



BIOTECHNOLOGY AND LIFE SCIENCES	
Cycle	XXXIV
Coordinator	Prof. Simone OTTONELLO Department of Chemistry, Life Sciences and Environmental Sustainability email: <a href="mailto:simone.ottonello@unipr.it">simone.ottonello@unipr.it</a>
Duration	3 years
Starting date of the PdD programme	01/11/2018
<b>Research Topics</b> (The candidate <b>MUST</b> indicate one research topic)	
<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) biochemical-molecular. 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>Applicants who have one of the following degrees may participate to the selection:</p> <ul style="list-style-type: none"><li>- Laurea specialistica or Laurea magistrale (second cycle degree)</li><li>- Laurea Vecchio Ordinamento (degree obtained under the previous Italian regulations);</li><li>- an academic Master's degree obtained abroad, equivalent to the above mentioned Italian degrees and <u>recognized as suitable for the admission to doctoral programmes.</u></li></ul> <p>Undergraduate applicants may apply with the obligation of getting their degree by <b>October 31<sup>st</sup> 2018.</b></p>	
<b>POSITIONS PUT OUT TO COMPETITION</b>	
With Scholarship	7
Without Scholarship	1
Reserved to employees of companies having an "Industrial Doctorate" arrangement	1
<b>TOTAL</b>	<b>9</b>



Positions with University Scholarship		
N°	Funding entity	Research Topic
3	Scholarship funded by the Ministry of Education, University and Research	<ul style="list-style-type: none"> <li>– Environmental</li> <li>– Genetic</li> <li>– Biomolecular</li> </ul>
1	Scholarship funded by the University of Parma	– Biomolecular
1	Scholarship co-funded by Fondazione Cariparma	– Genetic
1	POSITION WITHOUT SCHOLARSHIP	– Biomolecular: "Proteome analysis in preclinical models of pulmonary diseases"
Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)		
<p>During the Oral Exam, applicants may express to the Examination Committee their interest for being assigned a scholarship dedicated to a specific research topic. The Committee 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	Funded by the Department of Chemistry, Life Sciences and Environmental Sustainability (Project "DIPARTIMENTI DI ECCELLENZA")	<ul style="list-style-type: none"> <li>– Environmental: "The potential of applied biology in limiting urban air pollution and preventing its effects on human health and on the environment"</li> </ul> <p>The project will be conducted as part of a co-tutorship agreement with a European University where the student will have to spend a period of at least 6 months and may provide for the award of a double PhD degree.</p>
1	Chiesi Farmaceutici S.p.A.	– Biomolecular: "Transcriptome profiling of hyperoxia induced lung-injury"
Position reserved according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013 (Industrial Doctorate)		
N°	Company/Institution	
1	Reserved to employees of Chiesi Farmaceutici S.p.A.	
ADMISSION PROCEDURES		
<p><b>Assessment of QUALIFICATIONS:</b> up to 40 points  <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 will be assessed during the Oral Exam:  <b>ENGLISH.</b></p> <p>The evaluation of the knowledge of the above language will be performed on an oral basis and may include the reading and translation of a scientific text.</p>	
<p><b>Possibility of videoconference for candidates residing or temporarily abroad (appropriately documented)</b>            (the relevant request shall be submitted using the form attached to the competitive examination announcement)</p> <p style="text-align: center;">THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</p>		<b>YES</b>



## 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/Summary of the second cycle master's degree 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 3.000 characters, including spaces – in Italian or in English, aimed at explaining the candidate's reasons for applying to this particular PhD and at describing his/her specific research interests; **also specify the interest for one of the three main research topics.**

### 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:** other Master' and/or specialization degrees in subjects related to the research topics of this PhD programme;
- **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, 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 2018)	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>	Relatedness of the Master's Degree thesis 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 3.000 characters, including spaces – in Italian or in English, aimed at explaining the candidate's reasons for applying to this PhD course; the possible candidate's interest for one of the proposed 'bound research topics' may also be specified, if applicable.	<b>Up to 2 points</b>
<b>Scientific Publications</b>	Publications in peer-reviewed international scientific journals: 2 points for each publication (for evaluation purposes it is mandatory to attach a copy of the each publication to the application).	<b>Up to 6 points</b>
<b>Communications to conferences, publications 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 copy of each item 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 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>ORAL EXAM DATE:</b> September 20, 2018 <b>TIME:</b> 09:00am <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.	