UNIVERSITÀ DI PARMA

NEUROSCIENCES	
CYCLE	**XXXIX**
COORDINATOR	Prof. Luca BONINI email: luca.bonini@unipr.it Department of Medicine and Surgery
DURATION	3 years
STARTING DATE OF THE PHD PROGRAM	01/01/2024
CURRICULA	1. Neuroscience

TRAINING OBJECTIVES

- Provide a global and interdisciplinary view of the proposed research sectors, offering a high degree of specialization in these research fields
- Acquire skills and abilities in the autonomous use of at least one neuroscientific investigation technique
- Promote the development of networks of national and international relations and exchanges aimed at sharing and deepening the investigated research topic

RESEARCH AREAS

- **Integrated neuroscience**: comparative neurophysiology and neuroethology, cognitive and social neuroscience, cognitive psychology, psychology of perception and action, psychobiology, psychophysiology

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 **by 31.12.2023**

POSITIONS PUT OUT TO COMPETITION	**2**
With Scholarship	2

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

N°	***Funding entity***	***BOUND RESEARCH TOPIC***
1	Scholarship funded by Department of Medicine and Surgery (Project FARE "CIRCEM" Local circuitries and neuronal classes for emotional and social affordances processing in the freely moving monkey R20NJ7BBA7)	Analisys of neuronal dynamics from multielectrode recordings in the monkey

1	Scholarship funded by Department of Medicine and Surgery (Project 2022SP5K99 PNRR-M4C2- I1.1 - PRIN 2022 "Motor resonance during action planning and social interaction: from single neurons to brain circuits" CUP D53D23009860001)	Neuroethological study of social facilitation phenomena in the monkey

ADMISSION PROCEDURES		
Assessment of QUALIFICATIONS: up to 40 points (a minimum score of 20 points must be obtained to be admitted to the Oral Exam) **ORAL EXAM:** up to 80 points **Minimum score for ELIGIBILITY**: 70/120		
Foreign Language	Language the fluency of which shall be assessed during the Oral Exam The evaluation of this language will be oral and will consist in the discussion of the research project presented in English.	**ENGLISH**
ORAL EXAMINATION INDICATION		
THE ORAL EXAM TAKES PLACE IN THE PRESENCE. (The REMOTE ORAL EXAM is allowed for candidates residing abroad or temporarily abroad for study / work. 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	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)	
Curriculum Vitae et studiorum	No specific CV format is required (see art. 4 of the Competition notice)	
Degree thesis	**Abstract** of the second cycle master's degree thesis and **the full thesis** in pdf format. Undergraduate applicants must submit the draft of the thesis approved by their supervisor.	
Academic Qualifications	**Certificates and academic transcript of records for both Bachelor' and Master' degrees** 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 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).	
Research Project	Written in English, 3 pages with single spacing in Times New Roman 12, including bibliography, it must focusing on an original research topic (**unpublished, developed personally by the candidate. It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project**) and it shall be structured as follows: introduction of the problem in the scientific context, relevance of the problem, objectives, expected results. It does not represent a constraint with respect to the following choice of the doctoral thesis, which will be assigned by the Academic Board.	
LIST OF EVALUABLE QUALIFICATIONS (only qualifications attested by a document drawn up in Italian or in English)		

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 graduation mark.	**Up to 40 points**
Curriculum Vitae et Studiorum will be evaluated based on the following qualifications and scores:		
Graduation mark	Score related to the final mark: - 110 with honours (magna cum laude): 10 points; - 110: 7 points - From 108 to 109: 5 points - From 106 to 107: 3 points - 105-106: 1 point - Under 105: 0 points	**Up to 10 points**
Average of the exam marks (if the candidate will attain the degree no later than 31 December 2023)	Score related to the average of the exam marks: - From 29/30 to 30/30: 10 points - From 28/30 to 28.99/30: 7 points - From 27/30 to 27.99/30: 5 points - From 26/30 to 26.99/30: 3 points - Under 26/30: 0 points	**Up to 10 points**
Graduation thesis	Congruence with the research topics of the PhD course and methodological quality of the experimental or bibliographic work. ○ Experimental thesis related to the PhD program of Neuroscience: 10 points ○ Non-experimental and relevant thesis: 5 points ○ Thesis not relevant: 0 points	**Up to 10 points**
Research Project	Project evaluation score: ○ scientific value: 2.5 points ○ structure of the proposal: 2.5 points ○ proposal feasibility in relation to the specific research topics of the PhD course: 2.5 points ○ originality of the proposal: 2.5 points	**Up to 10 points**
Statement of Research Interest	Short text – maximum 1 page – in Italian or in English	**Up to 2 points**
Scientific publications	○ Each article in a peer-reviewed international journal: 1 point ○ Each book chapter: 0.4 points ○ abstracts/papers/posters presented at conferences or symposia: 0.3 points The same categories are half valued if in Italian. The points of the publications are normalized for post-graduate years, that is, divided by the numbers of post-graduate years.	**Up to 5 points**
Other Academic qualifications	Other academic qualifications consistent with the research topics of this PhD program	**Up to 3 points**

UNIVERSITÀ DI PARMA

ORAL EXAM		
Interview Program	**Evaluation CRITERIA**	**POINTS**
The ORAL examination includes: **A) <u>Neurosciences</u>: the oral report on 2 topics chosen by lot from those indicated in the list below:** 1) The origin of the nervous impulses 2) The synapses 3) The reflexes 4) Molecular and cellular bases of signal transduction 5) The motor system 6) The visual system 7) The somatosensory system 8) The autonomic nervous system 9) Neurobiology of language 10) Neurobiology of attention 11) Neurobiology of emotions 12) Memory and learning **B) The presentation and discussion of the research project,** aimed at verifying the candidate's aptitude for scientific research. The discussion will take in English to evaluate the knowledge and the fluency of the language	○ Up to 40 points for the oral report on the two topics extracted (up to 20 points per topic) ○ Up to 20 points for the project presentation ○ Up to 20 points for knowledge of the foreign language	**Up to 80 points**

SCHEDULE OF THE ADMISSION EXAMS		
It is the candidate's responsibility to verify the outcome of the evaluation of qualifications, which can be consulted in their reserved area by connecting to the page http://unipr.esse3.cineca.it/Home.do in the days preceding the date of the Oral Exam.		
ORAL EXAM	**DATE**	23 November 2023
	TIME	09:00 AM (Italian Time)
	PLACE	Lecture Room – Institute of Physiology Department of Medicine and Surgery Integrated Biotechnological Plexus Via Volturno, 39 – 43125 PARMA - ITALY
ALTRE INDICAZIONI		For foreign candidates, the admission examinations may be held in English at the candidate's choice.