



DRUG SCIENCES	
<b>Cycle</b>	XXXVI
<b>Coordinator</b>	Prof. Marco MOR Food and Drug Department email: <a href="mailto:marco.mor@unipr.it">marco.mor@unipr.it</a>
<b>Duration</b>	3 years
<b>Starting date of the PhD program</b>	01/11/2020
<b>Participation with positive results in international calls</b>	<b>PROGETTO UE H2020 – MSCA ITN "Innovation Training Networks"</b> <b>ITN-ETN "COLOTAN" project 956851</b> <ul style="list-style-type: none"><li>• Boosting advanced doctoral training in innovative colon targeting drugs</li></ul>
<b>Research Topics</b>	
<ul style="list-style-type: none"><li>• Biochemistry and Molecular Biology</li><li>• Biopharmaceutics – Pharmacokinetics</li><li>• Bio-organic chemistry</li><li>• Experimental Pharmacology and Toxicology</li><li>• Drug Design and Synthesis</li></ul>	
<b>Training Objectives</b>	
The PhD programme "Drugs Sciences" is aimed at the preparation of "Dottori di ricerca" having scientific bases and research experience in the design, discovery, development, production and control of drugs and health products, as well as in the investigation of mechanisms of action for drugs and bioactive compounds. The Course offers multi-disciplinary formation in different scientific areas, mainly chemical and biological with particular focus on medicinal chemistry, pharmaceutical technology, pharmacology and biochemistry. All the contributions converge toward the education and research training of PhD students who, at the end of the course, are expected to produce innovation and new knowledge in the field of drugs, biomolecules, health products and their interaction with biological substrates.	
<b>Admission requirements</b>	
Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <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 program</li></ul> Undergraduate applicants may also submit applications with the obligation of getting their degree by <b>October 31<sup>st</sup> 2020</b> .	
<b>POSITIONS PUT OUT TO COMPETITION</b>	
<b>With Scholarship</b>	8
<b>Reserved to employees of companies having an "Industrial Doctorate" arrangement</b>	2
<b>TOTAL</b>	<b>10</b>



Positions with University Scholarship		
N°	Funding entity	Research Topic
4	Scholarship Ministerial funds	<ul style="list-style-type: none"> <li>• Biopharmaceutics - Pharmacokinetics</li> <li>• Experimental Pharmacology and Toxicology</li> <li>• Drug Design and Synthesis</li> <li>• Biochemistry and Molecular Biology</li> </ul>
1	Scholarship co-funded by Fondazione Cariparma	<ul style="list-style-type: none"> <li>• Biopharmaceutics - Pharmacokinetics</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
3	Funded by the Food and Drugs Department	<ul style="list-style-type: none"> <li>• Application of NMR techniques to drug discovery and development</li> <li>• Design and synthesis of novel EphA2-receptor antagonists</li> <li>• Inhalatory route for the treatment of pulmonary infections</li> </ul>
Position reserved for "Industrial Doctorate" (according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013)		
N°	Company/Institution	RESEARCH TOPIC
2	Reserved to employees of Chiesi Farmaceutici S.p.A.	<ul style="list-style-type: none"> <li>• Oral Absorption: in vitro-silico-vivo approach to predict human PK using a rat model</li> <li>• Is it possible to develop a biopharmaceutical classification for inhaled drugs? In vitro, in vivo and in silico methods that could help in building such classification</li> </ul>
ADMISSION PROCEDURES		
<p><b>Assessment of QUALIFICATIONS:</b> up to 50 points (a minimum score of 30 points shall be required to be admitted to the Oral Exam)  <b>ORAL EXAM:</b> up to 70 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 in reading and translating of a scientific text.</p>	
<p align="center"><b>APPLICANTS SHALL TAKE THE EXAM REMOTELY.</b>            For further details please refer to the relevant provision laid down in art. 7 of the Call for applications.</p>		
<p>THE INTERVIEW MAY BE HELD ALSO IN ENGLISH</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 program
  - 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)

### 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)

- **Research Project:** The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focused on an original research topic and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation; it does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined together with the supervisor and approved by the Academic Board;
- **Scientific Publications:** Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings.

### EVALUATION CRITERIA

QUALIFICATION	EVALUTATION CRITERIA	POINTS
<b>Curriculum Vitae et studiorum</b>	Including academic career, 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, and postgraduate experiences, including any awards.	<b>Up to 20 points</b>
<b>Graduation thesis or Draft of the thesis</b>	Consistency of the Master's Degree thesis with the doctoral programme research topics (briefly describe the topics in the curriculum)	<b>Up to 10 points</b>
<b>Research Project</b>	Points relating to the research project shall be allocated on the basis of the following criteria: <ul style="list-style-type: none"> <li>○ Scientific value and ground-breaking nature of the proposal: 5 points</li> <li>○ description and structure of the proposal: 5 points</li> <li>○ consistency with the themes of the doctorate: doctorate proposal feasibility: 5 points</li> </ul>	<b>Up to 15 points</b>
<b>Scientific publications</b>	Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings	<b>Up to 5 points</b>



ORAL EXAMINATION		EVALUATION CRITERIA	POINTS
The ORAL EXAM includes the presentation of the research project and is intended to assess the suitability of the applicant to pursue scientific research as well as the general knowledge of issues connected to the PhD course		<ul style="list-style-type: none"><li>○ knowledge of foreign languages: 10 points</li><li>○ research project presentation: 30 points</li><li>○ general knowledge of issues connected to the PhD course: 30 points</li></ul>	<b>Up to 70 points</b>
SCHEDULE OF THE ADMISSION EXAMS			
ORAL EXAM	DATE	16 September 2020 (with possible extension in the following days)	
	TIME	10:00 am (Italian time)	
	PLACE	remotely using the <b>Microsoft Teams platform</b>	
OTHER INFORMATION		For foreign candidates, the admission examinations may be held in English at the candidate's choice.	