







BIOTECHNOLOGY AND LIFE SCIENCE				
CYCLE XXXVIII				
COORDINATOR	Prof. Marco VENTURA email: <u>marco.ventura@unipr.it</u> Department of Chemistry, Life Sciences and Environmental Sustainability			
DURATION	3 years			
STARTING DATE OF THE PHD PROGR	AM 01/11/2022			
RESEARCH TOPICS (The candidate M	<b>UST mandatorily</b> indicate one research topic in the form ANNEX A)			
<ul> <li>Environmental</li> <li>Biomolecular</li> <li>Genetics and microbiology</li> </ul>				
TRAINING OBJECTIVES				
The PhD in Biotechnology and Biosciences aims to train experts who can carry out advanced research activities in the biological disciplines and biotechnology. The Doctor's research themes concern the study of the function, organization and expression of the genome of microbial, plant and animal organisms (including humans), to deepen their basic knowledge, also in view of possible applications in biotechnology. The methodologies used are mainly those of genetic, microbiology, molecular biology, biochemistry and applied biology. Starting from this common objective and from a highly cross-cutting advanced teaching activity, in order to train PhDs with highly qualified skills in specific areas of Biotechnology and Life Sciences, three main areas of research defined as such: 1) environmental; 2) genetics and microbiology; 3) biochemical-molecular. PhD students will be involved full-time in a research project, to which they will also make critical and proactive contributions. In this way, they will acquire a marked scientific and management autonomy, also thanks to the numerous scientific, national and international collaborations in which they will be involved.				
ADMISSION REQUIREMENTS       Regardless of age and citizenship, applicants holding at least one of the following academ qualifications can apply for admission: <ul> <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 Italia degrees and recognized as suitable for the admission to doctoral program</li> </ul> Undergraduates can also apply for admission to the selection, with the obligation to obtai the degree within the deadline set for enrollment, that is by 24.10.2022				

POSIT	TIONS PUT OUT TO COMPETITION	7	With So	holarship	7
	Position with Scholarship				
N°	Funding entity			Research Topic	
3	Scholarship funded by University of Parma (Ministerial funds)		<ul> <li>Environmental</li> <li>Biomolecular</li> <li>Genetics and microbiology</li> </ul>		
1	Scholarship funded by University of Parma (University funds)		• Biomolecular		
1	Scholarship co-funded by Fondazione Cariparma		• Environmental		









### 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 financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 351/2022 art. 7 "PNRR Research") Finanziato dall'Unione europea NextGenerationEU	• The topic of the research encompasses the role of foods as a vehicle for the delivery of microbial communities influencing the health status of the host through a modulation of the intestinal microbiota composition
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	<ul> <li>The topic of the research includes the molecular characterization of preclinical model of lung diseases</li> </ul>

ADMISSION PROCEDURES		Assessment of QUALIFICATIONS: up to 40 points (a minimum score of 18 points shall be required to be admitted to the Oral Exam) ORAL EXAM: up to 80 points Minimum score for ELIGIBILITY: 70/120		
Foreign Language	Foreign LanguageLanguage the fluency of which shall be assessed during the Oral Exam: ENGLISH.Foreign LanguageThe evaluation of the knowledge of this language will be oral and will consist in reading and translat of a scientific text.			
(The Oral Evam tak	OR REMO	TS ADMITTED TO THE ORAL EXAM WILL TAKE THE EXAM IN PRESENCE TELY IN AUDIO AND VIDEO TELECONFERENCE FOR PROVEN REASONS he presence.; The remote oral exam is allowed for candidates residing abroad or temporarily		
abroad for study / w	ork reasons	or in isolation / quarantine for COVID-19 virus infection. To this end, candidates must submit 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 t		(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 s	studiorum	No specific CV format is required (see art. 4 of the Competition notice)		
Abstract of degree thesis		Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)		
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).		









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	Articles on national and international journals, papers presented at conferences or symposia, book chapters and indexed national publications.		
CITNOR ACORDIC AUDITICATIONS	First or second level Master's degree obtained in Italy and/or specialization degree subjects consistent with the research topics of this PhD program		
Other experiences (training, work, research, teaching, etc.)	<ul> <li>Periods of study abroad, outside th country of origin (e.g. Erasmus p similar mobility programmes)</li> <li>Other qualifications attesting the suitability of the applicants (schol grants, awards, etc.)</li> </ul>	-	
I	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 graduation mark.	Up to 5 points	
	The marks of the exams and the graduation mark will be the most relevant element of the evaluation.		
Graduation mark	Score related to the final mark:       -         - 110 with honours (magna cum laude): 20 points;       -         - 110: 18 points;       Up to 2         - From 103 to 109: points 4-16 (2 points for each mark unit);       -         - Until 102: 3 points.       -		
Average of the exam marks (if the candidate will attain the degree no later than 24 October 2022)	Score related to the average of the exam marks: - 30/30: 18 points; - From 22/30 to 29/30: points 2-16 (2 points for each unit average score)	Up to 18 points	
Graduation thesis	Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae)	Up to 6 points	
Scientific publications	Publications in <i>peer-rewiewed</i> international journals: 2 points for each publication (for evaluation purposes it is mandatory to attach a pdf copy of each publication to the application)	Up to 6 points	
Communiations to conferences, publication in indexed national journals, book chapters	1 point for each conference abstract, publication in indexed national journals or book chapters (for evaluation purposes it is mandatory to attach a pdf copy of each term to the application)	Up to 3 points	
ORAL EXAM	EVALUATION CRITERIA	POINTS	
The ORAL EXAM is inted to assess t aptitude of the applicant to t research as well as the gene knowledge of issues connected to t PhD course	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	Up to 80 points	
		-	









SCHEDULE OF THE ADMISSION EXAMS				
	DATE	15 September 2022 (with possible extension in the following days)		
ORAL EXAM	TIME	09:00 AM (Italian Time)		
PLACE		AULE A and B PODERE LA GRANDE Campus Universitario 43124 PARMA - ITALY		
OTHER INFORMATION		The applicant MUST indicate in the application his/her preference for one of the three main research topics proposed in the selection announcement (Environmental, Genetics and microbiology, Biomolecular). For foreign candidates, admission examinations may be held in English as per candidate's request.		









# ECONOMICS & MANAGEMENT OF INNOVATION AND SUSTAINABILITY (EMIS)

CYCLE	ХХХУШ
COORDINATOR	Prof.ssa Beatrice LUCERI Department of Economics and Management email: <u>Beatrice.luceri@unipr.it</u>
DURATION	3 years
STARTING DATE OF THE PHD PROGRAM	01/11/2022
PARTNER INSTITUTION	<ul><li>University of Ferrara</li><li>University Cattolica del Sacro Cuore</li></ul>

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

- Regulatory aspects and effects of agricultural and agri-food policies
- Branding and value creation
- Consumer behavior and marketing management
- Determination and communication of value in businesses
- Knowledge economy, organization, human capital and labour
- Culture economics: management and policies
- Environmental and natural resources economics
- Economics and public management
- Economics and industrial and development policy
- Finance and risk management
- Health care and health management
- Performance evaluation, balance analysis and business management auditing
- New entrepreneurship, business strategy and management development
- Intangible resources and management systems, financial and non-financial assessment and reporting
- Economic decisions under uncertain contexts
- Regional and territorial systems

### TRAINING OBJECTIVES

The course is designed to train Ph.D. students having a background in economic-business and economic-political, according to a theoretical and quantitative perspective and integrating – as a particular specificity of the course – economic, management, and mathematical-statistical tools. The aim is to provide students with the knowledge and skills useful for successful employability in academia, in companies or public authorities in job positions with a strong research connotation in the regional, Italian and European labor markets.

To this end, the Ph.D. program is structured to develop:

- a solid knowledge of the processes of business management and organization, as well as the processes of management of socio-economic phenomena and policy at regional and macroeconomic levels, through the completion of the basic preparation and the learning of appropriate research methodologies;
- a specialized theoretical and applicative preparation in the specific research area in which the Ph.D. program has declined the innovation and sustainability topic.

The educational objectives are achieved by offering a set of courses on consolidated and innovative research methods in the social sciences, qualitative and quantitative analysis tools and on the most relevant theoretical perspectives, with a strong interdisciplinary approach. Specifically, the first year is devoted to transferring the basic knowledge needed to appropriately structure the research project. The courses deal with bibliographic research, research design, quantitative and qualitative research techniques, tools for analyzing qualitative and quantitative data, and decision-making models of different economic actors. Starting from the second year, specific research activities, lectures and seminars consistent with the Ph.D. student's field of research, as well as courses aimed at the development of soft skills, language skills, and computer skills, complete the training. At the same time, the Ph.D. student starts writing the thesis that represents the main commitment of the third year.

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Special emphasis is placed on international mobility and periods of study abroad at qualified research institutions, aimed at individual growth and the advancement of the doctoral thesis project. In summary, a training course that, after providing the methodological foundations of scientific research, is custom designed on the specific interests and skills of each Ph.D. student.

	Regardless of age and citizenship, applicants holding at least one of the following academic qualifications			
	can apply for admission:			
	<ul> <li>"Laurea Magistrale" LM-16 Finance</li> </ul>			
	<ul> <li>"Laurea Magistrale" LM-31 Management Engineering</li> </ul>			
	<ul> <li>"Laurea Magistrale" LM-35 Environmental Engineering</li> </ul>			
	<ul> <li>"Laurea Magistrale" LM-40 Mathematics</li> </ul>			
	<ul> <li>"Laurea Magistrale" LM-52 International relations</li> </ul>			
	<ul> <li>"Laurea Magistrale" LM-56 Economics</li> </ul>			
	<ul> <li>"Laurea Magistrale" LM-62 Political Science</li> </ul>			
	<ul> <li>"Laurea Magistrale" LM-63 Public Administration</li> </ul>			
	<ul> <li>"Laurea Magistrale" LM-76 Environmental and cultural economics</li> </ul>			
ADMISSION REQUIREMENTS	<ul> <li>"Laurea Magistrale" LM-77 Management</li> </ul>			
	<ul> <li>"Laurea Magistrale" LM-81 Development co-operation</li> </ul>			
	<ul> <li>"Laurea Magistrale" LM-82 Statistics</li> </ul>			
	<ul> <li>"Laurea Magistrale" LM-83 Actuarial, Financial and Economic Statistics</li> </ul>			
	<ul> <li>"Laurea Magistrale" LM-90 European studies</li> </ul>			
	as well as the equivalent "laurea specialistica" or "laurea" achieved based on the university system in			
	force before the entry into force of Italian Ministerial Decree No. 509/99			
	– 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			With Scholarship		14
	OMPETITION	15	With Scholarship reserved for abroad	or candidates that have achieved degreee	1
			Position with Schol	arship	
N°	Funding entity		entity	Research Topic, if any	
2	Scholarship funded by University of Parma (Ministerial funds)				
3	Scholarship funded by University of Ferrara		of Ferrara		
1	Scholarship funded by University Cattolica del Sacro Cuore		v Cattolica del Sacro Cuore		
1	Scholarship co-funded by Fondazione Cariparma		zione Cariparma		
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.

<u> </u>		
N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship financed by University Cattolica del Sacro Cuore under the PNRR– Mission 4 component 1 <b>(Ministerial Decree</b> <b>351/2022 art. 8</b> "Public Administration") Finanziato dall'Unione europea NextGenerationEU	Management innovation in Public Administration The project is intended to investigate PA governance and management systems with the aim of identifying structures, practices and tools capable of accelerating innovation processes. Within the same framework is the activity aimed at investigating the necessary skills that will provide the basis and operational tools to carry out reforms, changes and adaptations with a view to deep renewal. Particularly

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		relevant will be the issue of change-management, the propulsive heart of those renewal and innovation actions required by the changed social, environmental and economic context and by the PNRR itself. With reference to PA and innovation, it is of primary importance to investigate the areas most affected by the recent evolution of all socio-economic, as well as human- relational, systems, in order to identify the risks related to any intrinsic rigidities in the management and governance system and the main opportunities related to change. The construction of a mapping of what are to date the active best practices and the main enabling factors for innovation will lead to selecting the adaptation/change paths most in line with the conditions of the reference context and the current historical period. Scientific coordinator: Prof. Francesco TIMPANO – Catholic University of the Sacred Heart
1	Scholarship financed with funds under the PNRR– Mission 4 component 1 <b>(Ministerial Decree 351/2022 art. 7</b> "PNRR Research") Finanziato dall'Unione europea NextGenerationEU	Sustainable assortments and integrated supply chain management The project aims to analyze sustainable strategies adopted by retailers with reference to assortment management. The main focus will be on factors driving products selection with a particular interest in private labels, that are entirely developed and managed by retailers. The research will also focus on consumer behavior investigating consumers' attitude, perception and behavioral intention towards sustainable choices. Interest will be focused on the role of digital technologies in environmental transition. In this context, the development and use of mobile apps in supporting sustainable policies, namely in facilitating consumers' virtuous behaviours, will be analyzed. Scientific Coordinators: Proff. Guido CRISTINI, Sabrina LATUSI and Donata Tania VERGURA – University of Parma.
4	Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 351/2022 art. 8 "Public Administration") Finanziato Mail/Unione europea NextGenerationEU	<ol> <li>Organisation and performance of Public Administration Good performances in terms of services' quality and capacity to manage risks among public organizations are strictly related to competencies of people working within such organizations. Therefore, there's a strong need to develop and incentivize the improvement of these skills.</li> <li>The research project aims to define management and leadership competencies that will be needed in public organizations in the forthcoming years.</li> <li>The PhD student will have the chance to improve his/her knowledge of the Italian public system, through empirical and in-depth case studies analyses. He/She will also collaborate with major public entities across the whole national territory (Universities, health organizations, schools, local authorities, penitentiary institutions, etc.). Results of his/her work will be presented at national and international conferences.</li> <li>Furthermore, the PhD student will be entitled to spend a period of time abroad, in order to acquire new competencies and get to know new contexts.</li> <li>Scientific coordinator: Prof. Antonello ZANGRANDI - University of Parma.</li> <li>Technological innovation in healthcare enterprise management: the telemedicine</li> <li>Telemedicine represents today one of the greatest innovation in the field of health technologies. It grants equal access to health services, stamping out possible waste of resources and allowing upstanding performances.</li> </ol>









The research project aims to assess the implementation and management of tele-medicine services according to effectiveness and efficiency principles.

The PhD student will be asked to study the elements guiding the technological innovation among health organizations, with a multidisciplinary approach.

He/she will gain a strong knowledge of the Italian public health context, thanks to different collaborations with major public health organizations (University-hospitals, IRCCS, public hospitals, etc.). Results of his/her work will be then presented to national and international conferences.

Furthermore, the PhD student will be entitled to spend a period of time abroad, in order to acquire new competencies and get to know new contexts.

Scientific coordinator: Prof. Antonello ZANGRANDI - University of Parma.

#### 3. Reform of the PA and local government accounting

In 2026 all Italian local authorities are anticipated to implement accrual accounting systems. This is one of the major outcomes of reforms related to the PNRR (National recovery and resilience plan) that will invest the world of public accounting and, as such, it will have a strong impact on all the organizations financially struggling.

Furthermore, considering the legal obligations related to the PNRR, the financial struggles of local municipalities are even more significant, as they may prevent the reaching of all goals stated by the PNRR.

The PhD student will be asked to sketch what critical factors can lead to financial distress for local authorities, isolating potential solutions for critical situations.

He/she will gain a strong knowledge of the Italian public accounting principles, and will collaborate with major public local authorities (municipalities, regions, etc.). Results of his/her work will be then presented to national and international conferences.

Furthermore, the PhD student will be entitled to spend a period of time abroad, in order to acquire new competencies and get to know new contexts.

Scientific coordinator: Prof. Marco FERRETTI - University of Parma.

# 4. Companies with public participation: opportunities and critical issues

Financial distress for municipal organizations is often related to the companies in which a stake is held and their impact on the holding accounting.

In light of this, the project's aim consists in identifying suitable models to assess subsidiaries performances, in order to prevent potential financial struggling for the whole holding.

The object of the research will consist in: risk management assessment, balance sheets analyse as well as management control evaluations. The PhD student will thus focus his/her work on these fields and provide useful insights for scholars and managers.

These activities will improve the PhD student knowledge of the Italian public system, through empirical and in-depth analyses of different cases. The PhD student will also collaborate with major public holdings. Results of his/her work will be then presented to national and international conferences.



**Foreign Language** 

Finanziato dall'Unione europea NextGenerationEU







		Furthermore, the PhD student will be entitled to spend a period of time abroad, in order to acquire new competencies
		and get to know new contexts.
		Scientific coordinator: Prof. Marco FERRETTI - University of
		Parma.
		Models of sustainable nutrition, health and well-being of
		citizens
		NielsenIQ, leading global market research, and big data company, supports the research activity within the Ph.D.
		EMIS by providing a scholarship aimed at setting up an
		observatory on fresh products. Despite these categories
	Scholarship co-financed with funds under the PNRR - Mission	being of high importance for the supply chain in the food
	4 component 2 (Ministerial Decree 352/2022) and co-	sector, there is currently a lack of a consolidated
1	financed by the Company NielsenIQ Italy S.r.l.	measurement system that can provide useful data to guide business choices.
-	Finanziato	Through analytical tools and the use of NielsenIQ databases,
	dall'Unione europea NextGenerationEU NextGenerationEU	together with the skills gained during the Ph.D., the candidate
	NextGenerationEO e anda - garcara	will be able to design innovative systems for measuring the
		performance of these categories. The research activity will produce valuable results for manufacturers and retailers that
		can identify effective ways to promote proper nutrition for
		the health of citizens and collective well-being.
		Scientific Coordinators: Proff. Silvia BELLINI and Davide
		PELLEGRINI - University of Parma. Quality and risk management in health care
		companies
		Progea Srl is a leading company in the field of consulting and
		education for health organizations in Italy, and it will co-fund
		a PhD study grant at University of Parma. The focus of the research will consist in the analysis of
		organizational variables impacting on risk management and
	Scholarship co-financed with funds under the PNRR - Mission	quality performances of health organizations across the
	4 component 2 (Ministerial Decree 352/2022) and co-	country.
	financed by the Company PRO.GE.A. S.r.I.	The PhD student will be asked to study organizational models concerning quality processes and risk management
1		assessment among Italian hospitals.
	Finanziato dall'Unione europea	He/she will gain a strong knowledge of the Italian public
	NextGenerationEU e delle Revea	health context, thanks to different collaborations with major
		public health organizations (University-hospitals, IRCCS, public hospitals, etc.). Results of his/her work will be then
		presented to national and international conferences.
		Furthermore, the PhD student will be entitled to spend a
		period of time abroad, in order to acquire new competencies
		and get to know new contexts. Scientific coordinator: Prof. Marco FERRETTI - University of
		Parma.
	Assessment of QUALIFICATIONS: up	-
ADM	INNON PROCEDURES	pe required to be admitted to the Oral Exam)
	ORAL EXAM: up to 45 points	

The evaluation of the knowledge of this language will be oral and will consist in presenting a part of the

Minimum score for ELIGIBILITY: 70/120

research project in English.

Language the fluency of which shall be assessed during the Oral Exam: ENGLISH.

