

DRUG SCIENCES			
CYCLE	XXXVIII		
COORDINATOR	Prof. Marco MOR email: marco.mor@unipr.it Food and Drug Department		
DURATION	3 years		
STARTING DATE OF THE PHD PROGRAM	01/11/2022		

**RESEARCH TOPICS** (The candidate **MUST mandatorily** indicate one research topic in the form ANNEX A and submit a RESEARCH PROJECT in the relevant field)

- 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 program

Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree within the deadline set for enrollment, that is **by 24.10.2022** 

POSITIONS PUT OUT TO COMPETITION		15	With Scholarship		12	
			Reserved for employees of companies or public institutes and research centers engaged in highly qualified activities		3	
Position with Scholarship						
N°	N° Funding entity		Research Topic			
2	2 Scholarship funded by University of Parma (Ministerial funds)		•	Biopharmaceutics-Pharmacokinetics Drug Design and Synthesis		
2	Scholarship funded by University of Parma (University funds)			•	Bio-organic Chemistry Experimental Pharmacology and Toxicology	ogy



1	Scholarship co-funded by Fondazione Cariparma	Drug Design and Synthesis
1	Scholarship funded by Food and Drug Department	Biochemistry and Molecular Biology
1	Scholarship funded by Food and Drug Department	Drug Design and Synthesis
1	Scholarship funded by Food and Drug Department	Biopharmaceutics-Pharmacokinetics

### Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)

During the Oral Exam, applicants may express and/or confirm their interest of being assigned a scholarship linked to a specific research topic. The Examination Board will evaluate their eligibility based on specific competences, experience and specific aptitudes of the applicants.

N°	Funding entity	BOUND RESEARCH TOPIC			
1	Scholarship partly financed with UNIVERSITY funds and co- financed by the Food and Drug Department	<ul> <li>Pharmacological evaluation of new Eph/ephrin ligands</li> </ul>			
1	Scholarship financed with funds under the PNRR- Mission 4 component 1 (Ministerial Decree 351/2022 art. 7 "PNRR Research")  Finanziato dall'Unione europea NextGenerationEU	Drug-delivery strategies for the treatment of degenerative pathologies of the posterior segment of the eye			
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 352/2022) and co-financed by the Company Chiesi Farmaceutici S.p.A.  Finanziato dall'Unione europea NextGenerationEU  MUR	Characterization with spectroscopic / spectrometric techniques of the structure and dynamics of target proteins and of the effects of macro and micromolecular interactors			
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 352/2022) and co-financed by the Company PLUMESTARS S.r.l.  Finanziato dall'Unione europea NextGenerationEU  MUR MUR	Innovative nasal powders for vaccinations and viral infection treatment of viral infections			
Position reserved for EMPLOYEES of companies or public institutes and research centers engaged in highly qualified activities					
N°	Company/Institution				
1	Reserved to employees of company Chiesi Farmaceutici S.p.A.				

# 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

Reserved to employees of company Preclinics Gesellshaft für präklinische Forshung mbH

Reserved to employees of company Laboratorio di analisi La Fontana

1

1

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.

# CANIDATES ADMITTED TO THE ORAL EXAM WILL TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE FOR PROVEN REASONS

(The Oral Exam takes place in the presence.; The remote oral exam is allowed for candidates residing abroad or temporarily abroad for study / work reasons or in isolation / quarantine for COVID-19 virus infection. To this end, candidates must submit a motivated REQUEST as per the model attached to the competition announcement)

### 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 Competition notice)			
Identification Document Sca		nned Copy of a valid identity document with photo (i.e. identity card, passport)			
Curriculum Vitae et stu	udiorum No s	specific CV format is required (see art. 4 of the Competition notice)			
Abstract of the second cycle master's degree thesis. Undergraduate applicants the draft of the thesis approved by their supervisor (abstract/draft of the thesis characters including spaces)					
Qualifications  Certificates and academic transcript of records for both Bachelor' and Master' de containing the following details for each degree held: (art. 4 of the Competition notice University that granted the degree - Type of degree (first cycle/second cycle/single cynome of the degree program - Date of graduation - Final mark - List of exame corresponding scores (academic transcript of records) - Translation into Italian or Equipment (only for degrees issued in languages other than Italian or English).			petition notice): ycle/single cycle) List of exams and		
Research Project	focu the be u sub <u>The</u> of th	e research project shall consist of a maximum of 3 pages, be written in Italian or in English, cused on an original research topic and it shall be structured as follows: introduction of a problem in the scientific context, significance of the problem, expected results. It should noted that the Examination Board can use tools useful for verifying the originality of the omitted Project.  The research project does not represent a constraint with respect to the following choice the doctoral thesis, that shall be defined together with the supervisor and approved by a Academic Board.			
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		cles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters sented at conventions or meetings.			
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	Up to 20 points		

graduation mark.



Graduation thesis			Consistency of the Master's Degree thesis with the doctoral program research topics	Up to 10 points	
Research Project			Points relating to the research project shall be allocated on the basis of the following criteria:  Scientific value and ground-breaking nature of the proposal: 5 points  description and structure of the proposal: 5 points  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 EXAM			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		oroject ability entific eneral	<ul> <li>knowledge of the oreign language: max 10 points</li> <li>research project presentation: max 30 points</li> <li>general knowledge of issues connected to the PhD course: max 30 points</li> </ul>	Up to 70 points	
SCHEDULE OF THE ADMISSION EXAMS					
	DATE	16 Se <sub>l</sub>	ptember 2022 (with possible extension in the following days)		
ORAL EXAM	TIME	09:30			
ONAL LANIN	PLACE	Food and Drug Department Parco Area delle Scienze, 27/A – Campus 43124 PARMA - ITALY			
OTHER INFORMATION For fore choice.			oreign candidates, the admission examinations may be held in English at the candidate's e.		