month, minor publications)	7 points max
Research Proposal Evaluation	Scientific value and innovative nature of the proposal	12 points max
	Description and structure of the proposal	10 points max
	Proposal feasibility	8 points max

2. Oral examination

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

English proficiency	5 points max
Research proposal presentation	20 points max
General knowledge of issues encompassed by the PhD Programme	25 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, English language proficiency shall be assessed. The oral examination is carried out in Italian 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 **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 topics, taking into account their skills, experience and aptitude. A sub-ranking list for each topic-specific position shall be drawn up. In case of vacancies, only after having scrolled the whole sub-ranking list, vacant positions shall be proposed to eligible applicants following the general ranking list.

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

- Cancer genome instability (Prof. Capranico)
- Molecular biotechnology of phages for the development of theranostic vector platforms (Prof. Danielli)
- Computational and functional genomics (Prof. Ferrè)
- Computational transcriptomics of human gene networks (Dr. Giorgi)

- Genetic factors of autism syndromes (Prof. Maestrini, Prof. Bacchelli)
- Molecular basis of neurodegenerative diseases (Prof. Monti)
- Gene expression regulation in cancer (Prof. Perini)
- Molecular characterization of solid tumors (Dr. De Biase)
- Mitochondria disfunctions in neurodegenerative diseases and mitochondria gene mutations in cancer (Prof. Porcelli, Prof. Ghelli) Molecular and genetic basis of bacterial pathogenesis (Prof. Scarlato)
- Molecular mechanisms of redox signalling and energy metabolism regulations in plants (Prof. Trost, Prof. Sparla) Phylogenetic and functional characterization of human and environmental microbial communities: study of the interactions between microorganisms and their habitat (Prof. Vitali)
- Structures, functions and interactions of metallo-proteins (Dr. Zambelli)