CANDIDATES ADMITTED TO THE ORAL EXAM CAN TAKE IT EITHER IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE

(Applicants who intend to take the Oral Exam remotely must submit a formal request, using the form attached to the competition notice)









THE INTERVIEW MAY BE HELD ALSO IN ENGLISH						
LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT						
MANDATORY DOCUMENTS TO B	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)					
Abstract of degree thesis	Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)					
Qualifications	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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 Italian or in English, according to the format attached to the competition notice It will have to focus on an original research topic ( <b>unpublished</b> , <b>developed personally by</b> <b>the candidate. It should be noted that the Examination Board can use of IT tools useful for</b> <b>verifying the originality of the submitted Project</b> ) <u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u> , which will be assigned by the Academic Board.					
	MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT document drawn up in Italian or in English)					
Statement of Research interest	Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests					
Scientific Publications	Articles and/or reviews in scientific journals with peer reviewing, abstracts of papers or posters presented at conventions or meetings					
Other Academic qualifications	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program					
Other experiences (training, work, research, teaching, etc.)	<ul> <li>Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covedered by research grant, and as a staff member of research units</li> <li>Working activity</li> <li>Professional and/or training internship</li> <li>Language proficiency certificates</li> <li>Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.) Continuous and lasting experiences will be privileged - at least one semester - and will be evaluated only if they are recognized as functional to the acquisition of skills, experience and qualification within the research areas of the PhD course</li> </ul>					
	EVALUATION CRITERIA					

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QUALIFICATION			EVALUTATION CRITERIA	POINTS
			e related to the final mark or to the average of the exam marks for luands.	Up to 12 points
Other qualifications			lified professional experiences (in the case of professional eriences, continuous and lasting ones will be privileged - at least semester - and will be evaluated only if they are recognized as tional to the acquisition of skills, experience and qualification in the arch areas covered by the specific doctoral course ); other lemic qualifications (masters, advanced courses, at least two- thly training courses provided by university-level training tutions or bodies); didactic, seminar or university training eriences.	Up to 12 points
Scientific publications			assessment will be carried out with a view to accessing the PhD rse and taking into account the degree of maturity required for the cific position. If publications of which a copy has been included among the ifications presented will be evaluated and not any publications of exclusively in the curriculum and / or in the form of a list.	Up to 6 points
Graduation thesis			gruence with the research topics of the PhD course and quality of research methodology	Up to 15 points
Research Project		origi	project will be evaluated based on the scientific value, the inality of the proposal, the articulation, the feasibility of the posal and the consistency with the themes of the doctorate.	Up to 24 points
Statement of Resea	arch Interest		motivation and interest in attending the PhD course will be uated.	Up to 6 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 scientife research as well as the genere knowledge of issues connected to the PhD course		bility ntific neral	ject ility tific o research project presentation: max 35 points eral Up to 45 points	
			SCHEDULE OF THE ADMISSION EXAMS	
DATE		19 September 2022 (with possible extension to 20 September 2022)		
ORAL EXAM	TIME	09:00	AM (Italian Time)	
	PLACE	Via J.F	tment of Economics and Management . Kennedy, 6 PARMA - ITALY	
<b>OTHER INFORMATION</b> For foreign candidates, the admission examinations may be held in Erchoice.				h at the candidate's









DUVCIOC					
PHYSICS					
CYCLE	XXXVIII				
COORDINATOR	Prof. Stefano CARRETTA email: <u>stefano.carretta@unipr.it</u> Department of Mathematical, Physical and Computer Sciences				
DURATION	3 years				
STARTING DATE OF THE PHD PRO	OGRAM 01/11/2022				
<b>RESEARCH TOPICS</b> (The candidate RESEARCH PROJECT in the releva	e <b>MUST mandatorily</b> indicate one research topic in the form ANNEX A and submit a nt field)				
<ul> <li>Spectroscopic characterization of minerals interesting for the environmental sciences</li> <li>Computational and theoretical models of single neuron dynamics and collective dynamical regimes of neuronal activity in non-human primates (<i>Bound research topic</i>)</li> <li>Molecular spins for Quantum Technologies beyond the qubit encoding (<i>Bound research topic</i>)</li> <li>Methods to find the super-spreaders in complex networks</li> <li>Emulsion Dynamics on Earth and in Microgravity</li> <li>Gauge Theories and Holography at the Crossroads</li> <li>Precision tests of fundamental physics from the Large Scale Structure of the Universe (<i>Bound research topic</i>)</li> <li>Artificial intelligence models: development and application on in vivo X-ray imaging in drug discovery (<i>Bound research topic</i>)</li> <li>Nonlinear evolution in open many-body quantum systems</li> </ul>					
TRAINING OBJECTIVES					
The PhD in Physics, with a duration of 3 years, is established as a unifying element of the third-level University education in the Physics area. Besides their main commitment to the research activity, students are supposed to spend a substantial part of the training period in attending advanced courses as well as national and international schools. Students are encouraged to spen part of their time abroad, in order to participate in scientific collaborations in their fields of interest, and follow advance courses in support of their research program. During the three years, teaching commitments are progressively reduced towar a full time engagement in the research activity. The evaluation of the training program is carried out - at the end of each yea through open seminars held by the students. The independent scientific research is expected to lead to publication of results international, peer reviewed journals. The ultimate goal of the PhD in Physics is a highly specialized scientific training that ope professional carriers in academic institutions and research laboratories, either public or private. The PhD in Physics is divide into three areas corresponding to major groups of disciplines of Physical Sciences covered by the research activity of the Department of Mathematical, Physical and Computer Sciences: Condensed Matter and Materials Physics, Theoretical Physical Biophysics and Applied Physics.					
	<ul> <li>Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul> <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 Italiar degrees and recognized as suitable for the admission to doctoral program</li> </ul> </li> <li>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</li> </ul>				

POSITIONS PUT OUT TO COMPETITION	9	With Scholarship	9









	Position with Sch	olarship
N°	Funding entity	Research Topic, if any
3	Scholarship funded by University of Parma (Ministerial funds)	
1	Scholarship co-funded by Fondazione Cariparma	
	Position with Scholarship LINKED TO SPECIFIC TO	PICS (art. 11 of the Competition notice)
resea	g the Oral Exam, applicants may express and/or confirm their i rch topic. The Examination Board will evaluate their eligibility udes of the applicants.	
N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship partly financed with UNIVERSITY funds and co- financed by the Department of Medicine and Surgery (Project ERC CoG "EMACTIVE")	<ul> <li>Computational and theoretical models of single neuron dynamics and collective dynamical regimes of neuronal activity in non-human primates</li> </ul>
1	Scholarship funded by INFN – The Italian National Institute for Nuclear Physics	• Precision tests of fundamental physics from the Large Scale Structure of the Universe
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	<ul> <li>Molecular spins for Quantum Technologies beyond the qubit encoding</li> </ul>
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co- financed by the Company Chiesi Farmaceutici S.p.A. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Artificial intelligence models: development and application on in vivo X-ray imaging in drug discovery</li> </ul>
1	Scholarship financed under the PNRR – Mission 4 component 2 – Investment 1.4 NATIONAL CENTER for sustainable mobility Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Inference and reconstruction of mobility temporal networks and mobility flows in urban areas</li> <li>Temporal complex networks represent an ideal field of research for the study of interacting social systems within cities and collaborative environments and are used to effectively monitor the evolution of communities, movement and interaction with the environment and services. The proposed research project is embedded in this research area and is developed within the National Center for Sustainable Mobility activities funded by PNRR projects. In this project, theoretical and numerical models will be developed for mobility flows and patterns of aggregation and higher order interaction within urban areas and the University Campus of Parma, exploiting data from multiple sources. The aim is to develop effective modelling for the generation of sustainable and inclusive mobility scenarios</li> </ul>









ADMISSION PROCEDURES (a		(a min <b>ORAL</b>	Assessment of QUALIFICATIONS: up to 50 points a minimum score of 20 points shall be required to be admitted to the Oral Exam) DRAL EXAM: up to 70 points Minimum score for ELIGIBILITY: 70/120			
<b>Foreign Language</b> Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> .						
	APPLICA	-	MITTED TO THE ORAL EXAM CAN TAKE IT EITHER IN PRESENCE REMOTELY IN AUDIO AND VIDEO TELECONFERENCE			
(Applicants who	intend to t	ake the	oral Exam remotely must submit a formal request, using the form a competition notice)	attached to the		
		٦	THE INTERVIEW MAY BE HELD ALSO IN ENGLISH			
I	LIST OF Q	UALIF	ICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT			
MANDATORY DOCUM	MENTS TO	BE ATT/	ACHED TO THE ON-LINE APPLICATION			
ANNEX A		(art. !	5 of the Competition notice)			
Identification Docum	ent	Scar	nned Copy of a valid identity document with photo (i.e. identity card	, passport)		
Curriculum Vitae et s	tudiorum	No s	pecific CV format is required (see art. 4 of the Competition notice)			
Abstract of degree th	iesis		act of the second cycle master's degree thesis. Undergraduate applicants must submit raft of the thesis countersigned by their supervisor.			
Qualifications		cont Univ Nam corr	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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 and Statement of Research interest		and choi proj resu <u>http</u> It <u>dc</u>	A brief text (max 3 pages) in English. The candidates must describe their research interests and indicate the preferred topic among those listed above, possibly suggesting a second choice theme. For the first choice theme, candidates must outlay an original research project including a concise state of the art, the relevance of the problem and the expected results. Candidates are warmly invited to contact the potential supervisors listed at http://smfi.unipr.it/it t does not represent a constraint with respect to the following choice of the doctoral thesis, chat shall be defined together with the supervisor and approved by the Academic Board.			
			BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APP nent drawn up in Italian or in English)	PLICANT		
()ther augustications		-	other document certifying the applicant's training and abilities. Pu entations to scientific meeting, stages, fellowships, reference letters			
			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 graduation mark.	Up to 25 points		









Graduation thesis			Consistency of the Master' Degree thesis with the doctoral program research topics. The assessment will make use of the information contained in the abstract (max 1 page) of the thesis (although not yet discussed, in this case countersigned by the thesis supervisor) and in the curriculum, where a brief description of the thesis work should be reported.	Up to 5 points	
Research Project a Research Iterest	nd Statemen	nt of	The project will be evaluated in relation to its scientific value and originality. The motivation expressed by the candidate in relation to the themes of the research doctorate will be evaluated	Up to 10 points	
Other qualification	S		Publications, awards, presentations to scientific meeting, stages, fellowships, reference letters, etc	Up to 10 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		ability entific eneral	<ul> <li>preparation on the issues related to the Master's degree thesis</li> <li>research project presentation</li> <li>general knowledge of issues connected to the PhD course</li> <li>knowledge of the foreign language</li> </ul>	Up to 70 points	
	T	1	SCHEDULE OF THE ADMISSION EXAMS		
ORAL EXAM	DATE TIME	10:00	15 September 2022 (with possible extension in the following days) 10:00 AM (Italian time) The schedule of oral examinations will appear at <u>http://smfi.unipr.it/it</u>		
	PLACE	Depar PHYSI Parco	tment of Mathematical, Physical and Computer Sciences CS BUILDING Area delle Scienze, 7/A – Campus PARMA - ITALY		
Gradu that t Progr the U OTHER INFORMATION In the and s		Gradu that th Progra the Ur In the and sp For fo	Dral Exam will focus on the description of the research work carried out to prepare the uation Thesis for the Laurea Magistrale/Specialistica, as well as on the research project the candidate proposes to carry out within the research topics of the Research Doctorate ram in Physics at the Department of Mathematical, Physical and Computer Sciences of University of Parma which are described at <a href="http://smfi.unipr.it/it">http://smfi.unipr.it/it</a> e application to participate in the competitive examination, the candidate must choose specify one research topic. The candidate may indicate a second priority choice.		









CIVIL ENGINEERING AND ARCHITECTURE				
CYCLE	ХХХУШ			
COORDINATOR	Prof. Sandro LONGO email: <u>sandro.longo@unipr.it</u> Department of Engineering and Architecture			
DURATION	3 years			
STARTING DATE OF THE PHD PROGRAM	01/11/2022			
<b>RESEARCH TOPICS</b> (The candidate <b>MUST</b> RESEARCH PROJECT in the relevant field)	mandatorily indicate one research topic in the form ANNEX A and submit a			
<ul> <li>Infrastructure and Environment</li> <li>Structural and Geotechnical Eng</li> <li>Architecture and Urban Plannin</li> </ul>	ineering			
TRAINING OBJECTIVES				
Т	o develop specialized skills in the following fields:			
<ol> <li>Infrastructure and Environmental Engineering: civil infrastructures for transport; survey, management, and analysis of land data, control and monitoring of displacements and deformations at all scales; issues related to surface waters and groundwater;</li> <li>Structural and Geotechnical Engineering: mechanical behaviour of materials, structural components and structures; behaviour of soils and geotechnical structures;</li> <li>Architecture and Urban Planning: theoretical, formal, distributional and functional aspects in architecture; the problems related to methods for survey and to computer-graphics in architecture; issues related to the implementation and the development of urban settlements; historical, artistic, technical and aesthetic themes in the architecture of the past.)</li> </ol>				
ADMISSION REQUIREMENTS Under	less of age and citizenship, applicants holding at least one of the following academic ations can apply for admission: rea specialistica or Laurea magistrale (second cycle master's degree) rea Vecchio Ordinamento (degree obtained under the previous Italian regulations); ond cycle Master's degree obtained abroad, equivalent to the above mentioned Italian grees and recognized as suitable for the admission to doctoral program graduates can also apply for admission to the selection, with the obligation to obtain gree within the deadline set for enrollment, that is <b>by 24.10.2022</b>			

			With Scholarship	
POSIT	POSITIONS PUT OUT TO COMPETITION		Reserved to holders of scholarship within specific international mobility programs	
			Reserved for employees of companies or public institutes and research centers engaged in highly qualified activities	
		Posi	ion with Scholarship	
N°	N° Funding entity		Research Topic,	if any
3	Scholarship funded by University of	f Parma (Mir	sterial funds)	









2	Scholarship funded by University of Parma (University funds)							
1	Scholarship co-funded by Fondazione Cariparma							
	Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)							
resea	g the Oral Exam, applicants may express and/or confirm their intro- rch topic. The Examination Board will evaluate their eligibility b ides of the applicants.							
N°	Funding entity	BOUND RESEARCH TOPIC						
1	Scholarship partly financed with UNIVERSITY funds and co- financed by the Department of Engineering and Architecture	<ul> <li>Fracture model of elastomeric multilayers and simulation of failure in tyres</li> </ul>						
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 352/2022) and co- financed by the Company SISGEO S.r.l. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Innovative monitoring system for railways</li> </ul>						
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co- financed by the Company ANDRITZ Hydro Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Development of a Smoothed Particle Hydrodynamics model for hydraulic turbines simulation</li> </ul>						
1	Scholarship financed under the PNRR – Mission 4 component 2 – Investment 1.4 NATIONAL CENTER for sustainable mobility Finanziato dall'Unione europea NextGenerationEU	• Railway Infrastructure Definition of data-driven and model-based methods for monitoring, diagnosis, and predictive maintenance of rail infrastructure, with a focus on subballast-ballast-rail systems and related joints. Sustainable solutions and decision support for civil infrastructure analysis and management						
1	Scholarship financed under the PNRR – Mission 4 component 2 – Investment 1.4 NATIONAL CENTER for sustainable mobility Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Planning Cities of Proximity: urban retrofit planning scenarios for accessible and inclusive public spaces</li> </ul>						
1	Scholarship financed under the PNRR – Mission 4 component 2 – Investment 1.5 Ecosystem for sustainable Transition in Emilia-Romagna Finanziato dall'Unione europea NextGenerationEU	<ul> <li>New architectural typologies of public service in the social-health sector in the definition of peripheral urban centralities</li> </ul>						
1	Scholarship financed under the PNRR – Mission 4 component 2 – Investment 1.5 Ecosystem for sustainable Transition in Emilia-Romagna Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Performance-based planning of pedestrian and bicycle networks to improve spatial and urban accessibility</li> </ul>						









	Reserved to HOLDERS OF SCHOLARSHIP WITHIN SPECIFIC INTERNATIONAL MOBILITY PROGRAMS					
N°	Agreements/Cooperations/Mobility Programs					
2	Reserved to holders of scholarship under the mobility program or other forms of financial support under the EU Project H2020 - MSCA ITN "Innovative Training Networks" CIRPAV 101072820					
	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 Autovie Venete S.p.A.					

ADMISSION PROCEDURES		Assessment of QUALIFICATIONS: up to 70 points (a minimum score of 40 points shall be required to be admitted to the Oral Exam) ORAL EXAM: up to 50 points Minimum score for ELIGIBILITY: 70/120				
ADMISSION PROCEDURES for pos reserved to scholarship holders w specific international mobility pro		within	Assessment of QUALIFICATIONS: up to <b>120</b> points Minimum score for ELIGIBILITY: 70/120			
• •			the fluency must be assessed during the Oral Examination: <b>ENGLISH</b> . wledge of this language will be oral and will consist in reading and translating a			
(Applicants who		OR REMOT	D TO THE ORAL EXAM CAN TAKE IT EITHER IN PRESENCE FELY IN AUDIO AND VIDEO TELECONFERENCE			
	competition notice) THE INTERVIEW MAY BE HELD ALSO IN ENGLISH					
	LIST OF Q	UALIFICATI	IONS TO BE SUBMITTED AND THEIR ASSESSMENT			
MANDATORY DOCU	MENTS TO	BE ATTACHED	TO THE ON-LINE APPLICATION			
ANNEX A		(art. 5 of the	e Competition notice)			
Identification Docun	nent	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)				
Abstract of degree thesis		Abstract of the second cycle master's degree thesis. Undergraduate applicants must subm the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)				
Qualifications		Certificates and academic transcript of records for both Bachelor' and Master' degree 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 ar corresponding scores (academic transcript of records) - Translation into Italian or Englis (only for degrees issued in languages other than Italian or English).				
Statement of Research Interest			– maximum 2 pages – in Italian or in English, aimed at explaining the candidate's attend the PhD program and at describing her/his specific research interests			









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)

Reference Letters	A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities. The reference letters must sent directly by the signer to the address e-mail: andrea.maranzoni@unipr.it Reference letters sent directly by the candidate or received in any other way will not be evaluated.				
Research Project	shall be stru the problem personally d IT tools usef It does not re	The research project shall consist of a maximum of 3 pages, be written in Italian or in English, and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results. The project must focus on an original research topic (unpublished, personally developed 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. 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 on r chapters etc	national and international journals, papers presented at conferences	s or symposia, book		
		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 graduation mark. Mandatory: <b>Statement of Research Interest</b> Not mandatory: <b>Reference Letters</b>	Up to 30 points		
Graduation mark			Up to 5 points		
Average of the exam ma candidate will attain the later than 24 October 20	degree no		Up to 5 points		
Graduation thesis		Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae by attaching the abstract of the degree thesis or draft of the thesis approved by the supervisor)	Up to 6 points		
Research Project			Up to 25 points		
Scientific publications		Maximum 2	Up to 4 points		
ORAL EXAM		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> <li>knowledge of the foreign language</li> <li>research project presentation</li> <li>general knowledge of issues connected to the PhD course</li> </ul>	Up to 50 points		
	LIST OF QUA	LIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT			

Positions reserved to holders of scholarship within specific international mobility programs









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. Mandatory: <b>Statement of Research Interest</b> Not mandatory: <b>Reference Letters</b>	Up to 52 points		
Graduation mark				Up to 8 points		
Average of the exa candidate will attai later than 24 Octob	n the degree			Up to 8 points		
Graduation thesis			Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae by attaching the abstract of the degree thesis or draft of the thesis approved by the supervisor)	Up to 10 points		
Research Project				Up to 44 points		
Scientific publication	ons		Maximum 2	Up to 6 points		
	1		SCHEDULE OF THE ADMISSION EXAMS			
	DATE	19 Se	ptember 2022 (with possible extension to the afternoon)			
	TIME	09:30 AM (Italian time)				
ORAL EXAM	PLACE	MEET Parco	artment of Engineering and Architecture TING ROMM – Building 10 D Area delle Scienze, 181/A – Campus 4 PARMA - ITALY			
The C         exam         A).         In the         and s         take         indica         https         OTHER INFORMATION         In th         resea         For A         orally         Forei         stron         (https:		exam A). In the and s take indica https: In the resea For A orally Foreig strong (http:		form (Form ANNEX blicant must choose the Applicant must he candidate must those listed in be binding for the ish will be assessed		









