



BIOTECHNOLOGY AND LIFE SCIENCES	
<b>Cycle</b>	XXXV
<b>Coordinator</b>	Prof. Simone OTTONELLO Department of Chemistry, Life Sciences and Environmental Sustainability email: <a href="mailto:simone.ottonello@unipr.it">simone.ottonello@unipr.it</a>
<b>Duration</b>	3 years
<b>Starting date of the PhD program</b>	01/11/2019
<b>Research Topics</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"><li>• Environmental</li><li>• Genetic</li><li>• Biomolecular</li></ul>	
<b>Training Objectives</b>	
<p>The PhD in Biotechnology and Life Sciences aims to train experts capable of performing (and be in charge of) advanced research activity in multiple and diverse fields of biology and biotechnology. The main focus will be on the study of the function, organization, and expression of microbial, plant and animal genomes (including the human genome) from a basic science but also a translational point of view, in order to gain insights on possible biotechnological and biomedical applications. The experimental methodology will be centred on the investigational tools of genetics, molecular biology, biochemistry and applied biology. Starting from these shared objectives, in order to train PhDs with highly qualifying skills in specific fields of Biotechnology and Life Sciences, three main research areas have been identified: 1) environmental; 2) genetic; 3) biomolecular. PhD students will be involved, on a full-time basis, in a research project, to which they will contribute in a highly critical and constructive/transformational manner. This will allow them to achieve scientific and management independence, also taking advantage of the national and international scientific collaborations in which they will be involved.</p>	
<b>Admission requirements</b>	
<p>Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:</p> <ul style="list-style-type: none"><li>- Laurea specialistica or Laurea magistrale (second cycle master's degree)</li><li>- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li><li>- Second cycle Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programs</li></ul> <p>Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2019</b>.</p>	
<b>POSITIONS PUT OUT TO COMPETITION</b>	
<b>With Scholarship</b>	5
<b>Covered by High Internship and Research Agreements</b>	1
<b>TOTAL</b>	<b>6</b>



Positions with University Scholarship		
N°	Funding entity	Research Topic
2	Scholarship Ministerial funds	<ul style="list-style-type: none"> <li>• Environmental</li> <li>• Genetic</li> </ul>
1	Scholarship University funds	<ul style="list-style-type: none"> <li>• Biomolecular</li> </ul>
1	Scholarship co-funded by Fondazione Cariparma	<ul style="list-style-type: none"> <li>• Environmental</li> </ul>
Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)		
<p>During the Oral Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.</p>		
N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship Ministerial funds	<ul style="list-style-type: none"> <li>• <u>Biomolecular</u>: "Functional and Structural characterization of toxin/antitoxin bacterial systems"</li> </ul> <p><i>Project in collaboration with the University of Aarhus (Denmark) that will require a research stage of at least 3 months at the above foreign University</i></p>
Positions covered by High Internship and Research Agreements		
N°	Company/Institution	BOUND RESEARCH TOPIC
1	GenProbio S.r.l.	<ul style="list-style-type: none"> <li>• <u>Genetic</u>: "Microbiota and health: development of novel approaches to unveil the composition and functionality of microbial communities"</li> </ul>
ADMISSION PROCEDURES		
<p><b>Assessment of QUALIFICATIONS:</b> up to 40 points (a minimum score of 16 points shall be required to be admitted to the Oral Exam)  <b>ORAL EXAM:</b> up to 80 points  <b>Minimum score for ELIGIBILITY:</b> 70/120</p>		
<b>Foreign Language</b>	<p>Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b>.            The evaluation of the knowledge of this language will be oral and will consist of questions on the scientific article selected and discussed by each candidate and/or on reading and translation of a scientific text.</p>	
<p><b>Possibility of videoconference for candidates residing or temporarily abroad</b>            (the relevant request shall be submitted using the form attached to the competitive examination announcement)</p> <p>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</p>		<p><b>YES</b></p>



## 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)
  - Name of the degree programme
  - Date of graduation
  - Final mark
  - List of exams and corresponding scores (academic transcript of records)
  - Translation into Italian or English (only for degrees issued in languages other than Italian or English)
- **Statement of Research Interest:** Short text – maximum n. 3.000 characters, including spaces – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD programme and at describing the specific her/his research interests. **The research area selected by the candidate as well as her/his interests for one of the 'bound research topic', if applicable, must also be indicated**

### 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/communications at conferences or symposia:** attach a list of articles published in *peer-reviewed* international scientific journals, articles published in indexed national journals; book chapters, 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 degrees in subjects related to the research topics of this PhD program;
- **Mobility experience abroad** (e.g. Erasmus or similar appropriately documented experiences);
- **Any other document** certifying the applicant's training and abilities (grants, awards, etc.).

### EVALUATION CRITERIA

QUALIFICATION	EVALUTATION CRITERIA	POINTS
<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience (Master' and/or specialization degrees in subjects related to the research topics of this PhD program; study or research periods abroad, grants, award and other academic qualifications), 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.	<b>Up to 5 points</b>
<b>Graduation mark</b>	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)	<b>Up to 20 points</b>



<b>Average of the exam marks</b> (if the candidate will attain the degree no later than 31 October 2019)	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)	<b>Up to 18 points</b>
<b>Graduation thesis</b>	Consistency of the Master's Degree thesis work with the doctoral programme research topics, as deduced from the Abstract/Summary of the thesis.	<b>Up to 4 points</b>
<b>Statement of Research Interest</b>	Short text – maximum n. 3.000 characters, including spaces – in Italian or in English, aimed at explaining the candidate's reasons/motivation for applying to this PhD programme. The candidate's interest for one of the 'bound research topics' if applicable, must also be specified.	<b>Up to 2 points</b>
<b>Scientific publications</b>	Publications in <i>peer-reviewed</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)	<b>Up to 6 points</b>
<b>Communications to conferences, publication in indexed national journals, book chapters</b>	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)	<b>Up to 3 points</b>
<b>ORAL EXAMINATION</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM meant to assess the suitability of the applicant to pursue scientific research as well as his/her general knowledge of scientific topic related 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.	<b>Up to 80 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		
<b>ORAL EXAM</b>	<b>DATE</b>	18 September 2019
	<b>TIME</b>	09:00 am
	<b>PLACE</b>	ROOM A – Podere "La Grande" Parco Area delle Scienze, 173/A – 43124 PARMA - ITALY
<b>OTHER INFORMATION</b>	The applicant <b>MUST</b> indicate in the application his/her preference for one of the three main research topics proposed in the selection announcement (Environmental, Genetic, 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.	