

BIOTECHNOLOGY AND LIFE SCIENCES		
Cycle XXXVI		
Coordinator	Prof. Marco VENTURA Department of Chemistry, Life Sciences and Environmental Sustainability email: marco.ventura@unipr.it	
Duration	3 years	
Starting date of the PhD program	01/11/2020	

Research Topics

- Environmental
- Molecular
- Genetics and microbiology

Training Objectives

The PhD in Biotechnology and Biosciences aims to train experts who can carry out advanced research activities in the biological disciplines and biotechnology. The Doctor's research themes concern the study of the function, organization and expression of the genome of microbial, plant and animal organisms (including humans), to deepen their basic knowledge, also in view of possible applications in biotechnology. The methodologies used are mainly those of genetic, microbiology, molecular biology, biochemistry and applied biology. Starting from this common objective and from a highly cross-cutting advanced teaching activity, in order to train PhDs with highly qualified skills in specific areas of Biotechnology and Life Sciences, three main areas of research defined as such: 1) environmental; 2) genetics and microbiology; 3) biochemical-molecular. PhD students will be involved full-time in a research project, to which they will also make critical and proactive contributions. In this way, they will acquire a marked scientific and management autonomy, also thanks to the numerous scientific, national and international collaborations in which they will be involved.

Admission requirements

Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:

- Laurea specialistica or Laurea magistrale (second cycle master's degree)
- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);
- Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral program

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2020.

POSITIONS PUT OUT TO COMPETITION		
With Scholarship		5
Reserved to employees of companies having an "Industrial Doctorate" arrangement		1
	TOTAL	6



Positions with University Scholarship			
N°	Funding entity	Research Topic	
3	Scholarship Ministerial funds	EnvironmentalMolecularGenetics and microbiology	
1	Scholarship University funds	Environmental	
1	Scholarship co-funded by Fondazione Cariparma • Genetics and microbiology		
Position recorned for "Industrial Doctorate"			

Position reserved for "Industrial Doctorate"

(according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013)

N°	Company/Institution	
1	Reserved to employees of GenProbio S.r.l.	

ADMISSION PROCEDURES

Assessment of QUALIFICATIONS: up to 40 points

(a minimum score of 18 points shall be required to be admitted to the Oral Exam)

ORAL EXAM: up to 80 points

Minimum score for ELIGIBILITY: 70/120

Foreign Language

Language the fluency of which shall be assessed during the Oral Exam: **ENGLISH**. The evaluation of the knowledge of this language will be oral and will consist in reading and

translating of a scientific text.

APPLICANTS SHALL TAKE THE EXAM REMOTELY.

For further details please refer to the relevant provision laid down in art. 7 of the Call for applications.

THE INTERVIEW MAY BE HELD ALSO IN ENGLISH

LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

Mandatory documents to be attached to the on-line application

- ANNEX A (art. 5 of the Call for Applications)
- Scanned Copy of a valid identification document with photo
- Curriculum Vitae et studiorum (art. 4 of the Call for Applications)
- Abstract of the second cycle master's degree thesis. Undergraduate applicants may submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)
- Certificates and academic transcript of records for both Bachelor' and Master' degrees containing the following details for each degree held: (art. 4 of the Call for Applications):
 - University that granted the degree
 - Type of degree (first cycle/second cycle/single cycle)
 - o Name of the degree program
 - Date of graduation
 - Final mark
 - List of exams and corresponding scores (academic transcript of records)
 - o Translation into Italian or English (only for degrees issued in languages other than Italian or English)



Further qualifications that may be attached to the application, if in possession of the applicant (only qualifications attested by a document drawn up in Italian or in English)

- Scientific Publications: articles published in *peer-reviewed* international scientific journals, abstracts of oral communications or posters presented at national or international scientific conferences;
- Academic qualifications: First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program;
- Mobility experience abroad (e.g. Erasmus or similar);
- Any other document certifying the applicant's traning and abilities (grants, awards, work contracts at public and / or private research centers).

EVALUATION CRITERIA			
QUALIFICATION	EVALUTATION CRITERIA	POINTS	
Curriculum Vitae et studiorum	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark	Up to 5 points	
Graduation mark	Score related to the final mark: - 110 with honours (magna cum laude): 20 points - 110: 18 points - From 101 to 109: 2 points for each mark unit (0-16 points)	Up to 20 points	
Average of the exam marks (if the candidate will attain the degree no later than 31 October 2020)	Score related to the average of the exam marks: - 30/30: 18 points; - From 21/30 to 29/30: 2 points for each mark unit (0-16 points)	Up to 18 points	
Graduation thesis	Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae)	Up to 6 points	
Scientific publications	Publications in <i>peer-rewiewed</i> international journals: 2 points for each publication (for evaluation purposes it is mandatory to attach a pdf copy of each publication to the application)	Up to 6 points	
Communiations to conferences, publication in indexed national journals, book chapters	1 point for each conference abstract, publication in indexed national journals or book chapters (for evaluation purposes it is mandatory to attach a pdf copy of each term to the application)	Up to 3 points	
ORAL EXAMINATION EVALUATION CRITERIA		POINTS	
The ORAL EXAM includes the presentation of the research project and is intend to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course The Oral Exam will focus on critical reading and discussion of a scientific article chosen by the candidate among those proposed by the Committee within the each of the three main research topics. Candidates will be asked by the Committee members to discuss and explain the contents of the scientific publication they have selected. During this Oral Exam and interview, knowledge of the English language will also be evaluated.		Up to 80 points	



SCHEDULE OF THE ADMISSION EXAMS		
ORAL EXAM	DATE	16 September 2020 (with possible extension to 17 September 2020)
	TIME	09:00 am (Italian time)
	PLACE	remotely using the Microsoft Teams platform
OTHER INFORMATION		The applicant MUST indicate in the application his/her preference for one of the three main research topics proposed in the selection announcement (Environmental, Genetics and microbiology, Biomolecular); the possible candidate's interest for one of the 'bound research topics' may also be specified, if applicable. For foreign candidates, admission examinations may be held in English as per candidate's request.