INDUSTRIAL ENGINEERING				
CYCLE	XXXVIII			
COORDINATOR	Prof. Gianni ROYER CARFAGNI email: <u>gianni.royer@unipr.it</u> Department of Engineering and Architecture			
DURATION	3 years			
STARTING DATE OF THE PHD PROGRA	M 01/11/2022			
<b>RESEARCH TOPICS</b> (The candidate <b>MU</b> RESEARCH PROJECT in the relevant fiel	<b>ST mandatorily</b> indicate one research topic in the form ANNEX A and submit a d)			
<ul> <li>Theoretical and applied mechanics, mechanics of materials and structures, material technology, machine design, measurements and diagnostics;</li> <li>Economic, organizational, managerial, logistics, plants and legal aspects in the field of engineering;</li> <li>Energy systems, thermo-fluid dynamics, fluid machinery, applied physics.</li> </ul>				
TRAINING OBJECTIVES				
industrial engineering. The PhD cour technical or scientific problem of the in of inclusion in a collaborative environ in the three-year curriculum, allows to	The Industrial Engineering PhD program aims at giving to the participants a deep knowledge in the main topics relevant to industrial engineering. The PhD course presents numerical, analytical and experimental techniques, in order to face any technical or scientific problem of the industrial engineering, with managerial skills, to provide autonomy in work and readiness of inclusion in a collaborative environment with other researchers and technicians. The internationalization phase, envisaged in the three-year curriculum, allows to forge links with other foreign realities by providing to the graduate student an additional tool to get into a scientific context, not just limited by national borders.			
<ul> <li>Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission:         <ul> <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 Italia degrees and recognized as suitable for the admission to doctoral program</li> </ul> </li> <li>Undergraduates can also apply for admission to the selection, with the obligation to obtai the degree within the deadline set for enrollment, that is by 24.10.2022</li> </ul>				

			With Scholarship		17
POSITIONS PUT OUT TO COMPETITION	20	Reserved to holders of Rese	Reserved to holders of Research Grant		
	20	Reserved for employees of companies or public institutes and research centers engaged in highly qualified activities		1	
			Position with Schola	arship	
N° Funding en		entity	Research Topic, if any		
3	Scholarship funded by University of Parma (Ministerial funds)				
1	1 Scholarship funded by University of Parma (University funds)				
1	1 Scholarship co-funded by Fondazione Cariparma				









## 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 Department of Engineering and Architecture	<ul> <li>Optimisation of logistics and supply chain processes using simulation models and advanced performance evaluation systems (such as lean, agile, resilient &amp; green - LARG)</li> </ul>
1	Scholarship financed with funds under the PNRR- Mission 4 component 1 (Ministerial Decree 351/2022 art. 6 "Digital and environmental transitions") Finanziato dall'Unione europea NextGenerationEU	<ul> <li>The enhancement of by-products from matrices of plant origin in the food industry: qualification, food safety legislation and its applicability, patentability profiles</li> </ul>
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company Maselli Misure S.p.A. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Lean production methodologies for improving production efficiency, liquidity and responsiveness to market demands</li> </ul>
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company KOSME S.r.l. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Re-design of "end-of-line packaging machinery" with the implementation of Structural Optimization, Design for Manufacturing and Design for Assembly concepts, in order to enhance the machine sustainability and competitiveness</li> </ul>
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company PLM4U S.r.l. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Life Cycle Engineering and product design for Disassembly</li> </ul>
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company FMB-Engine S.r.l. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Advanced simulation or artificial intelligence techniques for both design and management of industrial plants and their major components</li> </ul>
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company DexMat Inc. Finanziato dall'Unione europea NextGenerationEU	• DexMat Inc., Located in Houston, TX, USA, manufactures high performance products made from Carbon Nanotubes (CNTs). The supported student shall develop theoretical and experimental activities on solution spun CNT fibers with different nano-structural compositions, organized in strands, ropes and cables, for which the









		capacity in terms of strength, stiffness, robustness and resilience will be verified and compared with the		
		theoretical predictions.		
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 352/2022) and co-financed by the Company Kuraray Europe GmbH Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Kuraray Europe GMbH, located in Germany, is a wholly owned subsidiary company of the Japanese Kuraray group, the leading supplier of specialized products such as polymeric foils for laminated glass. The supported student shall develop advanced models, corroborated by experimental activities, for the viscoelastic characterization of polymeric films, to be applied in structural models for beams, plates and shells made of laminated glass.</li> </ul>		
1	Scholarship financed under the PNRR – Mission 4 component 2 – Investment 1.4 National Center for sustainable mobility Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Rail joints and related monitoring and diagnostic systems for predictive track maintenance.</li> </ul>		
1	Scholarship financed under the PNRR – Mission 4 component 2 – Investment 1.4 National Center for Agricultural Technologies AGRITECH Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Design, implementation and management of the "living lab"</li> </ul>		
1	Scholarship financed under the PNRR – Mission 4 component 2 – Investment 1.5 Ecosystem for sustainable Transition in Emilia-Romagna Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Design of supply chains through data-driven systemic design approach and performance evaluation in prototyping smart design solutions for circular economy</li> </ul>		
1	Scholarship financed under the PNRR – Mission 4 component 2 – Investment 1.5 Ecosystem for sustainable Transition in Emilia-Romagna Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Advanced measurements and analysis techniques for condition monitoring of complex systems</li> </ul>		
	Position reserved to HOLDE	RS OF RESEARCH GRANT		
N°	Subject area of the research			
1	<ul> <li>ING-IND/10 – Thermal engineering and industrial energy systems</li> <li>Study, development and characterisation of high-performance heat exchange devices with a view to energy saving</li> </ul>			
1	<ul> <li>ING-IND/17 – Industrial Mechanical Systems Engineering</li> <li>Environmental Impact Analysis of industrial systems using LCA methodology, with a main focus on the agri-food and food packaging sector, in order to find solutions with a low global impact in line with the principles and timelines dictated by the European Union</li> </ul>			
	Position reserved for EMPLOYEES of companies or public institutes and research centers engaged in highly qualified activities			
N°	Compan	y/Institution		
1	Reserved to employees of SUPSI – Scuola Universitaria della Svizzera Italiana			



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ADMISSION PROCEDURES		Assessment of QUALIFICATIONS: up to 70 points (a minimum score of 40 points shall be required to be admitted to the Oral Exam) ORAL EXAM: up to 50 points Minimum score for ELIGIBILITY: 70/120	
Foreign Language	La verifica	cui verrà accertata la conoscenza in sede di Prova Orale: <u>INGLESE</u> . della conoscenza di tale lingua avverrà in forma scritta/orale e consisterà nella lettura e e di un testo scientifico.	
	CANDIDA	TES ADMITTED TO THE ORAL TEST CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE	
		lace <u>in presence</u> . Candidates who intend to take the Oral Exam remotely must submit <b>QUEST</b> , to this purpose, as per the model attached to the competition notice)	
		THE INTERVIEW MAY BE HELD ALSO IN ENGLISH	
	LIST OF Q	UALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT	
MANDATORY DOCUM	MENTS TO I	BE ATTACHED TO THE ON-LINE APPLICATION	
ANNEX A		(art. 5 of the Competition notice)	
Identification Docum	ent	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)	
Curriculum Vitae et s	tudiorum	No specific CV format is required (see art. 4 of the Competition notice)	
Abstract of degree thesis		Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)	
Qualifications		<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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		<ul> <li>Written in Italian or in English, according to the format attached to the competition notice, it will have to focus 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).</li> <li>To identify the topic of the aforementioned project, the candidate may contact one of the Members of the Academic Board (available at: <a href="https://dia.unipr.it/it/node/2834">https://dia.unipr.it/it/node/2834</a>).</li> <li>It does not represent a constraint with respect to the following choice of the doctoral thesis, which will be assigned by the Academic Board.</li> </ul>	
		T MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT document drawn up in Italian or in English)	
Statement of Resear	ch interest	Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests	
Scientific Publications		Articles on national and international journals, contributions presented at conferences or symposia, book chapters. It is necessary to attach a copy to online application	









A maximum of 2 written by professors or researchers at the University of origin of candidate or from other universities or from experts in the research areas working in put			
	or private research facilities (to be attached to the online application)		
Other Academic qualifications	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program		
Other experiences (training, work, research, teaching, etc.)	<ul> <li>Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covedered by research grant, and as a staff member of research units</li> <li>Working activity</li> <li>Professional and/or training internship</li> <li>Language proficiency certificates</li> <li>Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)</li> </ul>		
	EVALUATION CRITERIA	r	
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 graduation mark, both of the bachelor's and master's degrees.	Up to 15 points	
Graduation mark	Score related to the final mark: - 110 with honours (magna cum laude): 10 points; - 110: 8 points; - From 105 to 109: up to 6 points; - From 100 to 104: up to 3 points; - From 66 to 99: 0 points - The scores will be proportionally renormalized in case of equivalent evaluations		
<b>Average of the exam marks</b> (if the candidate will attain the degree no later than 24 October 2022)	Score related to the average of the exam marks: - 30/30: 10 points; - From 28/30 to 29/30: up to 5 points; - From 26/30 to 27/30: up to 3 points; - From 18/30 to 25/30: 0 points; The scores will be proportionally renormalized in case of equivalent evaluations	Up to 10 points	
Graduation thesis	Consistency of the Master's Degree thesis with the doctoral program research topics	Up to 10 points	
Research Project	Consistency of the Research Project with the doctoral program research topics	Up to 15 points	
Statement of Research Interest	Evaluation of the candidate's motivations to attend the doctoral course and congruity of the research interests with the research topics of the doctoral course.		
Scientific publications	Articles on national and international journals, contributions presented at conferences or symposia, book chapters. It is necessary to attach a copy to online application		
Reference Letters	a maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities		
Other Academic qualifications	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program	Up to 2 points	









Other experiences		<ul> <li>Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covedere by research grant, and as a staff member of research units</li> <li>Working activity</li> <li>Professional and/or training internship</li> <li>Language proficiency cartificates</li> <li>Periods of study abroad, outside th country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)</li> </ul>	Up to 3 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		<ul> <li>research project presentation</li> <li>general knowledge of issues connected to the PhD course</li> <li>knowledge of foreign languages</li> </ul>	Up to 50 points	
		SCHEDULE OF THE ADMISSION EXAMS		
	DATE	13 September 2022 (with possible extension in the following days)		
		09:00 AM (Italian Time)		
PLACE		Meeting Room – Building 10 Department of Engineering and Architecture Parco Area delle Scienze, 181/A - Campus 43124 PARMA - ITALY		
		For foreign candidates, the admission examinations may be held in English choice.	h at the candidate's	









MOLECULAR MEDICINE			
CYCLE	XXXVIII		
COORDINATOR	Prof. Prisco MIRANDOLA email: <u>prisco.mirandola@unipr.it</u> Department of Medicine and Surgery		
DURATION	3 years		
STARTING DATE OF THE PHD PRO	GRAM 01/11/2022		
<b>RESEARCH TOPICS</b> (The candidate RESEARCH PROJECT in the relevan	<b>MUST mandatorily</b> indicate one research topic in the form ANNEX A and submit a t field)		
<ul> <li>Role of molecular chaperones in the onset and progression of protein misfolding diseases</li> <li>Metabolic alterations of hematological neoplasms and remodeling of the bone marrow niche</li> <li>Evaluation of the inflammatory state by in vitro studies: molecular and clinical aspects</li> <li>Physical activity and well-being</li> <li>Set up and validation of novel models of Chronic obstructive pulmonary diseases</li> <li>Design and synthesis of biological drugs directed against tumors and viral agents</li> <li>Genetics of sudden cardiac death</li> </ul>			
TRAINING OBJECTIVES			
necessary to carry out high-pro interdisciplinary perspective. The	Molecular Medicine aims to provide PhD students with the cultural and methodological skills file research in different scientific disciplines in the biomedical field, integrated in an acquired training will allow PhDoctors in Molecular Medicine to employ themselves in high ctivities in Universities, research centers and industries engaged in the medical, biological and		
ADMISSION REQUIREMENTSRegardless of age and citizenship, applicants holding at least one of the following academ qualifications can apply for admission: 			

POSITIONS PUT OUT TO COMPETITION		7	With Schol	arship	7
	Position with Scholarship				
N°	Funding en	tity		Research Topic, if any	
3	Scholarship funded by University of Parma (Ministerial funds)		erial funds)	• Role of molecular chaperones in the onset and	
1	Scholarship co-funded by Fondazione Cariparma			<ul> <li>progression of protein misfolding disease</li> <li>Metabolic alterations of hematological mand remodeling of the bone marrow nicl</li> <li>Evaluation of the inflammatory state by studies: molecular and clinical aspects</li> <li>Physical activity and well-being</li> </ul>	eoplasms ne









## 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 Department of Medicine and Surgery (co- financed by Project PRIN 2020, 2017LW7XWH: Early Phase Preclinical Development of PACECOR, a Mutation-Indipendent Anti-SARS-Co2 Therapeutic Strategy" - CUP D55F20002710001)	<ul> <li>Set up and validation of novel models of Chronic obstructive pulmonary diseases</li> </ul>
1	Scholarship funded by Chiesi Farmaceutici S.p.A.	<ul> <li>Design and synthesis of biological drugs directed against tumors and viral agents</li> </ul>
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co- financed by the Company Abbott S.r.l. Finanziato dall'Unione europea NextGenerationEU	• Genetics of sudden cardiac death

ADMISSION PROCEDURES		Assessment of QUALIFICATIONS: up to 60 points (a minimum score of 10 points shall be required to be admitted to the Oral Exam) ORAL EXAM: up to 60 points Minimum score for ELIGIBILITY: 70/120			
Foreign Language	Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> . <b>nguage</b> The evaluation of the knowledge of this language will be by an oral examination and will consist in translating of a scientific text.				
	CANDIDATES ADMITTED TO THE ORAL EXAM CAN TAKE IT EITHER IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE				
(Candidates who	o intend to t	ake the Oral Exam remotely must submit a formal request, using the form attached to the competition notice)			
	THE INTERVIEW MAY BE HELD ALSO IN ENGLISH				
	LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT				
MANDATORY DOCU	MENTS 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)			
Abstract of degree thesis		Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)			









Qualifications	con Univ Nan corr (onl	<b>artificates and academic transcript of records for both Bachelor' and Master' degrees</b> Intaining the following details for each degree held: (art. 4 of the Competition notice): inversity that granted the degree - Type of degree (first cycle/second cycle/single cycle) ame of the degree program - Date of graduation - Final mark - List of exams and irresponding scores (academic transcript of records) - Translation into Italian or English hly for degrees issued in languages other than Italian or English).		
it w Research Project can It d		Written in Italian or in English, according to the format attached to the competition notice, t will have to focus on an original research topic (unpublished, developed personally by the candidate). t does not represent a constraint with respect to the following choice of the doctoral thesis, which will be assigned by the Academic Board.		
		BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APP nent drawn up in Italian or in English)	PLICANT	
Statement of Research interest		t text – maximum 2 pages – in Italian or in English, aimed at explair ons to attend the PhD program and at describing her/his specific res	-	
Scientific Publications		cles on national and international journals, papers presented posia, book chapters etc.	at conferences or	
Reference Letters     Call		naximum of 3 written by professors or researchers at the Univers didate or from other universities or from experts in the research area private research facilities, to be attached to the online application.		
Other Academic qualifications		First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program		
Other experiences (training, – work, research, teaching, etc.) –		<ul> <li>Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covedered by research grant, and as a staff member of research units</li> <li>Working activity</li> <li>Professional and/or training internship</li> <li>Language proficiency certificates</li> <li>Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)</li> </ul>		
		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 graduation mark.	Up to 10 points	
Graduation mark		Score related to the final mark: - 110 with honours (magna cum laude): 5 points; - 110: 3 points; - From 100 to 109: 0,2 point for each mark unit	Up to 5 points	
<b>Average of the exam marks</b> (if the candidate will attain the degree no later than 24 October 2022)		Score related to the average of the exam marks: - > 28/30: 5 points - > 27/30: 3 points - > 25/30: 1 point	Up to 5 points	
		LINIVERSITÀ DI PARMA		









Graduation thesis			Consistency with the research themes of the PhD course and quality of the research methodology	Up to 7 points
Research Project			<ul> <li>Points relating to the research project:</li> <li>Scientific value and originality of the proposal: max 2.5 points</li> <li>articulation of the proposal: max 2.5 points</li> <li>proposal feasibility: max 2.5 points</li> <li>consistency with the research themes of the PhD course: max 2.5 points</li> </ul>	Up to 10 points
Statement of Rese	arch Interest	t	Clarity, maturity, motivation and expectations	Up to 9 points
Scientific publication	ons		Evaluation of the candidate's contribution and the editorial location of the product.	Up to 9 points
Reference Letters			one point per letter	Up to 3 points
Other Academic qu	ualifications		Academic qualifications/experience abroad/grants, scholarships and awards	Up to 5 points
Other experiences	Other experiences			Up to 2 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 foreign language: max 4 points</li> <li>ability to argument the project proposal: max 28 points</li> <li>knowledge of chosen topic: max 28 points</li> </ul>	Up to 60 points
	T	Т	SCHEDULE OF THE ADMISSION EXAMS	
	DATE	20 Sej	eptember 2022 (with possible extension in the following days)	
ORAL EXAM	TIME	10:00	AM (Italian Time)	
PLACE		Department of Medicine and Surgery Integrated Biotechnological Plexus Via Volturno, 39 – 43125 PARMA - ITALY		
OTHER INFORMATION For for		For fo	Oral Exam is held in Italian. foreign candidates, the admission examinations may be held also in English at the lidate's choice.	









