




MOLECULAR MEDICINE	
CYCLE	XXXVII
COORDINATOR	Prof. Prisco MIRANDOLA email: prisco.mirandola@unipr.it Department of Medicine and Surgery
DURATION	3 anni
STARTING DATE OF THE PHD PROGRAM	01/11/2021
PARTNER INSTITUTION FOR UNIVERSITY COOPERATION AGREEMENTS	<ul style="list-style-type: none"> • Aalborg University (Denmark)
RESEARCH TOPICS (The candidate MUST mandatorily indicate one research topic in the ANNEX A)	
<ul style="list-style-type: none"> • Innovative applications of molecular medicine in the medical-legal field • Cardiac pathophysiology • Microbiology and Clinical Microbiology • Digital Dentistry • Adapted physical activity in surgery. • Constrained topic. Big Data Analytics in Maxillofacial Surgery • Constrained topic. Salivary diagnostics of oral and systemic pathologies • Constrained topic. A machine learning algorithm in choosing between functional or instrumental test in patients with non-acute chest pain • Bats and emerging viruses: eco-epidemiological investigations to protect public health and biodiversity (Constrained topic "Industrial Doctorate") 	
TRAINING OBJECTIVES	
The Research Doctorate Course in Molecular Medicine aims to provide PhD students with the cultural and methodological skills necessary to carry out high-profile research in different scientific disciplines in the biomedical field, integrated in an interdisciplinary perspective. The acquired training will allow PhD students in Molecular Medicine to employ themselves in high level research and development activities in Universities, research centers and industries engaged in the medical, biological and biotechnological sectors.)	
ADMISSION REQUIREMENTS	Regardless of age and citizenship, applicants holding at least one of the following academic qualifications can apply for admission: <ul style="list-style-type: none"> – 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 Undergraduate applicants may also submit applications with the obligation of getting their degree by October 31st 2021 .

POSITION PUT OUT TO COMPETITION	9	With Scholarship	8
		Reserved to employees of companies having an "Industrial Doctorate" arrangement	1
Position with Scholarship			
N°	Funding entity	Research Topic, if any	
4	Scholarship funded by University of Parma (Ministerial funds)	<ul style="list-style-type: none"> • Innovative applications of molecular medicine in the medical-legal field • Cardiac pathophysiology 	



		<ul style="list-style-type: none"> • Microbiology and Clinical Microbiology • Digital Dentistry • Adapted physical activity in surgery
1	Scholarship co-funded by Fondazione Cariparma	<ul style="list-style-type: none"> • Innovative applications of molecular medicine in the medical-legal field • Cardiac pathophysiology • Microbiology and Clinical Microbiology • Digital Dentistry • Adapted physical activity in surgery
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 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 funded by EMILIA ROMAGNA REGION  The assignment of this scholarship is subject to the declaration of residence or domicile of the beneficiary in Emilia-Romagna	<ul style="list-style-type: none"> • OCCURS: Oral Cancers Clustering Using Risk Stratification. Forecasting the prognosis and therapeutic outcome in patients with squamous cell carcinomas of the oral cavity (OSCC) using Big Data Analytics aimed at stratification by risk of biological aggression.
1	Scholarship funded by Associazione Provinciale LILT Parma A.P.S.	<ul style="list-style-type: none"> • Evaluation of salivary and serological miRNAs in patients with breast cancer associated to BRCA1 and BRCA2 mutations. Perspective for the development of novel diagnostics approaches
1	Scholarship funded by Federazione nazionale Ordini dei TSRM e delle professioni sanitarie tecniche, della riabilitazione e della prevenzione	<ul style="list-style-type: none"> • A machine learning algorithm in choosing between functional or instrumental test in patients with non-acute chest pain
Position reserved for "INDUSTRIAL DOCTORATE" (according to art. 2 paragraph 2, lett. e) of Ministerial Decree n. 45/2013)		
N°	Company/Institution	
1	Reserved to employees of Istituto Zooprofilattico Sperimentale della Lombardia e dell'Emilia Romagna – IZSLER Specific Topic "Bats and emerging viruses: eco-epidemiological investigations to protect public health and biodiversity"	

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: ENGLISH . 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 TEXT CAN TAKE THE EXAM IN PRESENCE OR REMOTELY IN AUDIO AND VIDEO TELECONFERENCE (Candidates who intend to take the Oral Exam remotely must submit request, to this purpose, as per the model attached to the competition notice)	



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 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 ____ pages, be written in Italian or in English, focused on an original research topic, consistent with the research topic of Phd Program, 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. The Project shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation; <u>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.</u>

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 candidate's reasons to attend the PhD program and at describing her/his specific research interests
Scientific Publications	Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.
Reference Letters	A maximum of 3 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, 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 style="list-style-type: none"> – 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 – Working activity – Professional and/or training internship – Language proficiency certificates – Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes) – Other 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.	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
Average of the exam marks (if the candidate will attain the degree no later than 31 October 2021)	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
Graduation thesis	Consistency with the research themes of the PhD course and quality of the research methodology	Up to 7 points
Research Project	<ul style="list-style-type: none"> ○ scientific value and originality ○ articulation of the proposal ○ research feasibility ○ rigor and appropriateness methodological 	Up to 10 points
Statement of Research Interest	Clarity, maturity, motivation and expectations	Up to 9 points
Scientific publications	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 qualifications	Academic qualifications/experience abroad/grants, scholarships and awards	Up to 5 points
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	<ul style="list-style-type: none"> ○ knowledge of the oreign language: max 4 points ○ ability to argument the project proposal: max 28 points ○ knowledge of chosen topic: max 28 points 	Up to points
SCHEDULE OF THE ADMISSION EXAMS		
ORAL EXAM	DATE	20 September 2021 (with possible extension in the following days)
	TIME	10:00 am (Italian time)
	PLACE	Department of Medicine and Surgery Integrated Biotechnological Plexus Via Volturno, 39 – 43125 PARMA - ITALY
OTHER INFORMATION	The Oral Exam is held in Italian.	