

CELLULAR AND MOLECULAR BIOLOGY

Section "Positions and scholarships" integrated on 07/05/2020

Section "Positions and scholarships" integrated on 20/05/2020

Coordinator	Prof. Giovanni Capranico Department of Pharmacy and Biotechnology - FaBiT Via Imerio 48 - Bologna giovanni.capranico@unibo.it
Starting date of the PhD Programme	01/11/2020
Duration	3 calendar years
Language of the PhD Programme	Italian and English
Mandatory stay abroad	Yes (3 months)
Research topics	
<ul style="list-style-type: none"> - 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, Dr. Bacchelli) - Molecular basis of neurodegenerative diseases (Prof. Monti) - Gene expression regulation in cancer (Prof. Perini) - Cancer modeling in Drosophila (Prof. Pession) - Mitochondria disfunctions in neurodegenerative diseases and mitochondria gene mutations in cancer (Prof. Porcelli, Dr. 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) 	

PhD positions and scholarships			
Position n.	Financial support	Description	Positions linked to research subjects
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	Funded by the Pharmacy and Biotechnology Department	Development of novel computational algorithms for the deep characterization of gene regulatory networks in brain progenitor cells using transcriptomics data: an innovative approach to counteract hypomyelination in AGC1 deficiency
6	PhD Scholarship	Totally funded by the University of Bologna general budget with funds made available by the "Sviluppo Strategico dei Dipartimenti" projects (PSSD)	
7	Research Grant	Provided by the Department of Chemistry "G. Ciamician". The research grant shall have a duration of 12 months, renewable up to 36 months, and a gross percipient amount of € 19.367.	Molecular engineering of the M13 phage into a nanobiotechnological platform for photodynamic, sonodynamic and photothermal cancer therapy
8	Research Grant	Provided by the Department of Pharmacy and Biotechnology. The research grant shall have a duration of 36 months and a gross percipient amount of € 78.552.	Tumour metastasis and microenvironment: models and mechanisms
9	Research Grant	Provided by the Department of Pharmacy and Biotechnology. The research grant shall have a duration of 36 months and a gross percipient amount of € 78.552.	Tumour metastasis and microenvironment: models and mechanisms

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Positions linked to specific research subjects: during the oral examination, applicants may express their interest in the position linked to a specific research subject. Considering the expressions of interest above, the Admission Board shall express its view on the suitability of the interested applicants, taking into account their specific skills, experience and aptitude.

Admission requirements

Please, see art. 2 of the Call for applications

Mandatory documents to be attached to the application

Please, see art. 3 of the Call for applications.

Further qualifications that may be attached to the application, if in possession of the applicant (only qualifications attested by documents drawn up in Italian, English, French, German and Spanish shall be considered as valid and assessed by the Admission Board)

- Motivational letter. This must 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).
- List of the publications (monographs, articles published on scientific journals, volume's chapters).
- List of the minor publications (national and international conference papers, etc.).
- List of the abstracts and posters (presented during national and international conferences, etc.).
- Professional Master courses completed in Italy (1st or 2nd level) relevant to the PhD Programme.
- 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.
- Study periods completed by students 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.).

Admission exams (art. 4 of the call for applications)

Examination type	Examination type	Publicazione dei risultati delle prove (i candidati non riceveranno alcuna comunicazione sui risultati delle prove)
Evaluation of qualifications	Non-presential.	The results of the evaluation of qualifications shall be available online starting from the 30/06/2020 at the page http://studenti.unibo.it (please, select "summary of the requests in progress" - "see detail" and open the pdf file "risultati valutazione titoli")
Oral examination	Date 13/07/2020 In case that the oral examination cannot be completed in one day due to the large number of applicants, the oral exam schedule shall be made available at the webpage http://studenti.unibo.it together with the results of the evaluation of qualifications	The results of the oral examination shall be available on the webpage http://studenti.unibo.it starting from 22/07/2020 (please, select "summary of the requests in progress" - "see detail" and open the pdf file "risultati prova orale")
	Time 10:00 am (local time)	
Applicants shall take the exam remotely. For further details please refer to the relevant provision laid down in art. 4 of the Call for applications.		

Evaluation criteria

Points will be allocated to applications out of a total of 100 on the basis of the following weighting:

1. Qualifications

- Minimum for admission to the oral exam: 30 points
- Maximum: 50 points

Only qualifications relating to the last 5 calendar years prior to the calendar year of publication of the Call for applications shall be taken into consideration, with the exception of the University Degree (Diploma di laurea). Please, note that qualifications must be consistent with the PhD Programme.

Points relating to qualifications shall be allocated on the basis of the following criteria:

- Graduation final mark. Undergraduates shall be evaluated on the basis of the Weighted Average Mark (WAM): max 40 points
- Publications: max 7 points
- Other qualifications: max 3 points

2. Oral examination

- Minimum for inclusion in the final ranking list :30 points
- Maximum: 50 points

Oral examination is intended to assess the suitability of the applicant in respect of the pursuing of scientific research as well as the general knowledge of issues connected to the PhD Programme. During the oral examination, knowledge of English language shall be assessed.

The oral examination is carried out in Italian.

Points relating to the oral examination shall be allocated on the basis of the following criteria:

- knowledge of the English language: max 5 points
- general knowledge of issues connected to the PhD Programme: max 45 points

Possible evaluation sub-criteria will be available on the [Unibo website](#), selecting the relevant PhD Programme → “PhD programme information” at the bottom of the page in the section “Notices”.

Final ranking list and enrolment (arts.6 and 7 of the Call for applications)

After the publication of the results of the oral exam, the final ranking list will be available on the [Unibo website](#), selecting the relevant PhD Programme → “PhD programme information” at the bottom of the page in the section “Notices”.

Following the publication of the final ranking list, successful applicants must enroll on <http://studenti.unibo.it> by the deadline indicated on the [Unibo website](#), selecting the relevant PhD Programme → “PhD programme information”.