NEUROSCIENCES				
CYCLE	XXXVIII			
COORDINATOR	Prof. Luca BONINI email: <u>luca.bonini@unipr.it</u> Department of Medicine and Surgery			
DURATION	3 years			
STARTING DATE OF THE PHD PROGF	RAM 01/11/2022			
CURRICULA	1. Neurosciences 2. Behavioural Biology			
<b>RESEARCH TOPICS</b> (The candidate <b>M</b> RESEARCH PROJECT in the relevant f	<b>UST mandatorily</b> indicate one research topic in the form ANNEX A and submit a ield)			
<ul> <li>Integrated neuroscience: comparative neurophysiology and neuroethology, cognitive and social neuroscience, cognitive psychology, psychology of perception and action, psychobiology, psychophysiology.</li> <li>Behavioral biology: biological basis of social, competitive and parental behavior, gene/environment interactions on the development of behavior, cognitive ethology and emotions in animals and humans</li> </ul>				
<ul> <li>Provide a global and interdisciplinary vision of the proposed research sectors, guaranteeing a high degree of specialization in research in these areas;</li> <li>Acquire skills and abilities in the autonomous use of at least one neuroscientific investigation technique;</li> <li>Promote the development of networks of national and international relations and exchanges aimed at sharing and deepening the research topic addressed.</li> </ul>				
Qua 	gardless of age and citizenship, applicants holding at least one of the following academic alifications can apply: 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 dergraduates can also apply for admission to the selection, with the obligation to obtain e degree within the deadline set for enrollment, that is <b>by 24.10.2022</b>			

POSITIONS PUT OUT TO COMPETITION			With Scholarship		12
		14	Reserved for employees of companies or public institutes and research centers engaged in highly qualified activities		2
	Position with Schol			arship	
N°	° Funding entity			Research Topic, if any	
2	Scholarship funded by University of Parma (Ministerial funds)				
1	1 Scholarship funded by University of Parma (University funds)				
1	1 Scholarship co-funded by Fondazione Cariparma				









## 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 Department of Medicine and Surgery (Project ERC CoG "EMACTIVE")	<ul> <li>Telemetric monitoring of autonomic parameters in freely moving macaques during neural recordings</li> </ul>
1	Scholarship partly financed with UNIVERSITY funds and co- financed by the Department of Medicine and Surgery (Project ERC CoG "EMACTIVE")	<ul> <li>Implementation of techniques for optogenetic and chemogenetic manipulation of neural activity in the macaque</li> </ul>
1	Scholarship partly financed with UNIVERSITY funds and co- financed by the Department of Medicine and Surgery (Project ERC CoG "EMACTIVE")	<ul> <li>Neuroethology of non-human primate motor and social behavior</li> </ul>
1	Scholarship funded by Neurexplore S.r.l.	Artificial Intelligence Applied to Neuromarketing
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co- financed by the Company Lombardini22 Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Interaction between motor system and architecture in action and emotion perception</li> </ul>
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co- financed by the Company Toyota Motor Europe SV.SA Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Emotional state classification via kinematic, neurovegetative and electrophysiological monitoring in ecological contexts</li> </ul>
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co- financed by the Company HENESIS S.r.l. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Electrophysiological correlates and predictors of motor learning via action observation</li> </ul>
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co- financed by the Company Ernst & Young Business School S.r.l. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>The multifaceted interplay between environment and multisensory integration.</li> <li>The research project concerns the study of the influence of environmental factors on the plasticity of multisensory integration processes. The grant will support the execution of both behavioural studies using virtual environments and functional neuroimaging studies.</li> </ul>











	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 A.S.S.T. Grande Ospedale Metropolitano Niguarda					
1	Reserved to employees of HENESIS S.r.I.					

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	During the Oral Exam it will be verified the proficiency in the following language: <b>ENGLISH</b> . The evaluation of this language will be oral and will consist in the discussion of the research project presented in English.			
temporarily abroad It is also possible t	can be take for study / to ask for th	TS ADMITTED TO THE ORAL EXAM WILL TAKE THE EXAM IN PRESENCE* In in remote mode with audio and video connection only for candidates residing abroad or work reasons who submit a motivated request as per the model attached to the competition announcement. e remote examination for those in isolation/quarantine for COVID-19 virus infection, at the hitting a motivated REQUEST as per the model attached to the competition announcement)		
		THE INTERVIEW MAY BE HELD ALSO IN ENGLISH		
	LIST OF Q	UALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT		
MANDATORY DOCU	MENTS TO E	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)		
Abstract of 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 ( <b>unpublished</b> , <b>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</b> ) 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.		









	MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICATION OF THE	PLICANT	
Statement of Research interest	Short text – maximum 1 page – in English, aimed at explaining the candidate's motivation to attend the PhD program and at describing her/his specific research interests		
Scientific Publications	Articles on national and international journals with peer reviewing, a presented at conferences or symposia, book chapters etc.	abstracts of papers	
Other Academic qualifications	First or second level Master's degree obtained in Italy and/or speci subjects consistent with the research topics of this PhD program	alization degree in	
Other experiences (training, work, research, teaching, etc.) related to the topic of PhD course	<ul> <li>Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covedered by research grant, and as a staff member of research units</li> <li>Working activity</li> <li>Professional and/or training internship</li> <li>Language proficiency certificates</li> <li>Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)</li> </ul>		
	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 graduation mark.	Up to 40 points	
Curriculum Vitae et S	tudiorum 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 n later than 24 October 2022)	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	Up to 10 points	
Graduation thesis	<ul> <li>Congruence with the research topics of the PhD course and methodological quality of the experimental or bibliographic work.</li> <li>Experimental thesis related to the PhD program of Neuroscience: 10 points</li> <li>Non-experimental and relevant thesis: 5 points</li> <li>Thesis not relevant: 0 points</li> </ul>	Up to 10 points	
Research Project	<ul> <li>Project evaluation score:</li> <li>scientific value: 2.5 points</li> <li>structure of the proposal: 2.5 points</li> <li>proposal feasibility in relation to the specific research topics of the PhD course: 2.5 points</li> <li>originality of the proposal: 2.5 points</li> </ul>	Up to 10 points	

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Via Università, 12 - 43121 Parma www.unipr.it









Statement of Research Interest	Short text – maximum 1 page – in Italian or in English	Up to 2 points
Scientific publications	<ul> <li>Each article in a peer-reviewed international journal: 1 point</li> <li>Each book chapter: 0.4 points</li> <li>abstracts/papers/posters presented at conferences or symposia: 0.3 points</li> <li>The same categories are half valued if in Italian.</li> <li>The points of the publications are normalized for post-graduate years, that is, divided by the numbers of post-graduate years.</li> </ul>	Up to 5 points
Other Academic qualifications	Other academic qualifications consistent with the research topics of this PhD program	Up to 3 points
ORAL EXAM	EVALUATION CRITERIA	POINTS
<ul> <li>The ORAL examination includes:</li> <li>A1) Neurosciences: the oral report on 2 topics chosen by lot from those indicated in the list below:</li> <li>1) The origin of the nervous impulses</li> <li>2) The synapses</li> <li>3) The reflexes</li> <li>4) Molecular and cellular bases of signal transduction</li> <li>5) The motor system</li> <li>6) The visual system</li> <li>7) The somatosensory system</li> <li>8) The autonomic nervous system</li> <li>9) Neurobiology of language</li> <li>10) Neurobiology of attention</li> <li>11) Neurobiology of emotions</li> <li>12) Memory and learning</li> <li>A2) Behavioural Biology: the oral report on 2 topics chosen by lot from those indicated in the list below:</li> <li>1) Individual and social learning</li> <li>2) Imprinting and development of behavior</li> <li>3) Genetic and epigenetic of behavior</li> <li>4) Parental effort and sexual selection</li> <li>5) Social behavior, reproductive systems and parental care</li> <li>6) Aggression, assault and social hierarchies</li> <li>7) Hormones, neurotransmitters and behavior</li> </ul>	<ul> <li>Up to 40 points for the oral report on the two topics extracted (up to 20 points per topic)</li> <li>Up to 20 points for the project presentation</li> <li>o Up to 20 points for knowledge of the foreign language</li> </ul>	Up to 80 points









<ol> <li>8) Parental selection and altruism</li> <li>9) Behavioral evolution</li> <li>10) Communication and emotions emozioni</li> </ol>							
of the verify for discus evalua	e presentatio e research p ing the cand scientific ssion will tak ate the know cy of the langu	<b>roject,</b> aime lidate's aptit research. ke in Englisł wledge and	d at rude The n to				
			SCHEDULE OF THE ADMISSION EXAMS				
		DATE	15 September 2022				
ORAL	LEXAM	TIME	09:00 AM (Italian Time)				
		PLACE	Department of Medicine and Surgery Neuroscience Unit - Building E - 1 <sup>st</sup> Floor Via Volturno, 39 - 43125 PARMA - ITALY				
OTHE			For foreign candidates, the admission examinations may be held in English choice.	at the candidate's			









PSYCHOLOGY					
CYCLE		XXXVIII			
COORDINATOR		Prof.ssa Luisa MOLINARI email: <u>luisa.molinari@unipr.it</u> Department of Humanities, Social Sciences and Cultural Industries			
DURATION		3 years			
STARTING DATE OF THE PHD PR	OGRAM	01/11/2022			
<b>RESEARCH TOPICS</b> (The candidat RESEARCH PROJECT in the releva		datorily indicate one research topic in the form ANNEX A and submit a			
Developmental and lear	<ul> <li>Psychosocial processes in complex societies</li> <li>Developmental and learning processes</li> <li>Clinical processes in life contexts</li> </ul>				
TRAINING OBJECTIVES					
Train researchers able to plan ar	nd implement	research in social, educational and clinical contexts.			
ADMISSION REQUIREMENTS	<ul> <li>qualification</li> <li>Laurea s</li> <li>Laurea V</li> <li>Second c degrees</li> <li>Undergradu</li> </ul>	of age and citizenship, applicants holding at least one of the following academic is can apply for admission: pecialistica or Laurea magistrale (second cycle master's degree) /ecchio Ordinamento (degree obtained under the previous Italian regulations); cycle Master's degree obtained abroad, equivalent to the above mentioned Italian and recognized as suitable for the admission to doctoral program hates can also apply for admission to the selection, with the obligation to obtain within the deadline set for enrollment, that is by <b>October 24<sup>st</sup> 2022</b> .			

POSIT	TION PUT OUT TO COMPETITION	4	With Scholarship		4	
	Position with Scholarship					
N°	Funding en	tity		Research Topic, if any		
1	Scholarship funded by University of Parma (Ministerial funds)					
1	1 Scholarship co-funded by Fondazione Cariparma					
	Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)					
schola	During the Oral Exam, applicants may express and / or confirm their interest to the Examination Board in being assigned a scholarship dedicated to a specific research topic 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.					

N°	Funding entity	BOUND RESEARCH TOPIC
1	Scholarship partly financed with UNIVERSITY funds and co- financed by the Department of Humanities, Social Sciences and Cultural Industries	• The transition from preschool to primary school: Prequisites for learning and adjustment in the class









ADMISSION PROCEDURES		Assessment of QUALIFICATIONS: up to 60 points (a minimum score of 35 points shall be required to be admitted to the Oral Exam) ORAL EXAM: up to 60 points Minimum score for ELIGIBILITY: 70/120			
Foreign Language		the fluency of which shall be assessed during the Oral Exam: <u>ENGLISH</u> . ation of the knowledge of this language will be oral and will consist in reading and translating ific text.			
	CANDIDA	TES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE			
(Candidates who inte	end to take	e the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)			
		THE INTERVIEW MAY BE HELD ALSO IN ENGLISH			
L	IST OF Q	UALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT			
MANDATORY DOCUM	IENTS TO B	BE ATTACHED TO THE ON-LINE APPLICATION			
ANNEX A		(art. 5 of the Competition notice)			
Identification Docume	ent	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)			
Abstract of degree thesis		Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)			
Qualifications		<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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		The research project shall consist of a maximum of 2500 words, be written in Italian or in English, and it must be an original research project (inedited, unpublished, personally developed by the candidate) and be structured as follows: theoretical introduction, relevance of the problem, research design and methodology, expected results and discussion, essential bibliography (maximum 5 bibliographic entries) The Research Project <u>does not represent a constraint with respect to the following choice of the doctoral thesis</u> , that shall be defined together with the supervisor and approved by the Academic Board.			
		T MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT document drawn up in Italian or in English)			
Scientific Publications Articles on national and international journals, represented to the set of		cles on national and international journals, reports presented at conferences or symposia, book oters etc.			
Academic qualificatio	nc	or second level Master's degree obtained in Italy and/or specialization degree in subjects istent with the research topics of this PhD program			
Other experiences		y or research expiences abroad, prizes, scholarships and research grants (will be taken into sideration only if clearly documented).			
		EVALUATION CRITERIA			
UNIVERSITÀ DI PARMA					









QUALIFICATION		EVALUTATION CRITERIA	POINTS	
<b>Graduation mark</b> Or		Score related to the final mark: - 110 and 110 with honours (magna cum laude): 10 points; - From 100 to 109: 8 points - Under 99: 5 points	Un to 10 points	
Average of the exa candidate will attain later than 24 Octob	n the degree		Up to 10 points	
Abstract of the Gra	duation the	is Consistency with the research themes of the PhD course and quality of the research methodology	Up to 5 points	
Research Project		<ul> <li>Scientific value and nternal consistency: 20 points         <ul> <li>(aspects that will be considered: validity of the theoretical formulation, relevance of the problem faced, clarity of the objectives and appropriateness of the methodology, consistency of the expected results and relative discussion)</li> <li>Formal and grammatical aspects: 4 points</li> <li>Congruence with the research themes of the PhD course: 4 points</li> </ul> </li> </ul>	Up to 28 points	
The candidate	's Curriculun	Vitae et Studiorum will be evaluated based on the following qualificatio	ns and scores:	
Scientific publication	ons	Articles on national and international journals, papers presented at conferences or symposia, book chapters etc	Up to 10 points	
Academic qualifica	tions	First or second level master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD programme	Up to 5 points	
Other experiences		study or research expiences abroad, prizes, scholarships and research grants (documented)	Up to 2 points	
ORAL EXAM		EVALUATION CRITERIA	POINTS	
The ORAL EXAM focuses on the knowledge of the English language, on the discussion of the research project, on the knowledge related to the research themes of the PhD programme		<ul> <li>ge, o knowledge of foreign languages (English): 10 points</li> <li>o discussion and argumentation of the projec: 35 points</li> <li>o knowledge on at least one of the themes of the PhD</li> </ul>	Up to 60 points	
		SCHEDULE OF THE ADMISSION EXAMS		
	DATA	15 September 2022		
PROVA ORALE	ORA	09:30 AM (Italian Time)		
I NOVA UNALE	LUOGO	ROOM A POLO DIDATTICO Via del Prato – 43121 PARMA - ITALY		
OTHER INFORMA	TION	oreign candidates, the admission examinations may be held in English.		









## MATERIALS SCIENCE AND TECHNOLOGY XXXVIII CYCLE Prof. Enrico DALCANALE COORDINATOR email: enrico.dalcanale@unipr.it Department of Chemistry, Life Sciences and Environmental Sustainability DURATION 3 years STARTING DATE OF THE PHD PROGRAM 01/11/2022 PARTNER INSTITUTION The Italian National Research Council (C.N.R.) RESEARCH TOPICS (The candidate MUST mandatorily indicate one research topic in the form ANNEX A) Photovoltaic devices ٠ **Functional materials** • Nanodiagnostics Nanostructured materials Supramolecular sensors and devices Semiconductive massive crystals Low dimensionality semiconductive structures • Self-healing and self-diagnostic polymers Ceramic and composite materials Magnetic materials and magneto-refrigeration TRAINING OBJECTIVES The PhD program in Materials Science aims at the preparation of PhDs equipped with strong scientific background and wide research experience in materials science. Enrollment is open to MS laureates in Materials Science, Chemistry, Physics, Industrial Chemistry, Engineering and Biological Sciences. The Board provides a wide range of courses and seminars in different scientific areas, with particular focus on all aspects of materials science (synthesis, characterization, functions and devices). It also offers soft skills courses. The PhD program offers an interdisciplinary preparation through research activity, also in collaboration with foreign Institutions. 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); ADMISSION REQUIREMENTS 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

POSIT	IONS PUT OUT TO COMPETITION	20	With Scholarship		20
		arship			
N°	Funding en	tity		Research Topic	
2	Scholarship funded by University of	Parma (Ministerial	funds)	<ul> <li>Design of programmable systems synthetic DNA as functional materia development of nanodevices for biomedical applications.</li> </ul>	al for the











		• Low loss and low cost hybrid type heterojunctions for power electronics: synthesis of new materials and devices.		
2	Scholarship funded by The Italian National Research Counci C.N.R ISTEC	<ul> <li>Circular economy in the ceramic tile production: resource efficiency and waste valorization.</li> <li>Developments of innovative materials for carbon dioxide and nitrogen oxides conversion into valuable products by photo-electrochemical cells.</li> </ul>		
1	Scholarship funded by The Italian National Research Counci C.N.R IMEM	CVD/printing growth of 2D dichalcogenides for nanoelectronic devices		
	Position with Scholarship LINKED TO SPECIFIC T	OPICS (art. 11 of the Competition notice)		
resea	g the Oral Exam, applicants may express and/or confirm their rch topic. The Examination Board will evaluate their eligibili des of the applicants.			
N°	Funding entity	BOUND RESEARCH TOPIC		
1	Scholarship partly financed with UNIVERSITY funds and co-financed by The Italian National Research Council C.N.R IMEM	<ul> <li>Development of a new type of permanent magnet with low rare earth content obtained from the recovery of recycled magnets.</li> </ul>		
2	Scholarship partly financed with UNIVERSITY funds and co-financed by The Italian National Research Council C.N.R ISTEC	<ul> <li>Development of innovative materials and components for proton conduction solid oxide cells also operating in reversible mode (RSOC)</li> <li>Safe-and-Sustainable-by-Design applied to nano-production. Engineering of nano-phases and products for environmental protection. Evaluation of performance, safety and sustainability attributes through their life cycle to identify the best design options.</li> </ul>		
1	Scholarship financed with funds under the PNRR– Mission 4 component 1 <b>(Ministerial Decree 351/2022 art. 7</b> "PNRR Research") Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Innovative magnetic materials for the recovery of waste heat at low temperatures through the technology of thermomagnetic energy generation, to improve efficiency and sustainability of production processes.</li> </ul>		
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company EPTAINKS S.p.A. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>New formulations of sustainable magnetic inks with multifunctional properties.</li> </ul>		
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company Dallara S.p.A. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>New reprocessable epoxy resin-carbon fiber (CFRP) composites based on phenoxy resin vitrimers. Replacement of bisphenol A with bio-based building blocks in CFRPs</li> </ul>		









1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company Vetriceramici S.r.I.		of
1	NextGenerationEU       -ddl Amage         Scholarship co-financed with funds under the PNRR -         Mission 4 component 2 (Ministerial Decree 352/2022) and         co-financed by the Company Curti - Costruzioni         Meccaniche S.r.l.         Finanziato         dall'Unione europea         NextGenerationEU	d	
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company Lamberti S.p.A. Finanziato dall'Unione europea NextGenerationEU		
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company Industrie Bitossi S.p.A. Finanziato dall'Unione europea NextGenerationEU		
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company Kemin Cavriago S.r.l. Finanziato dall'Unione europea NextGenerationEU		ne
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company due2lab S.r.l. Finanziato dall'Unione europea NextGenerationEU		ar
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company Davines S.p.A. Finanziato dall'Unione europea NextGenerationEU		
2	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company Intercos S.p.A. Finanziato dall'Unione europea NextGenerationEU		









ADMISSION PROCEDURES		(a mir <b>ORAL</b>	Assessment of QUALIFICATIONS: up to 60 points (a minimum score of 30 points shall be required to be admitted to the Oral Exam) ORAL EXAM: up to 60 points Minimum score for ELIGIBILITY: 70/120			
Foreign Language			ency of which shall be assessed during the Oral Exam: <u>ENGLISH</u> . f the knowledge of this language will be oral and will consist in trans	lating of a scientific		
	CANDIDATES ADMITTED TO THE ORAL EXAM CAN TAKE IT EITHER IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE					
(Applicants who	intend to ta	-	e Oral Exam remotely must submit a formal request, using the form a competition notice)	ittached to the		
		-	THE INTERVIEW MAY BE HELD ALSO IN ENGLISH			
	LIST OF QU	UALIF	FICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT			
MANDATORY DOCU	MENTS TO B	E ATT	ACHED TO THE ON-LINE APPLICATION			
ANNEX A		(art.	5 of the Competition notice)			
Identification Docum	ient	Scar	nned Copy of a valid identity document with photo (i.e. identity card	, passport)		
Curriculum Vitae et s	tudiorum	No s	specific CV format is required (see art. 4 of the Competition notice)			
Abstract of degree th	nesis	Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)				
Qualifications	QualificationsCertificates and academic transcript of records for both Bachelor' and Master' d containing the following details for each degree held: (art. 4 of the Competition noti University that granted the degree - Type of degree (first cycle/second cycle/single c Name of the degree program - Date of graduation - Final mark - List of exar corresponding scores (academic transcript of records) - Translation into Italian or (only for degrees issued in languages other than Italian or English).			petition notice): ycle/single cycle) List of exams and		
			BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APP nent drawn up in Italian or in English)	PLICANT		
Statement of Resear	ch interest		rt text – maximum 2 pages – in Italian or in English, aimed at explain ons to attend the PhD program and at describing her/his specific res	-		
Scientific Publication	S		cles and/or reviews in scientific journals with peer reviewing, abs ters presented at conventions or meetings	tracts of papers or		
Final mark of gradua	ition					
Average of the exam	marks	(for	candidates enrolled under conditions and who graduate by 24.10.20	22)		
			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 graduation mark.			









