DRUG SCIENCES

Cycle | XXXV
---|---
Coordinator | Prof. Marco MOR  
Food and Drug Department  
email: marco.mor@unipr.it

Duration | 3 years

Starting date of the PhD program | 01/11/2019

Participation with positive results in international calls | Progetto UE H2020 – MSCA ITN "Innovative Training Networks"  
ITN-2018 "ORBITAL 813440"  
- Development of ex-vivo models for smart screening of novel colloidal ocular formulations

Research Topics
- Biochemistry and Molecular Biology  
- Biopharmaceutics – Pharmacokinetics  
- Bio-organic chemistry  
- Experimental Pharmacology and Toxicology  
- Drug Design and Synthesis

Training Objectives
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.

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 programs

Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2019.

POSITIONS PUT OUT TO COMPETITION

<table>
<thead>
<tr>
<th>With Scholarship</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>8</td>
</tr>
</tbody>
</table>
### Positions with University Scholarship

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>Research Topic</th>
</tr>
</thead>
</table>
| 3  | Scholarship Ministerial funds | • Biopharmaceutics – Pharmacokinetics  
• Experimental Pharmacology and Toxicology  
• Drug Design and Synthesis |
| 1  | Scholarship University funds | • Bio-organic chemistry |
| 1  | Scholarship co-funded by Fondazione Cariparma | • Biochemistry and Molecular Biology |

### Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Oral Exam, applicants may express their interest in being assigned a scholarship linked to a specific research topic. The Board will express its judgement on eligibility for scholarships linked to specific topics, in consideration of the specific competences, experience and specific attitudes of the applicants.

<table>
<thead>
<tr>
<th>N°</th>
<th>Funding entity</th>
<th>SPECIFIC RESEARCH TOPIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Funded by the Food and Drugs Department</td>
<td>• A multistage model of thyroid gland function for screening endocrine-disrupting chemicals in a biologically sex specific manner</td>
</tr>
<tr>
<td>1</td>
<td>Funded by the Food and Drugs Department</td>
<td>• Microscale Thermophoresis in Drug Discovery</td>
</tr>
<tr>
<td>1</td>
<td>Funded by the Food and Drugs Department (Project PRIN2017 Sector ERC_LS7, CUP D94I19001010001)</td>
<td>• Cutaneous and mucosal drug delivery</td>
</tr>
</tbody>
</table>

### ADMISSION PROCEDURES

**Assessment of QUALIFICATIONS:** up to 50 points  
(a minimum score of 30 points shall be required to be admitted to the Oral Exam)  
**ORAL EXAM:** up to 70 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.

**Possibility of videoconference for candidates residing or temporarily abroad**  
**NO**

### LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

- **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
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

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th>EVALUATION CRITERIA</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Curriculum Vitae et studiorum</strong></td>
<td>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.</td>
<td>Up to 20 points</td>
</tr>
<tr>
<td><strong>Graduation thesis or Draft of the thesis</strong></td>
<td>Consistency of the Master’s Degree thesis with the doctoral programme research topics (briefly describe the topics in the curriculum)</td>
<td>Up to 10 points</td>
</tr>
</tbody>
</table>
| **Research Project**                      | Points relating to the research project shall be allocated on the basis of the following criteria:  
  o Scientific value and ground-breaking nature of the proposal: 5 points  
  o description and structure of the proposal: 5 points  
  o consistency with the themes of the doctorate: doctorate proposal feasibility: 5 points | Up to 15 points |
| **Scientific publications**               | Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings | Up to 5 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 | o knowledge of foreign languages: 10 points  
  o research project presentation: 30 points  
  o general knowledge of issues connected to the PhD course: 30 points | Up to 70 points |
## SCHEDULE OF THE ADMISSION EXAMS

<table>
<thead>
<tr>
<th>ORAL EXAM</th>
<th>DATE</th>
<th>16 September 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TIME</td>
<td>09:30 am</td>
</tr>
</tbody>
</table>
|           | PLACE      | Food and Drugs Department  
Parco Area delle Scienze, 27/A – 43124 PARMA - ITALY |
| OTHER INFORMATIONS | For foreign candidates, the admission examinations may be held in English at the candidate’s choice. |