Graduation mark			Score related to the final mark: - 110 with honors (magna cum laude): 20 points - 110: 16 points - From 105 to 109: 12 points - From 100 to 104: 8 points - From 95 to 99: 4 points - Under 95: 0 points	Up to 20 points		
<b>Average of the exam marks</b> (if the candidate will attain the degree no later than 24 October 2022)			Score related to the average of the exam marks: - 30/30: 20 points - From 28/30 to 29/30: 16 points - From 26/30 to 27/30: 12 points - 25/30: 8 points - 24/30: 4 points - Under 24/30: 0 points	Up to 20 points		
Graduation thesis			Consistency of the Master's Degree thesis with the doctoral program research topics (briefly describe the topics in the curriculum vitae)	Up to 10 points		
Statement of Rese	Statement of Research Interest		Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD and at describing the specific research interests	Up to 5 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 candidate's motiva PhD, on the descri research interests of the qualification candidate.	ntion to atten otion of his s and on a disc	nd the pecific cussion	<ul> <li>knowledge of foreign languages: 10 points</li> <li>general knowledge of issue connected to the Master's thesis: 25 points</li> <li>general knowledge of issues connected to the PhD course: 25 points</li> </ul>	Up to 60 points		
			SCHEDULE OF THE ADMISSION EXAMS			
	DATE	20 Sej	otember 2022 (with possible extension to 21 September 2022)			
ORAL EXAM	TIME	09:00	AM (Italian Time)			
PLACE		CHEM Parco	Department of Chemistry, Life Sciences and Environmental Sustainability CHEMISTRY BUILDING Parco Area delle Scienze, 17/A – Campus 43124 PARMA - ITALY			
		For fo choice	preign candidates, the admission examinations may be held in English at the candidate's re.			









CHEMICAL SCIENCES						
CYCLE XXXVIII						
COORDINATOR	Prof.ssa Alessia BACCHI email: <u>alessia.bacchi@unipr.it</u> Department of Chemistry, Life Sciences and Environmental Sustainability					
DURATION	3 years					
STARTING DATE OF THE PHD PROGRAM	01/11/2022					
<b>RESEARCH TOPICS</b> (The candidate <b>MUST</b> RESEARCH PROJECT in the relevant field)	nandatorily indicate one research topic in the form ANNEX A and submit a					
<ul> <li>RESEARCH TOPICS (The candidate MUST mandatorily indicate one research topic in the form ANNEX A and submit a RESEARCH PROJECT in the relevant field)         <ul> <li>A) Towards high value complex molecular architectures via atom-economical cascades</li> <li>B) Metal coordination and development of antiviral and anticancer compounds.</li> <li>C) PNA-based systems for link-and-release and their application for the realization of supramolecular mini-proteins</li> <li>D) Design and synthesis of organic mono- and multivalent ligands for medically relevant biomacromolecules and study of their properties</li> <li>E) Preparation, characterization and study of the catalytic and biological properties of mechanochemically obtained substances</li> <li>F) Integration of advanced analytical platforms for the detection and characterization of nano- and small microplastics: metrological traceability of measurement data to address environmental pollution and food safety issues (Project: Project: 21GRD07 PlasticTrace - Metrological traceability of measurement data from nano to small-microplastics for a greener environment and food safety, Bando: European Partnership on Metrology Call 2021 – Green Deal programme of EURAMET)</li> <li>G) Novel small molecule activation modes promoted by visible light</li> </ul> </li> <li>TRAINING OBJECTIVES</li> <li>The training program aims to provide the PhD in Chemical Sciences the necessary skills to propose and manage research projects in the advanced fields of Analytical Chemistry, General and Inorganic Chemistry, Physical Chemistry, Industrial Chemistry, and Organic Chemistry. The PhD course in Chemical Sciences requires each student to work within one of the research groups active at the Chemistry Unit of the Department of Chemistry, Life Sciences and Environmental Sustainability (SCVSA), and to follow a specific training pathway in the chosen sector; this is achieved also th</li></ul>						
qualifica – Laur ADMISSION REQUIREMENTS – Seco	ss of age and citizenship, applicants holding at least one of the following academic tions can apply for admission: ea specialistica or Laurea magistrale (second cycle master's degree) ea Vecchio Ordinamento (degree obtained under the previous Italian regulations); nd cycle Master's degree obtained abroad, equivalent to the above mentioned Italian ees 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 <b>by 24.10.2022.</b>					

POSITIONS PUT OUT TO COMPETITION	7	With Scholarship	7



dall'Unione europea NextGenerationEU







	Position with Scholarship								
N°	Funding entity	Research Topic							
3	Scholarship funded by University of Parma (Ministerial funds)	• Research Topic: A-B-C-D-E							
1	Scholarship funded by University of Parma (University funds)	• Research Topic: <b>A-B-C-D-E</b>							
1	Scholarship co-funded by Fondazione Cariparma	• Research Topic: <b>A-B-C-D-E</b>							
1	Scholarship funded by the Department of Chemistry, Life Sciences and Environmental Sustainability (Project: 21GRD07 PlasticTrace - Metrological traceability of measurement data from nano to small-microplastics for a greener environment and food safety, Bando: European Partnership on Metrology Call 2021 – Green Deal programme of EURAMET)	• Research Topic: <b>F</b>							
	Position with Scholarship LINKED TO SPECIFIC TOPIC	S (art. 11 of the Competition notice)							
resea	g the Oral Exam, applicants may express and/or confirm their interch topic. The Examination Board will evaluate their eligibility ba des of the applicants.								
N°	Funding entity	BOUND RESEARCH TOPIC							
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	<ul> <li>Research Topic: G: Novel small molecule activation modes promoted by visible light</li> </ul>							

ADMISSION PROCEDURES		Assessment of QUALIFICATIONS: up to 40 points (a minimum score of 20 points shall be required to be admitted to the Oral Exam) ORAL EXAM: up to 80 points Minimum score for ELIGIBILITY: 70/120			
Foreign LanguageLanguage the fluency of which shall be assessed during the Oral Exam: ENGLISH.Foreign LanguageThe evaluation of the knowledge of this language will be oral and will consist in the discussion of pathethe research topics in English.					
	CANDIDATES ADMITTED TO THE ORAL TEST CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE (The Oral Exam takes place <u>in presence</u> . Candidates who intend to take the Oral Exam remotely must submit <b>a motivated REQUEST</b> , to this purpose, as per the model attached to the competition notice)				
		THE INTERVIEW MAY BE HELD ALSO IN ENGLISH			
		UALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT			
MANDATORY DOCU	MENTS TO	BE ATTACHED TO THE ON-LINE APPLICATION			
ANNEX A (art. 5 of the Competition notice)					
Identification Docum	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)					
	μινινερςιτά τι ραρμα				









Abstract of degree thesis	the	stract of the second cycle master's degree thesis. Undergraduate applicants must submit draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 macters including spaces)			
Qualifications	cor Uni Nar cor	rtificates and academic transcript of records for both Bachelor' an ntaining the following details for each degree held: (art. 4 of the Com iversity that granted the degree - Type of degree (first cycle/second of me of the degree program - Date of graduation - Final mark - rresponding scores (academic transcript of records) - Translation int ily for degrees issued in languages other than Italian or English).	petition notice): cycle/single cycle) List of exams and		
Research Project	lt w the ver <u>lt d</u>	ritten in Italian or in English, according to the format attached to the competition notice. will have to focus on an original research topic ( <b>unpublished</b> , <b>developed personally by</b> <b>e candidate. It should be noted that the Examination Board can use of IT tools useful for</b> <b>rifying the originality of the submitted Project</b> ). does not represent a constraint with respect to the following choice of the doctoral thesis, at shall be assigned by the Academic Board.			
		<b>BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APP</b> ment drawn up in Italian or in English)	PLICANT		
Statement of Research interest	reas topi	ort text – maximum 1 page – in Italian or in English, aimed at: 1) explaining the candidate's asons to attend the PhD programme; 2) research interests, with particular reference to pics of interest in the specific topics proposed; 3) skills that can contribute to a research oject in the field of Chemical Sciences.			
Scientific Publications		rticles on scientific journals with referees, communications presented at conferences or mposia, book chapters, other publications related to Chemical Sciences.			
Other experiences		<ul> <li>Participation in Schools or training courses related to Chemical Sciences</li> <li>Any awards received related to Chemical</li> </ul>			
		EVALUATION CRITERIA			
QUALIFICATION		EVALUTATION CRITERIA	POINTS		
Curriculum Vitae et studiorum		Relevance of the academic career as well as postgraduate experiences and other research activities related to Chemical Sciences	Up to 16 points		
Graduation mark or Average of the exam marks (if the candidate will attain the degree no later than 24 October 2022)		Assignment of a score related to the final mark or, for candidates who will attain the degree by 24 October 2022, a score related to the average of the exam marks	Up to 5 points		
Graduation thesis					
Graduation thesis		Consistency of the Master's Degree thesis with the doctoral programme research topics	Up to 10 points		
Graduation thesis Research Project			Up to 10 points Up to 2 points		
		programme research topics Score related to the evaluation of the Project based on originality,			
Research Project		programme research topics Score related to the evaluation of the Project based on originality, impact and scientific substantiation.	Up to 2 points		









The ORAL EXAM takes place in Italian or in English for foreign candidates. It includes a discussion of the qualifications presented by the candidate and an assessment of their scientific profile and design skills.		tes. It the the the their thei	Up to 80 points		
		SCHEDULE OF THE ADMISSION EXAMS			
	DATE	19 September 2022 (with possible extension in the following days)			
ORAL EXAM	TIME	10:30 AM (Italian time)			
	PLACE	Departiment of Chemistry, Life Sciences and Environmental Sustainability CHEMISTRY BUILDING Parco Area delle Scienze, 17/A – Campus 43124 PARMA - ITALY			
OTHER INFORMATION The of the		For foreign candidates, the admission examinations may be held in English at the candidate's choice.			
		he choice of the Research Topic to be expressed in Annex A is not binding on the assignment f the research project, and it is intended to assess candidates skills during the admission xam.			









FOOD SCIENCE							
CYCLE	XXXVIII						
COORDINATOR	Prof.ssa Chiara DALL'ASTA Food and Drug Department email: <u>chiara.dallasta@unipr.it</u>						
DURATION	3 years						
STARTING DATE OF THE PHD PROGRA	M 01/11/2022						
<b>RESEARCH TOPICS</b> (The candidate <b>MU</b> RESEARCH PROJECT in the relevant fie	<b>IST mandatorily</b> indicate one research topic in the form ANNEX A and submit a ld)						
<ul> <li>Study and characterization of advanced chromatographic te</li> <li>Antimicrobial resistance throw</li> <li>Microorganisms engineering fermentation processes</li> <li>Criteria to select and use lac properties of products and by</li> <li>Design and development of n</li> <li>Enzyme assisted extraction oligosaccharides and other no</li> <li>Switching Mediterranean com</li> <li>Databases and analytical met</li> <li>Fertilizers from agri-food was</li> <li>Digital solutions for on-farm of</li> </ul>	for the production of metabolites of interest and transformation of molecules during tic acid bacteria to increase the sustainability, technological, nutritional, and functional y-products throughout the agri-food chain. neat and dairy analogues using vegetable proteins from upcycled sources and modification of lignocellulosic biomasses for the production of functional utraceutical compounds isumers to Mediterranean sustainable healthy dietary patterns hods for nutritionally relevant plant bioactives and the food-microbiome-host interplay tes for the intensification of sustainability in agriculture						
The PhD candidates will acquire advar	nced theoretical and practical expertise to provide innovative approaches and						
ADMISSION REQUIREMENTS ADMISSION REQUIREMENTS	r, under a multidisciplinary perpective. Inders of age and citizenship, applicants holding at least one of the following academic ifications can apply for admission: .aurea specialistica or Laurea magistrale (second cycle master's degree) .aurea 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 ergraduates can also apply for admission to the selection, with the obligation to obtain degree within the deadline set for enrollment, that is <b>by 24.10.2022</b>						

POSIT	TIONS PUT OUT TO COMPETITION	12	With Sc	holarship	12	
	Position with Scholarship					
N°	Funding entit	У		Research Topic		
3	Scholarship funded by University of P	arma (Ministerial	funds)	<ul><li>HUMAN NUTRITION</li><li>FOOD CHEMISTRY</li><li>FOOD INSPECTION</li></ul>		









1	Scholarship co-funded by Fondazione Cariparma		FOOD MICROBIOLOGY							
	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 research topic. The Examination Board will evaluate their eligibility based on specific competences, experience and aptitudes of the applicants.										
N°	Funding entity		BOUND RESEARCH TOPIC							
1	Scholarship funded by Food and Drug Department (funds Project "PRIMASWITCHtoHEALTHY")		witching Mediterranean consumers to Mediterranean ustainable healthy dietary patterns							
1	Scholarship funded by Food and Drug Department (funds Project "FARE CARE-DIET")	r	Patabases and analytical methods for nutritionally elevant plant bioactives and the food-microbiome-host nterplay							
1	Scholarship partly financed with UNIVERSITY funds and co-financed by Food and Drug Department		Design and development of meat and dairy analogues sing vegetable proteins from upcycled sources							
1	Scholarship funded by Food and Drug Department	li	nzyme assisted extraction and modification of gnocellulosic biomasses for the production of functional ligosaccharides and other nutraceutical compounds							
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	tl fi	riteria to select and use lactic acid bacteria to increase he sustainability, technological, nutritional, and unctional properties of products and by-products hroughout the agri-food chain							
1	Scholarship financed under the PNRR – Mission 4 component 2 – Investment 1.4 National Center for Agricultural Technologies AGRITECH Finanziato dall'Unione europea NextGenerationEU		ertilizers from agri-food wastes for the intensification of ustainability in agriculture							
1	Scholarship financed under the PNRR – Mission 4 component 2 – Investment 1.4 National Center for Agricultural Technologies AGRITECH Finanziato dall'Unione europea NextGenerationEU	• D	igital solutions for on-farm crop quality assessment							
1	Scholarship financed under the PNRR – Mission 4 component 2 – Investment 1.4 National Center for Agricultural Technologies AGRITECH Finanziato dall'Unione europea NextGenerationEU		nnovative bioprocesses and extraction techniques of ioactive compounds from agricultural biomasses							

	Assessment of QUALIFICATIONS: up to 30 points
ADMISSION PROCEDURES	(a minimum score of 18 points shall be required to be admitted to the Oral Exam)
ADMISSION PROCEDORES	ORAL EXAM: up to 90 points
	Minimum score for ELIGIBILITY: 70/120









Foreign Language	Foreign Language the fluency of which shall be assessed during the Oral Exam: <u>ENGLISH</u> . The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific test. For foreign candidates, basic knowledge of <b>ITALIAN LANGUAGE</b> will also be assessed.							
	APPLICANTS ADMITTED TO THE ORAL EXAM CAN TAKE IT EITHER IN PRESENCE							
	OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE							
(Applicants who	(Applicants who intend to take the Oral Exam remotely must submit a formal request, using the form attached to the competition notice)							
	THE INTERVIEW MAY BE HELD ALSO IN ENGLISH							
	LIST OF QU	JALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT						
MANDATORY DOCU	MENTS TO B	E ATTACHED TO THE ON-LINE APPLICATION						
ANNEX A		(art. 5 of the Competition notice)						
Identification Docum	ient	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)						
Curriculum Vitae et s	tudiorum	No specific CV format is required (see art. 4 of the Competition notice)						
Abstract of degree th	nesis	Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)						
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		The research project shall consist of a maximum of 2 pages, be written in Italian or in English, focused on an original research topic (unpublished, developed personally by the candidate. It should be noted that the Examination Board can use tools useful for verifying the originality of the submitted Project) concerning one of the specific topic indicated in this notice and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation. The research project 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.						
		MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT document drawn up in Italian or in English)						
Statement of Resear	ch interest	Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests						
Scientific Publications		Articles and/or reviews in scientific journals with peer reviewing, scientific book chapters with national or international circulation. The explicit indication of the candidate's contribution to the works presented for evaluation is a necessary requirement.						
Reference Letters		Maximum no. 1 letter written by experts in the research areas working in public or private research institutions. It must be sent directly by the signatory to the e-mail address: <a href="mailto:foodsciencephd@unipr.it">foodsciencephd@unipr.it</a> The submission by the candidate himself will not be accepted.						









Other Academic qualifications First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program						
Other experiences work, research, tea	•	-	Language proficiency certificates Periods of study abroad, outside the country of origin (e.g. Erasmus p similar mobility programmes) Other qualifications attesting the suitability of the applicants (scholar <b>EVALUATION CRITERIA</b>	-		
QUALIFICATION	QUALIFICATION EVALUTATION CRITERIA					
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. The marks of the exams and the graduation mark and the consistency of the Master's Degree thesis with the doctoral program research topics will be the most relevant element of the evaluation.			
Statement of Resea	arch Interest		Originality and motivation to research	Up to 2 points		
Scientific publicatio	ons		International peer-reviewed papers: up to 2 points National peer-reviewed papers: up to 1 point Book chapters: up to 1 point	Up to 3 points		
<b>Reference Letters</b>			Attestation of motivation and aptitude for the research	Up to 2 points		
Other Academic qu	alifications		in subjects related to the research areas of the PhD course	Up to 1 point		
Other experiences			Aptitude to research activity and congruence with the research topics and the obctives of the PhD course	Up to 2 points		
		The Re	esearch Project will be evaluated during the Oral Exam			
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			<ul> <li>English reading and speaking and for foreign candidates also Italian language: up to 10 points</li> <li>research project presentation: max 50 points</li> <li>general knowledge of issues connected to the PhD course: max 30 points</li> </ul>	Up to 90 points		
	I		SCHEDULE OF THE ADMISSION EXAMS			
	DATE	19 Se	eptember 2022 (with possible extension in the following days)			
ORAL EXAM	TIME	09:00 AM (Italian Time)				
	PLACE	Food Parco 43124				
OTHER INFORMA	TION	Englis	preign candidates it is possible to carry out the admission examin th, after checking the basic knowledge of ITALIAN LANGUAGE. For I e possible to take the admission examination in Italian or in English e.	talian candidates it		









DRUG SCIENCES						
CYCLE	XXXVIII					
COORDINATOR	Prof. Marco MOR email: <u>marco.mor@unipr.it</u> Food and Drug Department					
DURATION	3 years					
STARTING DATE OF THE PHD PRO	GRAM 01/11/2022					
<b>RESEARCH TOPICS</b> (The candidate RESEARCH PROJECT in the relevan	<b>MUST mandatorily</b> indicate one research topic in the form ANNEX A and submit a t field)					
<ul> <li>Biochemistry and Molecu</li> <li>Biopharmaceutics – Phar</li> <li>Bio-organic chemistry</li> <li>Experimental Pharmacolo</li> <li>Drug Design and Synthes</li> </ul> TRAINING OBJECTIVES	macokinetics ogy and Toxicology					
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 acader qualifications can apply for admission: <ul> <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 Italia degrees and recognized as suitable for the admission to doctoral program</li> <li>Undergraduates can also apply for admission to the selection, with the obligation to obtained degree within the deadline set for enrollment, that is by 24.10.2022</li> </ul>						

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









1       Scholarship co-funded by Fondazione Cariparma <ul> <li>Drug Design and Synthesis</li> <li>Scholarship funded by Food and Drug Department</li> <li>Biochemistry and Molecular Biology</li> </ul> 1       Scholarship funded by Food and Drug Department <ul> <li>Drug Design and Synthesis</li> <li>Scholarship funded by Food and Drug Department</li> <li>Biopharmaceutics-Pharmacokinetics</li> </ul> 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 research topic. The Examination Board will evaluate their eligibility based on specific competences, experience and aptitudes of the applicants.         N° <i>Funding entity BOUND RESEARCH TOPIC</i> 1          Scholarship partly financed with UNIVERSITY funds and co-financed by the Food and Drug Department           Pharmacological evaluation of new Eph ligands          1          Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 351/2022 art. 7 "PNRR Research") <ul> <li></li></ul>	/ephrin ent of			
1       Scholarship funded by Food and Drug Department <ul> <li>Drug Design and Synthesis</li> <li>Scholarship funded by Food and Drug Department</li> <li>Biopharmaceutics-Pharmacokinetics</li> <li>Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Competition notice)</li> <li>During the Oral Exam, applicants may express and/or confirm their interest of being assigned a scholarship linked to a research topic. The Examination Board will evaluate their eligibility based on specific competences, experience and 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 Ept ligands</li> <li>Scholarship financed with funds under the PNRR- Mission 4 component 1 (Ministerial Decree 351/2022 art. 7 "PNRR Research")</li> <li>Finanziato component 2 (Ministerial Decree 352/2022) and co-financed by the Company Chiesi Farmaceutici S.p.A.</li> <li>Component 2 (Ministerial Decree 352/2022) and co-financed by the Company Chiesi Farmaceutici S.p.A.</li> <li>Finanziato Component 2 (Ministerial Decree 352/2022) and co-financed by the Company Chiesi Farmaceutici S.p.A.</li> <li>Scholarship co-financed with funds under the PNRR - Mission 4</li> <li>Characterization with spectrosco spectrometric techniques of the struct dynamics of target proteins and of the emacro and micromolecular interactors</li> </ul> </li> </ul>	/ephrin ent of			
1       Scholarship funded by Food and Drug Department <ul> <li>Biopharmaceutics-Pharmacokinetics</li> </ul> 1         Scholarship funded by Food and Drug Department <ul> <li>Biopharmaceutics-Pharmacokinetics</li> </ul> 1         Scholarship funded by Food and Drug Department <ul> <li>Biopharmaceutics-Pharmacokinetics</li> </ul> 1         Bound Provide State Sta	/ephrin ent of			
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 research topic. The Examination Board will evaluate their eligibility based on specific competences, experience and 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 ligands</li> <li>Scholarship financed with funds under the PNRR – Mission 4 component 1 (Ministerial Decree 351/2022 art. 7 "PNRR Research")</li> <li>Finanziato dall'Unione europea NextGenerationEU</li> <li>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.               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.               1             Scholarship co-financed with funds under the PNRR - Mission 4               1             Scholarship co-financed with funds under the PNRR - Mission 4               1             Scholarship co-financed with funds under the PNRR - Mission 4               1             Scholarship co-financed with funds under the PNRR - Mission 4               1             Scholarship co-financed with</li></ul>	/ephrin ent of			
During the Oral Exam, applicants may express and/or confirm their interest of being assigned a scholarship linked to a research topic. The Examination Board will evaluate their eligibility based on specific competences, experience and 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       • Pharmacological evaluation of new Ept ligands         2       Scholarship financed with funds under the PNRR- Mission 4 component 1 (Ministerial Decree 351/2022 art. 7 "PNRR Research")       • Drug-delivery strategies for the treatr degenerative pathologies of the gesegnent 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.       • Characterization with spectrosco spectrometric techniques of the struct dynamics of target proteins and of the e 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 Chiesi Farmaceutici S.p.A.       • Characterization with spectrosco spectrometric techniques of the struct dynamics of target proteins and of the e macro and micromolecular interactors         1       Scholarship co-financed with funds under the PNRR - Mission 4       • Characterization with spectrosco spectrometric techniques of the struct dynamics of target proteins and of the e macro and micromolecular interactors	/ephrin ent of			
research topic. The Examination Board will evaluate their eligibility based on specific competences, experience and 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       • Pharmacological evaluation of new Ept ligands         1       Scholarship financed with funds under the PNRR- Mission 4 component 1 (Ministerial Decree 351/2022 art. 7 "PNRR Research")       • Drug-delivery strategies for the treatment degenerative pathologies of the 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.       • Characterization with spectroscol spectrometric techniques of the struct dynamics of target proteins and of the emacro and micromolecular interactors         1       Scholarship co-financed with funds under the PNRR - Mission 4       • Characterization with spectroscol spectrometric techniques of the struct dynamics of target proteins and of the emacro and micromolecular interactors         1       Scholarship co-financed with funds under the PNRR - Mission 4       • Characterization with spectroscol spectrometric techniques of the struct dynamics of target proteins and of the emacro and micromolecular interactors	/ephrin ent of			
1       Scholarship partly financed with UNIVERSITY funds and co-financed by the Food and Drug Department       • Pharmacological evaluation of new Eph ligands         1       Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 351/2022 art. 7 "PNRR Research")       • Drug-delivery strategies for the treatment degenerative pathologies of the proceed all'Unione europea NextGenerationEU         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.       • Characterization with spectroscop spectrometric techniques of the struct dynamics of target proteins and of the emacro 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 Chiesi Farmaceutici S.p.A.       • Characterization with spectroscop spectrometric techniques of the struct dynamics of target proteins and of the emacro and micromolecular interactors         1       Scholarship co-financed with funds under the PNRR - Mission 4       • Characterization with spectroscop spectrometric techniques of the struct dynamics of target proteins and of the emacro and micromolecular interactors	ent of			
1       financed by the Food and Drug Department       ligands         1       Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 351/2022 art. 7 "PNRR Research")       • Drug-delivery strategies for the treatridegenerative pathologies of the pathologies pathologies of the pathologies pathologies of the pathologies o	ent of			
1       component 1 (Ministerial Decree 351/2022 art. 7 "PNRR Research")       • Drug-delivery strategies for the treated degenerative pathologies of the				
1       component 2 (Ministerial Decree 352/2022) and co-financed by the Company Chiesi Farmaceutici S.p.A.       • Characterization with spectroscol spectrometric techniques of the struct dynamics of target proteins and of the emacro and micromolecular interactors         1       Finanziato dall'Unione europea NextGenerationEU       • Characterization with spectroscol spectrometric techniques of the struct dynamics of target proteins and of the emacro and micromolecular interactors         Scholarship co-financed with funds under the PNRR - Mission 4				
	re and			
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.       • Innovative nasal powders for vaccinations and viral infection treatment of viral infections         Finanziato dall'Unione europea NextGenerationEU       • Innovative nasal powders for vaccinations and viral infections				
Position reserved for EMPLOYEES of companies or public institutes and research centers engaged in highly qualified activities				
Company/Institution				
1 Reserved to employees of company Chiesi Farmaceutici S.p.A.				
1 Reserved to employees of company Preclinics Gesellshaft für präklinische Forshung mbH	Reserved to employees of company Preclinics Gesellshaft für präklinische Forshung mbH			
1 Reserved to employees of company Laboratorio di analisi La Fontana				

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
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Foreign Language	Language the fluency of which shall be assessed during the Oral Exam: <u>ENGLISH</u> . The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text.				
		MITTED TO THE ORAL EXAM WILL TAKE THE EXAM IN PRESENCE			
abroad for study / w	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 DOCU	MENTS TO BE AT	TACHED TO THE ON-LINE APPLICATION			
ANNEX A	(art	. 5 of the Competition notice)			
Identification Docum	ient Sca	anned Copy of a valid identity document with photo (i.e. identity card	, passport)		
Curriculum Vitae et s	studiorum No	specific CV format is required (see art. 4 of the Competition notice)			
Abstract of the second cycle master's degree thesis. Undergraduate applicants must         Abstract of degree thesis       the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.         characters including spaces)					
QualificationsCertificates and academic transcript of records for both Bachelor' and Master' containing the following details for each degree held: (art. 4 of the Competition no University that granted the degree - Type of degree (first cycle/second cycle/single Name of the degree program - Date of graduation - Final mark - List of exc corresponding scores (academic transcript of records) - Translation into Italian of (only for degrees issued in languages other than Italian or English).			petition notice): cycle/single cycle) List of exams and		
Research ProjectThe research project shall consist of a maximum of 3 pages, be written in Italian or i focused on an original research topic and it shall be structured as follows: introd the problem in the scientific context, significance of the problem, expected results. be noted that the Examination Board can use tools useful for verifying the original submitted Project. The research project does not represent a constraint with respect to the following of the doctoral thesis, that shall be defined together with the supervisor and appro 			ws: introduction of ed results. It should he originality of the following choice		
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)					
ScientificArticles and/or reviews in scientific journals with peer reviewing, abstracts of papers oPublicationspresented at conventions or meetings.			papers or posters		
		EVALUATION CRITERIA			
QUALIFICATION		EVALUTATION CRITERIA	POINTS		
Curriculum Vitae et s	tudiorum	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 20 points		









Graduation thesis			Consistency of the Master's Degree thesis with the doctoral program research topics	Up to 10 points
Research Project			<ul> <li>Points relating to the research project shall be allocated on the basis of the following criteria:</li> <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>	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			<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 September 2022 (with possible extension in the following days)		
ORAL EXAM	TIME	09:30	am (Italian Time)	
	PLACE	Parco	and Drug Department Area delle Scienze, 27/A – Campus PARMA - ITALY	
<b>OTHER INFORMATION</b> For foreign candidates, the admission examinations may be held in English at the cand choice.				h at the candidate's









EARTH SCIENCES				
CYCLE XXXVIII				
COORDINATOR	Prof. Marco ROVERI email: <u>marco.roveri@unipr.it</u> Department of Chemistry, Life Sciences and Environmental Sustainability			
DURATION	3 years			
STARTING DATE OF THE PHD PROC	GRAM 01/11/2022			
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the form ANNEX A and submit a RESEARCH PROJECT in the relevant field)				
<ul> <li>Debris-flows in Northern Apennines and climate change: recent event analysis and reconstructions at different temporal scales</li> <li>The calcareous nannofossils of the Southern Ocean in the Eocene - Oligocene interval: paleoecological, paleoclimatic and paleoceanographic implications</li> <li>Fracture pattern and connectivity in folded and faulted sandstone turbidites: implications for subsurface fluid mobility in fractured reservoirs</li> <li>The role of Messinian evaporites on the deformational style of the Crotone sector of the Calabrian Arc</li> <li>Carbonate production during the Messinian salinity crisis</li> <li>Genetic processes and possible exploitation of natural hydrogen systems</li> <li>Reconstructing the plumbing system of Marsili seamount (Southern Tyrrhenian): a combined petro-chemical and experimental petrology approach</li> </ul> TRAINING OBJECTIVES The main aim of the Ph.D. Course in Earth Sciences is to provide highly qualified study and research paths within the large and				
۹ ADMISSION REQUIREMENTS	Regardless of age and citizenship, applicants holding at least one of the following academicqualifications can apply for admission:-"Laurea Magistrale" LM-11 Science for the conservation of cultural heritage-"Laurea Magistrale" LM-35 Environmental Engineering-"Laurea Magistrale" LM-60 Natural Sciences-"Laurea Magistrale" LM-74 Geology-"Laurea Magistrale" LM-75 Environmental and land sciences			

			With Scholars		5
POSITIONS PUT OUT TO COMPETITION		6		mployees of companies or public institutes enters engaged in highly qualified activities	1
Position with Scholarship					
N°	N° Funding entity			Research Topic, if any	
3	<b>3</b> Scholarship funded by University of Parma (Ministerial funds)				
LINIVERSITÀ DI PARMA					









1	Scholarship co-funded by	v Fondazione Cariparma		
		epartment of Chemistry, Life Sciences		
1	and Environmental Susta	•		
	(funds of "Departments of	of Excellence" program)		
Position reserved for EMPLOYEES				
of companies or public institutes and research centers engaged in highly qualified activities				
N°	Com	pany/Institution	Bound research topic	
1	Reserved to employees of Petrobas	f company Petroleo Brasileiro S.A	<ul> <li>Modeling of depositional systems and turbidite facies variations at the basin scale: relationship between field data and machine and deep learning</li> </ul>	
ADMISSION PROCEDURES (a minimum score of 3 ORAL EXAM: up to 70		Assessment of QUALIFICATIONS: up (a minimum score of 30 points shall b ORAL EXAM: up to 70 points Minimum score for ELIGIBILITY: 70/1	pe required to be admitted to the Oral Exam)	

Foreign Language	Language the fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> . The assessment of knowledge of this language will be oral and will consist in reading and translating a paragraph of scientific text.
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# APPLICANTS ADMITTED TO THE ORAL EXAM CAN TAKE IT EITHER IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE

(Applicants who intend to take the Oral Exam remotely must submit a formal request, using the form attached to the competition notice)

#### 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)		
Abstract of degree thesis	Abstract of the second cycle master's degree thesis. Undergraduate applicants must sub the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)		
QualificationsCertificates and academic transcript of records for both Bachelor' and M containing the following details for each degree held: (art. 4 of the Competi University that granted the degree - Type of degree (first cycle/second cycle Name of the degree program - Date of graduation - Final mark - List corresponding scores (academic transcript of records) - Translation into It (only for degrees issued in languages other than Italian or English).			
Research Project       The research project shall consist of a maximum of 3 pages, be written in Ita focused on an original research topic (unpublished, developed personally be lt should be noted that the Examination Board can use tools useful foriginality of the submitted Project) and it shall be structured as follows the problem in the scientific context, significance of the problem, expected it does not represent a constraint with respect to the following choice of the that shall be defined together with the supervisor and approved by the Acae			









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)				
Statement of Research Interest	Short text – maximum 1 page – in Italian or in English, aimed at explaining the candid reasons to attend the PhD program and at describing her/his specific research interest			
Scientific Publications	Articles on national and international journals, papers presented symposia, monographs, chapters of books, convention papers, reviews	at conferences or		
Other Academic qualifications	First or second level Master's degree obtained in Italy and/or spec subjects consistent with the research topics of this PhD program	ialization degree in		
Other experiences (training, work, research, teaching, etc.)	<ul> <li>Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covered by research grant, and as a staff member of research units</li> <li>Periods of study abroad, outside the country of origin (e.g., Erasmus programme or other similar mobility programmes)</li> <li>Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)</li> </ul>			
	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 graduation mark.Up to 6The marks of the exams and the graduation mark will be the most 			
Graduation mark	Score related to the final mark: - 110 and 110 with honours (magna cum laude): 5 points - from 107 to 109: 4.5 points - from 105 to 106: 3.5 points - from 100 to 104: 2.5 points - from 95 to 99: 1 point - under 95: 0.5 points	Up to 5 points		
<b>Average of the exam marks</b> (if the candidate will attain the degree n later than 24 October 2022)		Up to 5 points		
Graduation thesis	Congruence with the research topics of the PhD course and quality of the research methodology	Up to 8 points		
Research Project	<ul> <li>Points relating to the research project shall be allocated on the basis of the following criteria:</li> <li>Scientific value and or originality of the proposal: max 8 points</li> <li>description and structure of the proposal: max 3 points</li> <li>proposal feasibility: max 3 points</li> <li>consistency with the research themes of the PhD course: max 8 points</li> </ul>	Up to 22 points		
Statement of Research Interest	Short text – maximum 1 page – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD program and at describing her/his specific research interests	Up to 1 point		









Scientific publications		<ul> <li>Abstract presented at a national or international congress: 0,5 points</li> <li>Articles on scientific journals (ISI/SCOPUS): 2 points</li> <li>Other publication (related to the topics of PhD program: 1 point</li> </ul>	Up to 5 points	
Other Academic qu	alifications	First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program	Up to 1 points	
Other experiences		<ul> <li>Periods of study abroad: 1 point</li> <li>Scholarships, scientific associations awards: 1 point</li> </ul>	Up to 2 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 of the			Up to 70 points	
SCHEDULE OF THE ADMISSION EXAMS				
	DATE	19 September 2022 (with possible extension to 20 September 2022)		
	ΤΙΜΕ	09:00 AM (Italian Time)		
ORAL EXAM	PLACE	remotely (at the request of the candidate) using the Microsoft Teams platform in presence at: Department of Chemistry, Life Sciences and Environmental Sustainability EARTH SCIENCES BUILDING Parco Area delle Scienze, 157/A – Campus 43124 PARMA - ITALY		
OTHER INFORMA	<b>DTHER INFORMATION</b> For foreign candidates, the admission examinations may be held in English at the candidates, the admission examinations may be held in English at the candidates.			









# PHILOLOGICAL-LITERARY, HISTORICAL-PHILOSOPHICAL AND ARTISTIC STUDIES

CYCLE	XXXVIII	
COORDINATOR	Prof. Italo TESTA email: <u>italo.testa@unipr.it</u> Department of Humanities, Social Sciences and Cultural Industries	
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)

- Greek and Latin Philology
- Philosophy
- Italianistics and Romance Philology
- Foreign Languages and Literatures
- History
- History of Art and Entertainment

## TRAINING OBJECTIVES

• In **Greek and Latin Philology** the knowledge and skills of doctoral candidates will be deepened in the sciences of antiquity, with particular reference to linguistics, philological-literary studies, archaeology, papyrology, and the development of the Greek-Latin tradition in the Middle Ages and the Humanities. The doctoral candidates will be led to realize a critical edition, a commentary or an essay, concerning texts in Greek or Latin, or the edition of sources or archaeological contexts, according to the complete time span of their tradition and their continuity of life.

• In **Philosophy**, PhD students' critical ability and logical-argumentative skills will be developed, as will their knowledge in the history of philosophy. Phd students will acquire the ability to conduct an original piece of research – which requires being able to put into practice conceptual analysis, reasoning, historic and philological documentation – in the fields of theoretical philosophy, the philosophy of language and aesthetics, and the history of medieval, modern and contemporary philosophy.

• In Italian and Romance Studies the aim is to train researchers able both in the linguistic and philological fields as well as literary theory. They will be able to produce critical texts and commentaries of texts from the Romance field or that of Italian literature, and to conduct innovative, historical-literary or thematic analysis of various time periods.

• In Foreign Languages and Literature, the focus is on the learning of languages and foreign literature within the European area (English, French, German, Spanish and Russian) as well as, where applicable, their expression in the field of post colonialism. Within the course, original and innovative research activities, based on the latest theoretical and methodological approaches and relevant to the discipline of linguistics (translation, discourse analysis, corpus linguistics, lexicography) and the historical-critical analysis of literature and of the culture between the early modern age and contemporaneity, are promoted.

• In **History**, the goal is to train young academics in the field of historical sciences through the acquisition of skills, methodologies and critical abilities that are necessary for historical, classical and contemporary-age research. PhD students will be supervised during their realisation of original and innovative research projects, focused on various types of sources and dealing with the main issues relating to different perspectives in political and religious history, the history of ideas, and social and economic analysis.

• In **History of Art and the Performing Arts**, the aim is to provide the methodological and critical tools necessary for conducting research in the history of medieval art, or modern or contemporary art, in the history of criticism and museology, but also in the fields of the history of theatre and cinema. PhD students will acquire the ability to consciously recall critical debate, to be able to read the various sources available, and above all the ability to employ philological tools when reading an image.









ADMISSION REQUIREMENTS	<ul> <li>Regardless of age and citizenship, applicants holding at least one of the following academ qualifications can apply for admission:</li> <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 Italia degrees and recognized as suitable for the admission to doctoral program</li> </ul>				
	Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree within the deadline set for enrollment, that is <b>by 24.10.2022</b>				

POSIT	IONS PUT OUT TO COMPETITION	13	With Sch	olarship	13	
	Position with Scholarship					
N°	Funding entit	ту.		Research Topic, if any		
3	Scholarship funded by University of F	arma (Ministeri	al funds)			
1	Scholarship funded by University of F	arma (Universit	y funds)			
3	Scholarship funded by University of .					
1	Scholarship co-funded by Fondazione	e Cariparma				
	Position with Scholarship	LINKED TO SPE	CIFIC TOPI	CS (art. 11 of the Competition notice)		
resea				erest of being assigned a scholarship linked to ased on specific competences, experience a	-	
N°	Funding entit	Т <b>у</b>		BOUND RESEARCH TOPIC		
3	Scholarship financed with funds under the PNRR– Mission 4 component 1 <b>(Ministerial Decree 351/2022 art. 8</b> "Publi Administration") Finanziato dall'Unione europea NextGenerationEU			<ul> <li><u>Museology and History of Collecting:</u> deand implementation of a digital platfor dematerialization of the scientific catalog <i>Gallerie Estensi</i>, with particular attentio cataloguing applied to the history of collection of the science, <u>Bibliography and Lib</u> development and implementation of platform for the dematerialization of th catalogue of the <i>Gallerie Estensi</i>, suital communication side (Web front-end) as internal administration.</li> <li><u>Archival Science, Bibliography and Lib</u> determination and development or solutions for digitalization and management referred to archival docum Houses of Farnese and Bourbon-Parma, in the <i>Archivio di Stato di Parma</i>.</li> </ul>	rm for the gue of the n to digital ections. rarianship: a digital e scientific ole for the well as for rarianship: f suitable metadata ents of the	
2	Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 351/2022 art. 9 "Cultura Heritage")			• For a new aesthetic-practical model of landscape, between nature and cu project aims to investigate the experiences and the crossing practic Apennine mountain landscape as a ma	lture: The aesthetic es of the	









	Finanziato dall'Unione europea       Exit ChenerationEU	<ul> <li>intangible Cultural Heritage to be valued in an eco- sustainable sense. The project moves within aesthetic-philosophical coordinates of a neo- phenomenological and neo-materialistic type with openings to other disciplinary perspectives. The project also aims to analyze case studies in collaboration with the CAI with particular reference to the APE.</li> <li>Parma as european crossroad: the Festival Internazionale del Teatro Universitario (FITU, 1953-1975). Research in archive and history of a cultural heritage which belong to the town and University of Parma: The Ph.D. Project aims at continuing the historical research wich started with a class of students of Dusic Department, guided by prof. Roberta Gandolfi, in collaboration with Archivio storico del Teatro Regio, Archivio Storico dell'Università di Parma, and other archives in Parma (Archivio storico della Fondazione Teatro Due, Archivio del Centro Studi Movimenti), which deals with the decades of FITU, when Parma became a crossroad of national and international theatre. It is a precious cultural heritage little</li> </ul>
2	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co- financed by the Edizioni Centro Studi Erickson S.p.A. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>explored, up to know, which needs investigation.</li> <li>Inclusive Language education: The research project will be carried out within a strategic partnership agreement with Edizioni Centro Studi Erickson S.p.A. The two research scholarships will pertain the scientific field "L-LIN/02 Educational Linguistics" and will revolve around linguistic, communicative and professional competences of inclusive language education. Both scholarships will focus on: 1) the development, analysis and certification of linguistic and communicative competences of monolingual and bilingual learners with and without language/learning disorders; 2) the professional profile and development of the language educators (teachers, tutors, social workers) who work with these types of learners</li> </ul>

ADMISSION PROCEDURES		Assessment of QUALIFICATIONS: up to 80 points (a minimum score of 30 points shall be required to be admitted to the Oral Exam) ORAL EXAM: up to 40 points Minimum score for ELIGIBILITY: 70/120	
Foreign LanguageLanguage the fluency of which shall be assessed during the Oral Exam: FRENCH, ENGLISH, GERI SPANISH (at the candidate's choice). The evaluation of the knowledge of this language will be oral and will consist in reading and transi of a short passage.		(at the candidate's choice). Nation of the knowledge of this language will be oral and will consist in reading and translating	
APPLICANTS ADMITTED TO THE ORAL EXAM CAN TAKE IT EITHER IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE (Applicants who intend to take the Oral Exam remotely must submit a formal request, using the form attached to the competition notice)			









THE INTERVIEW MAY BE HELD ALSO IN ENGLISH						
LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT						
MANDATORY DOCUMENTS TO B	MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION					
ANNEX A	(art.	(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 studiorum	Nos	specific CV format is required (see art. 4 of the Competition notice)				
Abstract of degree thesis And degree thesis	<b>cyc</b> and	<b>PDF of the Abstract</b> (10.000 characters including spaces) <b>and PDF of the second cycle master's degree thesis</b> Undergraduate applicants shall submit the abstract and the draft of the thesis approved by their supervisor through a short statement attached to the draft				
Qualifications	con Uni Nar cor	<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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	introduction of the problem in the scientific context, significance of the problem, expected results, argumentation. The project <u>does not represent a constraint with respect to the</u> <u>following choice of the doctoral thesis</u> , that shall be defined together with the supervisor					
	and approved by the 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	Scientific Publications Monographs, articles in national and international scientific journals, book chapter conference proceedings, reviews.					
Other Academic qualifications		t or second level Master's degree obtained in Italy and/or speci jects consistent with the research topics of this PhD program	alization degree in			
Other experiences (training, work, research, teaching, etc.)						
EVALUATION CRITERIA						
QUALIFICATION		EVALUTATION CRITERIA	POINTS			
Graduation mark		Score related to the final mark: - 110 with honours (magna cum laude)	Up to 1 point			
Average of the exam marks		Score related to the average of the exam marks: - 30/30	Up to 1 point			
Graduation thesis		Consistency of the Master's Degree thesis with the doctoral programme research topics, methodological rigor, knowledge of critical literature	Up to 25 points			









Research Project			Points relating to the research project : (originality, articulation, feasibility of the proposal)	Up to 25 points
Scientific publication	Scientific publications		Monographs, articles in national and international scientific journals, book chapters, conference proceedings, reviews.	Up to 14 points
Other experiences			Post lauream scholarship, experience abroad, award, etc.	Up to 14 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		roject ability entific eneral	<ul> <li>knowledge and methodology necessary for the realization of the project: max 35 points</li> <li>knowledge of chosen foreign language: max 5 points</li> </ul>	Up to 40 points
	DATE 20 Se		otember 2022	
ORAL EXAM			AM (Italian Time)	
Depai PLACE Via D		Via D'	rrtment of Humanities, Social Sciences and Cultural Industries 'Azeglio, 85 5 PARMA - ITALY	
OTHER INFORMATION For fo choice			reign candidates, the admission examinations may be held in Englisl 2.	n at the candidate's









JURIDICAL SCIENCES				
CYCLE	ХХХУШ			
COORDINATOR	Prof. Fabio Salvatore CASSIBBA email: <u>fabiosalvatore.cassibba@unipr.it</u> Department of Law, Politics and International Studies			
DURATION	3 years			
STARTING DATE OF THE PHD PROGRAM	01/11/2022			
PARTNER INSTITUTION	University of Modena e Reggio Emilia			
<b>RESEARCH TOPICS</b> (The candidate <b>MUST mandatorily</b> indicate one research topic in the form ANNEX A and submit a				

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

- Commercial Law (IUS/04)
- Al and Public Administration. Problems and topics of the algorithmic decision (IUS/08 Constitutional Law)
- Sustainability and next generations' interests about the politics agains climate change (IUS/08 Constitutional Law)
- Structural innovations and new models of governance (IUS/10 Administrative Law)
- Tax Law (IUS/12)
- Civil procedure (IUS/15)
- Criminal Law (IUS/17)
- Philosophy Law (IUS/20)
- Right to a sustainable, healthy and "inedible" food: comparative perspectives (IUS/21 Public comparative law)
- Criminology (MED/43)

#### TRAINING OBJECTIVES

The project of the doctoral course in Law Sciences is developed by a plurality of higher education activities, throughout the three-year period and divided into various types.

First of all, the PhD program intends to enhance - from the first year - interdisciplinary / multidisciplinary / transdisciplinary activities, through the provision of various courses, concerning topics of general or transversal legal interest. The related courses (some delivered exclusively in English) will be held by 1st and 2nd level professors and by RTD-B researchers, as well as by experts from the various scientific disciplinary sectors involved, so as to favor the acquisition of skills and professionalism truly adequate for the objectives. training courses, on a methodological level, on that of reasoning and analysis in the legal field, of the in-depth knowledge required at the level of professional opportunities. In addition, the aim is improving the linguistic skills of doctoral students in the legal field. These didactic activities will take place - in particular although not exclusively - in the first year of the doctorate, in order to allow the PhD students, on one hand, to acquire a solid and interdisciplinary "initial" training, also on the methodological profiles and tools necessary for research ; on the other hand, to give them the opportunity in subsequent years to improve their skills in specific disciplinary sectors, also through periods of stay abroad, in view, then, of the drafting of the doctoral thesis. The PhD course also provides for strengthening the theoretical skills of the students through the conduct of lessons (also in a foreign language) on legal issues related to the individual scientific disciplinary sectors referable to "Area 12" /Law Science), held by 1st or 2nd level professors. o by RTD-B researchers Italian or foreign, as well as by experts in the field, including foreigners. Finally, the doctoral course intends to enrich the training of PhD students, encouraging their participation in conferences, study meetings, seminars (typically, although not exclusively, organized or sponsored by universities, including foreign ones, and by national or international research bodies), also abroad, which from time to time will be accredited as moments of common, interdisciplinary or sector teaching.









ADMISSION REQUIREMENTS	<ul> <li>Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul> <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> </li> </ul>
	Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree within the deadline set for enrollment, that is <b>by 24.10.2022</b>

POSIT	POSITIONS PUT OUT TO COMPETITION     11     With Schola			arship	11
		Position	n with Schola	arship	
N°	Funding en	tity		Research Topic	
3	Scholarship funded by University of	f Parma (Ministe	erial funds)	<ul> <li>Tax Law (IUS/12)</li> <li>Criminal Law (IUS/17)</li> <li>Philosophy Law (IUS/20)</li> </ul>	
3	Scholarship funded by University of	f Modena e Reg	gio Emilia	<ul> <li>Commercial Law (IUS/04)</li> <li>Civil procedure (IUS/15)</li> <li>Criminology (MED/43)</li> </ul>	
	Position with Scholarsh	ip LINKED TO SF	PECIFIC TOPI	CS (art. 11 of the Competition notice)	
resea				erest of being assigned a scholarship linked to based on specific competences, experience an	
N°	Funding en	tity		BOUND RESEARCH TOPIC	
2	Scholarship financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 351/2022 art. 8 "Public Administration") Finanziato dall'Unione europea NextGenerationEU			<ul> <li>CONSTITUTIONAL LAW (IUS/08):</li> <li>AI and Public Administration. Problems of the algorithmic decision</li> <li>Sustainability and next generations' inter the politics agains climate change</li> </ul>	
2	Scholarship financed with funds up component 1 (Ministerial Decree Administration") Finanziato dall'Unione europea NextGenerationEU	e 351/2022 art.		ADMINISTRATIVE LAW (IUS/10): • Structural innovations and new n governance	nodels of
1	Scholarship financed with funds up component 1 (Ministerial Decree Administration") Finanziato dall'Unione europea NextGenerationEU	e 351/2022 art.		<ul> <li>PUBLIC COMPARATIVE LAW (IUS/1):</li> <li>Right to a sustainable, healthy and "ined comparative perspectives (Public compared)</li> </ul>	









ADMISSION PROCEDURES		Assessment of QUALIFICATIONS: up to 70 points (a minimum score of 35 points shall be required to be admitted to the Oral Exam) ORAL EXAM: up to 50 points Minimum score for ELIGIBILITY: 70/120		
Foreign Language	Language the fluency of which shall be assessed during the Oral Exam: <u>ENGLISH</u> . The evaluation of the knowledge of this language will be oral and will consist in translating of a scientific text etc.			
	CANDIDA	TES ADMITTED TO THE ORAL TEST CAN TAKE THE EXAM IN PRESENCE.		
		<u>ely</u> via audio and video teleconference in case of isolation / quarantine due to COVID-19 virus dates must submit <b>a motivated REQUEST</b> as per the model attached to the competition.		
	LIST OF Q	UALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT		
MANDATORY DOCU	MENTS TO B	E ATTACHED TO THE ON-LINE APPLICATION		
ANNEX A		(art. 5 of the Competition notice)		
Identification Docum	nent	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)		
Curriculum Vitae et s	studiorum	No specific CV format is required (see art. 4 of the Competition notice)		
Abstract of degree th	hesis	Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)		
Qualifications		<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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 Italian or in English, according to the format attached to the competition notice, it will have to focus 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). It does not represent a constraint with respect to the following choice of the doctoral thesis, which will be assigned by the 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 Publication	15	Monographs, articles in scientific journals, chapters in collective volumes (uniquely referable to the candidate).		
Other Academic qualifications		First or second level Master's degree obtained in Italy and/or specialization degree in subjects consistent with the research topics of this PhD program		
Other experiences (training, work, research, teaching, etc.)		<ul> <li>Research activity (basic, applied, translational, etc.) carried out in any capacity, including when covedered by research grant, and as a staff member of research units</li> <li>Working activity</li> <li>Professional and/or training internship</li> <li>Language proficiency certificates</li> <li>Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes)</li> <li>Other qualifications attesting the suitability of the applicants (scholarships, awards, etc.)</li> </ul>		









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 graduation mark.	Up to 33points	
Graduation mark			Score related to the final mark: - 110 with honours (magna cum laude): 5 points; - 110: 3 points	Up to 5 points	
Average of the exa candidate will attai later than 24 Octob	n the degree		Score related to the average of the exam marks: - 30/30: 5 points - From 27/30 to 29/30: 3 points	Up to 5 points	
Graduation thesis			Congruence with the research topics of the PhD course for the scientific disciplinary sectors available for competition	Up to 2 points	
Research Project			<ul> <li>Points relating to the research project:</li> <li>methodological rigor: max 10 points</li> <li>originality: max 8 points</li> <li>consistency with the topics of the scientific disciplinary sector of reference: max 2 points</li> </ul>	Up to 20 points	
Scientific publication	ons			Up to 5 points	
Other Academic qu	ualifications			Up to 3 points	
Other experiences				Up to 2 points	
ORAL EXAM	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		roject ability entific eneral	<ul> <li>presentation of the project: max 30 points</li> <li>preparation on the topics of the scientific disciplinary sector of reference for the project: max 20 points</li> </ul>	Up to 50 points	
	T	1	SCHEDULE OF THE ADMISSION EXAMS		
	<b>DATE</b> 19 Se		eptember 2022 (with possible extension to 20 September 2022)		
	TIME	03:00 PM (Italian Time)			
PLACE Unive Via Unive		Univer Via Un	DIERA" CLASSROOM ersity of Parma - CENTRAL PALACE niversità, 12 1 PARMA - ITALY		
OTHER INFORMATION For foreign candidates it is possible to carry out the admission examination exclusivel English.			ation exclusively in		









# TRASLATIONAL MEDICAL AND SURGICAL SCIENCES CYCLE XXXVIII COORDINATOR Prof. Nicola SVERZELLATI email: nicola.sverzellati@unipr.it Department of Medicine and Surgery 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)

- 1. Stem cells in the diagnosis and treatment of neoplasms, chronic and degenerative disorders, cardiovascular diseases and musculoskeletal diseases;
- 2. Translational medicine and immunologic dysregulation of gastrointestinal, respiratory, infective, haematological, oncological, endocrinological, nephrological and dermatological diseases, and of vasculitis;
- **3.** Plasticity, function and diagnostic-therapeutic use of genomic, transcriptomic, proteomic and metabolomic platforms of cells, organs and tissues to prevent or treat neoplasms, infections, chronic and degenerative diseases, metabolic dysfunctions, obstetrics and neonatal diseases as well as in response to environmental factors, lifestyles and drugs;
- 4. Development and "theragnostic" function of imaging and technologically advanced phenotyping platforms to prevent or treat neoplasms, infections, chronic and degenerative diseases, metabolic dysfunctions, obstetrics and neonatal diseases as well as in response to environmental factors, lifestyles and drugs;
- 5. Development and application of technologically advanced devices (i.e. biological devices), to measure and support and/or replace the function of cells, tissues or organs in medical and/or surgical diseases;
- 6. Advanced and innovative strategies for recovery and functional rehabilitation to prevent or treat neoplasms, infections, chronic and degenerative diseases, metabolic dysfunctions, obstetrics and neonatal diseases as well as in response to environmental factors, lifestyles and drugs;
- 7. Role of governance and organization of healthcare systems and services in the prevention and care of disorders with a potentially high social and economic impact, including, but not limited to, environmental and professional diseases;
- 8. Role of microbiota and microbiome in translational medicine and surgery;
- 9. Retrieval and role of "big data" in translational medicine and surgery;
- 10. Role of advanced technologies, including robotics, in translational surgery
- Role of qualitative and quantitative imaging in the diagnosis of neoplasms, infections and chronic degenerative diseases

#### TRAINING OBJECTIVES

The PhD Program in Translational Medical and Surgical Sciences is a multidisciplinary program, in which the common denominator of the various research activities conducted by the PhD students is represented by the application of the acquired knowledge to clinical practice. In fact, the close link between preclinical and clinical research will allow discoveries and methodological skills acquired through experimental studies to be transferred into medical practice. Such a link will enable PhD students to deal with real problems, ranging from diagnosis to therapy and from prevention to rehabilitation, all of which deeply connected with human diseases and patient care.

The bidirectional exchange between lab and clinical research will bring back to the lab the results of clinical and epidemiological observations, and at the same time it will anchor experimental research to issues that originate from real-world inputs and tests carried out directly on humans.

Therefore, the final goal of the PhD Program in Translational Medical and Surgical Sciences is to provide a highly qualifying training to the PhD students, offering them opportunities, skills and technological resources necessary to practice translational research at a high level in either public or private Institutions, national or international, including, but not limited to, Universities, Research Institutes and PharmaMed Industries.









ADMISSION REQUIREMENTS	<ul> <li>Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul> <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> </li> </ul>
	Undergraduates can also apply for admission to the selection, with the obligation to obtain the degree within the deadline set for enrollment, that is <b>by 24.10.2022</b>

POSIT	IONS PUT OUT		With Scholarship		6			
TO COMPETITION		8	Reserved for employees of companies or public institutes and research centers engaged in highly qualified activities		2			
	Position with Scholarship							
N°		Funding e	ntity	Research Topic, if any				
3	Scholarship fund	ded by University	of Parma (Ministerial funds)					
1	Scholarship co-f	unded by Fondazi	one Cariparma					
	Posit	tion with Scholars	hip LINKED TO SPECIFIC TOP	CS (art. 11 of the Competition notice)				
resea	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 e	ntity	BOUND RESEARCH TOPIC				
1		•	JNIVERSITY funds and co- edicine and Surgery	<ul> <li>Role of the bone marrow microenvironn progression of multiple myeloma</li> </ul>	nent in the			
1	Scholarship part financed by AIL		JNIVERSITY funds and co-	<ul> <li>Development of high throughput platfor identification of new targets and therap leukemia</li> </ul>				
	Position reserved for EMPLOYEES of companies or public institutes and research centers engaged in highly qualified activities							
N°			Company/Ins	titution				
2	Reserved to emp	Reserved to employees of Azienda Unità Sanitaria Locale of Piacenza						

ADMISSION PROCEDURES		ASSESSMENT OF QUALIFICATIONS: up to 45 points ORAL EXAM: up to 75 points MINIMUM SCORE FOR ELIGIBILITY: 70/120		
		fluency which shall be assessed during the Oral Exam: <b>ENGLISH</b> . rledge of the English language will be assessed orally and will consist in reading and translating ic text.		
APPLICANTS ADMITTED TO THE ORAL EXAM CAN TAKE IT EITHER IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE (Applicants who intend to take the Oral Exam remotely must submit a formal request, using the form attached to the competition notice)				









THE INTERVIEW MAY BE HELD ALSO IN ENGLISH						
LI	LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT					
MANDATORY DOCUM	MANDATORY DOCUMENTS TO BE ATTACHED TO THE ON-LINE APPLICATION					
ANNEX A		(art. 5 of the Competition notice)				
Identification Docume	nt	Scanned Copy of a valid identity document with photo (i.e. identity card, passport)				
Curriculum Vitae et stu	udiorum	No specific CV format is required (see art. 4 of the Competition notice)				
Abstract of degree the	sis	Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)				
Qualifications		<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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		The research project, written in Italian or in English and consisting of a maximum of 3 pages, shall be focused on an original research topic (unpublished, developed personally by the applicant. It should be noted that the Examination Board can use IT tools to verify the originality of the submitted Project) and structured as follows: scientific context, significance of the problem, expected results. The research project does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined with the supervisor and approved by the Academic Board.				
		MAY BE ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPLICANT document drawn up in Italian or in English)				
Statement of Research interest		tt – maximum 1 page – in Italian or in English, aimed at explaining the applicant's reasons to he PhD program and at describing her/his specific research interests				
Scientific Publications		and/or reviews published on peer-reviewed scientific journals, abstracts of papers or posters ed at conventions or meetings; book chapters, etc.				
Reference Letters other Un The refe		num of 2 letters, written by Professors or Researchers from the applicant's University or from niversities or from experts in the research field working in public or private research facilities. erence letters must be produced on the letterhead of the University/Operating Unit/Structure eferee and attached to the online application by the applicant.				
Other Academic qualifications	First or second level Master's degree obtained in Italy and/or specialization degree in subjects relat to the research topics of this PhD program.					
Other experiences-V(training, work,-Aresearch, teaching,-Petc.)-L-P		arch activities (basic, applied, translational, etc.) carried out in any way, including those red by research grant, and conducted as a staff member of research units king activity ities at accredited laboratories essional and/or training internship uage proficiency certificates eds of study abroad, outside the country of origin (e.g. Erasmus or similar programmes) r qualifications attesting the suitability of the applicants (scholarships, awards, etc.)				









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 graduation mark. The marks of the exams and the graduation mark will be the most relevant element of the evaluation.	Up to 9 points		
Graduation mark	Score assignable to the final mark: - 110 with honours (magna cum laude): 5 points; - 110: 3 points; - From 106 to 109: 2 points; - From 102 to 105: 1 point.	Up to 5 points		
Average of the exam marks (if the candidate will attain the degree no later than 24 October 2022)	Score assignable to the average of the exam marks: - 30/30: 5 points; - From 28/30 to 29/30: 3 points; - From 26/30 to 27/30: 2 points; - From 24/30 to 25/30: 1 point.	Up to 5 points		
Graduation thesis	Up to 2 points			
Research Project	<ul> <li>Score assignable for the research project:</li> <li>Scientific value and ground-breaking nature of the proposal: max 7 points</li> <li>Description and structure of the proposal: max 2 points</li> <li>Proposal feasibility: 1 point</li> </ul>	Up to 10 points		
Statement of Research Interest		Up to 1 point		
Scientific publications		Up to 9 points		
Reference Letters		Up to 3 points		
Other Academic qualifications	<ul> <li>Second level Master's degree and Specialization: 3 points</li> <li>First level Master's degree and / or Advanced training and / or specialization and / or Higher Education course: 1 point</li> </ul>	Up to 3 points		
Other experiences		Up to 3 points		
ORAL EXAM	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> <li>Ability to argument the project proposal: up to 30 points</li> <li>Discussion of the critical points of the project: up to 18 points</li> <li>Ability to provide an adequate scientific context to the project proposal: up to 15 points</li> <li>Ability to mitigate risks deriving from unexpected results: up to 10 points</li> <li>Knowledge of the English language: up to 7 points</li> </ul>	Up to 75 points		



dall'Unione europea NextGenerationEU







	SCHEDULE OF THE ADMISSION EXAMS					
	DATE	14 September 2022 (with possible extension to 15 September 2022)				
	TIME	09:00 AM (Italian Time)				
ORAL EXAM	PLACE	Department of Medicine and Surgery BUILDING 26 – INTERNAL MEDICINE CLASSROOM Via A. Gramsci, 14 43126 PARMA - ITALY				
OTHER INFORMATION		For foreign applicants it will be possible to carry out the oral exam in English. For Italian applicants it will be possible to take it in either Italian or English.				









VETERINARY SCIENCES					
CYCLE	XXXVIII				
COORDINATOR	Prof. Gaetano DONOFRIO email: <u>gaetano.donofrio@unipr.it</u> Department of Veterinary Science				
DURATION	3 years				
STARTING DATE OF THE PHD PROGI	RAM 01/11/2022				
<b>RESEARCH TOPICS</b> (The candidate <b>N</b> RESEARCH PROJECT in the relevant f	<b>//UST mandatorily</b> indicate one research topic in the form ANNEX A and submit a field)				
<ul> <li>Clinical Sciences</li> <li>Basic Sciences</li> <li>Animal Production Sciences and Technologies</li> <li>Food inspection and Public Health</li> </ul> TRAINING OBJECTIVES					
Veterinary Science Doctoral course nonclinical areas (animal productio	e aims at training PhD-students about research topics on basic, pre-clinical, clinical and on and food inspection) by novel methodology and technology. PhD student chooses to ct under the supervision of a Tutor and to produce scientific outcomes in the following area				
ADMISSION REQUIREMENTS       Regardless of age and citizenship, applicants holding at least one of the following acade qualifications can apply for admission: <ul> <li>"Laurea Magistrale" LM-42 Veterinary Medicine</li> <li>"Laurea Magistrale" LM-6 Biology</li> <li>"Laurea Magistrale" LM-9 Medical Biotechnology, Veterinary and Pharmaceutica</li> <li>"Laurea Magistrale" LM-86 Zootechnical Sciences and Animal Technologies as well as the equivalent "laurea specialistica" or "laurea" achieved based on the university system in force before the entry into force of Italian Ministerial Decree No. 509/99</li> <li>Second cycle Master's degree obtained abroad, equivalent to the above mention Italian degrees and recognized as suitable for the admission to doctoral programs</li> </ul>					

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		6	With Scholarship		5
			Reserved to holders of Research Grant		1
	Position with Scholars			ір	
N°	Funding entity			Research Topic, if any	
3	Scholarship funded by University of Parma (Ministerial funds)				
1	Scholarship co-funded by Fondazione Cariparma "CARLO GA				









### 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 financed with funds under the PNRR– Mission 4 component 1 (Ministerial Decree 351/2022 art. 7 "PNRR Research") Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Development of calibration equations for mobile NIRS devices for the rapid nutritional and economic evaluation of forages in the production phase, aimed at their sustainable allocation within the livestock.</li> </ul>					
	Position reserved to HOLDERS OF RESEARCH GRANT						
N°	Subject area of the research						
1	Digital spatial profiling and single cell in situ classification on normal and fibrotic mouse lung parenchyma						

ADMISSION PROCEDURES		Assessment of QUALIFICATIONS: up to 40 points ORAL EXAM: up to 80 points Minimum score for ELIGIBILITY: 70/120			
Foreign Language	Foreign LanguageLanguage the fluency of which shall be assessed during the Oral Exam: ENGLISH.Foreign LanguageThe evaluation of the knowledge of this language will be oral and will consist in translation and comprehension of a scientific text.				
APPLICANTS ADMITTED TO THE ORAL EXAM CAN TAKE IT EITHER IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE (Applicants who intend to take the Oral Exam remotely must submit a formal request, using the form attached to th competition notice)					
		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 Docun	nent	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)			
Abstract of degree thesis		Abstract of the second cycle master's degree thesis. Undergraduate applicants must subm the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)			
Qualifications		<b>Certificates and academic transcript of records for both Bachelor' and Master' degrees</b> 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 it vent		Written in Italian or in English, according to the format attached to the competition notice, it will have to focus on an original research topic ( <b>unpublished</b> , <b>developed personally by the candidate</b> . It should be noted that the Examination Board can use of IT tools useful for verifying the originality of the submitted Project). It does not represent a constraint with respect to the following choice of the doctoral thesis,			
	that s	hall be defined together with the supervisor and approved by the Ad	cademic Board.		
		E ATTACHED TO THE APPLICATION, IF IN POSSESSION OF THE APPL nt drawn up in Italian or in English)	ICANT		
Statement of Research interest		text – maximum 2 pages – in Italian or in English, aimed at explainir ns to attend the PhD program and at describing her/his specific resea			
Scientific Publications	Article	es published in journals indexed in databases Wos and Scopus			
Reference Letters		ximum of 2 written by professors or researchers at the University date or from other universities or from experts in the research areas vate research facilities must be sent directly by the signer to the address e-mail: <u>gaetano.c</u> candidate, therefore, must not uploading them through the p etition online registration).	working in public		
Other qualifications	in subj	jects consistent with the research topics of the PhD program			
		EVALUATION CRITERIA			
QUALIFICATION	E	EVALUTATION CRITERIA			
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. The marks of the exams and the graduation mark will be the most relevant element of the evaluation.			
Graduation mark		core related to the final mark: 110 with honours (magna cum laude): 3 points; 110: 2 points; From 100 to 109: 0.1 points for each mark unit	Up to 3 points		
<b>Average of the exam marks</b> (if the candidate will attain the degree no later than 24 October 2022)		core related to the average of the exam marks: 30/30: 3 points; From 26/30 to 29/30: 2 points; From 22/30 to 25/30: 1 point; From 18/30 to 21/30: 0.5 points	Up to 3 points		
Graduation thesis		Congruence with the research topics of the PhD course and quality of the research methodology			
Research Project		t will be evaluated: Scientific value and originality of the proposal description and structure of the proposal proposal feasibility consistency with the research themes of the PhD course	Up to 10 points		
Statement of Research Interest	S	Short text – maximum 2 pages – in Italian or in English			
Scientific publications	^	Articles published in journals indexed in databases Wos and Scopus	Up to 5 points		









Reference Letters			A maximum 2 letters	Up to 5 points	
Other qualificatior	15		in subjects consistent with the research topics of the PhD program	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				Up to 80 points	
			SCHEDULE OF THE ADMISSION EXAMS		
	DATE	20 Se	20 September 2022 (with possible extension in the following days)		
	TIME	10:00	AM (Italian Time)		
ORAL EXAM	PLACE	ROOM "L" Department of Veterinary Science Via del Taglio, 10 43126 PARMA - ITALY			
		For fo	oreign candidates, the admission examinations may be held in English at the candidate's ce.		









INFORMATION TECHNOLOGIES					
CYCLE		XXXVIII			
COORDINATOR		Prof. Marco LOCATELLI email: <u>marco.locatelli@unipr.it</u> Department of Engineering and Architecture			
DURATION		3 years			
STARTING DATE OF THE PHD PR	OGRAM	01/11/2022			
<b>RESEARCH TOPICS</b> (The candidate RESEARCH PROJECT in the relevation of the relevatio		datorily indicate one research topic in the form ANNEX A and submit a			
Computer systems and	<ul> <li>Electronics instrumentation and electrical drives</li> <li>Computer systems and automatic control</li> <li>Telecommunications and electromagnetic fields</li> </ul>				
TRAINING OBJECTIVES	TRAINING OBJECTIVES				
The course aims at educating the universities and industries.	The course aims at educating the future Ph.D.'s so that they will enter the research world with an active role, within both universities and industries.				
ADMISSION REQUIREMENTS	<ul> <li>qualifications</li> <li>Laurea sp</li> <li>Laurea Ve</li> <li>Second condense</li> <li>degrees a</li> <li>Undergradua</li> </ul>	f age and citizenship, applicants holding at least one of the following academic s can apply for admission: becialistica or Laurea magistrale (second cycle master's degree) ecchio Ordinamento (degree obtained under the previous Italian regulations); ycle Master's degree obtained abroad, equivalent to the above mentioned Italian and recognized as suitable for the admission to doctoral program ates can also apply for admission to the selection, with the obligation to obtain within the deadline set for enrollment, that is <b>by 24.10.2022</b>			

POSITIONS PUT OUT TO COMPETITION			With Scholarship		11
		14	Reserved to holders of Research Grant		1
			Reserved to holders of scholarship funded by foreign States		1
			Reserved for employees of companies or public institutes and research centers engaged in highly qualified activities		1
	Position with Scholarship				
N°	Funding entity Research Topic, if			Research Topic, if any	
3	Scholarship funded by University of Parma (Ministerial funds)				
1	Scholarship co-funded by Fondazione Cariparma				
	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 Department of . Engineering and Architecture	<ul> <li>Study and implementation of control systems for collaborative robots</li> </ul>		
1	Scholarship partly financed with UNIVERSITY funds and co-financed by the Department of . Engineering and Architecture	<ul> <li>Development and implementation of machine learning techniques for the online monitoring of optical communication links</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	<ul> <li>Study and development of underwater communication systems based on visible light communication technology: channel modeling, performance evaluation in typical 6G scenarios, integration with terrestrial, wireless, and satellite networks</li> </ul>		
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 352/2022) and co-financed by the Company LAUMAS Elettronica S.r.I. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Development and implementation of advanced signal processing algorithms for the design of embedded systems based on microcontrollers or programmable logic devices, for load cells with high dynamic performance</li> </ul>		
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company eDriveLAB S.r.l. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Smart Converters for Hybrid and Electric propulsion and generation in Marine Applications (SCHEMA), with sensorless control and virtual sensing</li> </ul>		
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 ( <b>Ministerial Decree 352/2022</b> ) and co-financed by the Company LOOGOS S.r.l. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Machine Learning methods for early detection of anomalies in industrial machines and plants</li> </ul>		
1	Scholarship co-financed with funds under the PNRR - Mission 4 component 2 (Ministerial Decree 352/2022) and co-financed by the Company STMicroelectronics S.r.I. Finanziato dall'Unione europea NextGenerationEU	<ul> <li>Design of ultra-low power analog and RF integrated circuits in CMOS technologies (bulk and FD-SOI) for IoT application</li> </ul>		
Position reserved to HOLDERS OF RESEARCH GRANT				
N°	Subject area	of the research		
1	Academic discipline ING-INF/05 "Information processing systems" Research title: Deep learning and generative models for sustainable and ecological agriculture			
	Position reserved to HOLDERS OF SCHOL			
N°	University	or Foreign State		









1	1 Reserved to holders of Qatar			
	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 Maps S.p.A.			

ADMISSION PROCEDURES		Assessment of QUALIFICATIONS: up to 70 points (a minimum score of 30 points shall be required to be admitted to the Oral Exam) ORAL EXAM: up to 50 points Minimum score for ELIGIBILITY: 70/120	
Foreign Language The evaluation		he fluency of which shall be assessed during the Oral Exam: <b>ENGLISH</b> . tion of the knowledge of this language will be oral and will consist of a brief interview on a opic (for example a translation of a scientific text).	
CANDIDATES ADMITTED TO THE ORAL TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE			
(Candidates who in	tend to take	e the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)	
		THE INTERVIEW MAY BE HELD ALSO IN ENGLISH	
	LIST OF Q	UALIFICATIONS 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)	
Abstract of degree thesis		Abstract of the second cycle master's degree thesis. Undergraduate applicants must submit the draft of the thesis approved by their supervisor (abstract/draft of the thesis: 10.000 characters including spaces)	
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		<ul> <li>Max 10.000 characters, written in English, it will have to focus on an original research topic and structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation.</li> <li><u>It does not represent a constraint with respect to the following choice of the doctoral thesis</u>, that shall be defined together with the supervisor and approved by the Academic Board. However, this project must be prepared after having contacted and consulted one of the research groups related to the PhD course in Information Technologies (information on the research groups and their contacts can be found at <a href="https://dia.unipr.it/en/node/3080">https://dia.unipr.it/en/node/3080</a>).</li> <li>Failure to submit the project will result in exclusion from procedure for admission to the course.</li> </ul>	









Scientific Publications		on national and international journals, papers presented at conferences or symposia, apters etc.		
Reference Letters marco.lo		m 2 letters and must be sent directly by the signer to the address e-mail: <u>pcatelli@unipr.it</u> (The candidate, therefore, must not upload them through the procedure pompetition online registration)		
(training, work, research, simil		ods of study abroad, outside the country of origin (e.g., Erasmus programme or other ar mobility programmes) er qualifications attesting the suitability of the applicants (scholarships, awards, etc.)		
		EVALUATION CRITERIA		
QUALIFICATION		EVALUTATION CRITERIA	POINTS	
Curriculum Vitae et studiorum		Evaluation of the marks of the exams and of the master's degree mark (if available). The candidate is required to provide the average of the marks of all the exams of the master's degree, in addition to the details of the same It will also be evaluated the congruence of the degree obtained with the PhD themes.	Up to 25 points	
Abstract of the Master's degree thesis		It will be evaluated the congruence of the Master's Degree thesis with the doctoral program research topics	Up to 5 points	
Research Project		<ul> <li>Points relating to the research project shall be allocated on the basis of the following criteria:</li> <li>Scientific value and originality of the proposal: max 10 points</li> <li>description and structure of the proposal: max 10 points</li> <li>proposal feasibility: max 10 points</li> </ul>	Up to 30 points	
Scientific publications		Evaluation of the editorial position of the publication and its impact on the scientific community on the basis of the available indicators. It will be evaluated only publications from the past five years.	Up to 5 points	
Reference Letters		Evaluation of the judgments reported in the reference letters.	Up to 2 points	
Other experiences		Duration evaluation (for scholarships and internships), score (for the GRE test), prestige (for awards)	Up to 3 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		<ul> <li>knowledge of the foreign language: max 5 points</li> <li>research project presentation: max 25 points</li> <li>general knowledge of issues connected to the PhD course: max 20 points</li> </ul>	Up to 50 points	

SCHEDULE OF THE ADMISSION EXAMS









	DATE	15 September 2022 (with possible extension in the following days)	
	TIME	10.30 AM (Italian Time)	
ORAL EXAM	PLACE	Department of Engineering and Architecture Scientific Engineering Headquarters Parco Area delle Scienze, 181/A – Campus Universitario 43124 PARMA - ITALY	
OTHER INFORMATION		For foreign candidates, the admission examinations may be held in English at the candidate's choice. For foreign candidates all documents written in a language other than Italian will have to be translated into English, otherwise they will not be evaluated	