



**PhD Programme in
BIOMOLECULAR AND HEALTH SCIENCES
A.Y. 2024/2025 – XL Cycle**

Administrative Department	BIOMOLECULAR AND SCIENCES (DISB)		
Coordinator	Prof. Ferdinando Mannello		
Duration of the programme	3 years		
Available positions (total n. 10)	Scholarships funded by the University, 2 of which are reserved for candidates with qualifications obtained abroad (Candidates who intend to apply for positions with scholarships reserved for those who obtained their qualification abroad must specify that in the online procedure)	n. 9	<p>Project of priority theme - 1 <i>Implementing innovative methods for safety and sustainability assessments of chemicals and materials particularly at nanolevel in the European Union (CheMatSustain).</i></p> <p>Project of priority theme - 2 <i>Effects of TECAR Therapy Treatment on Reducing Acute and Chronic Osteoarticular and Muscular Inflammation and Pain: Relationship between Biological and Functional Markers and Neuromuscular Signalling in Athletes.</i></p> <p>Project of priority theme- 3 <i>In vitro evaluation of colostrum/milk EVs uptake and their immunomodulatory activity on intestinal and macrophagic cells.</i></p> <p>Project of priority theme - 4 <i>Clozapine inhibits lipid accumulation and mitochondrial biogenesis in differentiating adipocytes: identification of the mechanisms and development of pharmacological strategies for their prevention.</i></p> <p>Project of priority theme - 5 <i>Platelet aggregation by circulating histones: their roles as biomarkers, triggers and therapeutic target for sepsis.</i></p> <p>Project of priority theme - 6 <i>New mathematical-statistical models for real-time PCR quantification.</i></p> <p>Project of priority theme - 7</p>



			<p><i>Prognostic and predictive biomarkers in human cancer.</i></p> <p>Project of priority theme - 8 <i>C. elegans as a powerful multicellular organism for aging studies: food components promoting healthspan via mitochondria-regulated signaling.</i></p> <p>Project of free theme - 9 The candidate may opt for one of the general research topics: -biomarkers, biomolecular targets and new therapeutic agents; -cell signaling and intercellular communication; -molecular mechanisms of pathologies; -physiopathology of oxidative stress; -diagnosis and prevention of infectious and multifactorial diseases; -nutrition sciences and food safety; -neural plasticity in physiology and pathology; -physical activity and exercise in health promotion, prevention and functional re-education; -statistical and mathematical methods in biology and medicine.</p>
	Externally financed scholarship with a restricted theme PRIN2022_PNRR (CUP H53D23011040001 - Cod. P20225HFSK)	n. 1	<i>Novel therapeutic approaches to fight bacterial pathogens.</i>
Topics covered in the interview	SSD BIO 04 Plant Physiology BIO 05 Zoology BIO 09 Physiology BIO 10 Biochemistry BIO 11 Molecular Biology BIO 12 Clinical Biochemistry and Clinical Molecular Biology BIO 13 Applied Biology BIO 14 Pharmacology BIO 16 Human Anatomy BIO 17 Histology BIO 19 Microbiology MED 01 Medical Statistics MED 03 Genetics MED 04 General Pathology MED 07 Microbiology and Clinical Microbiology MED 40 Gynecology and Obstetrics MED 42 General and Applied Hygiene MED 46 Technical sciences of laboratory medicine M-EDF 01 Methods and Teaching of Motor Activities M-EDF 02 Methods and teaching of sports activities		D.M. n. 639/2024 del 02/05/2024 Cod GDS BIOS-02/A Plant Physiology BIOS-03/A Zoology BIOS-06/A Physiology BIOS-07/A Biochemistry BIOS-08/A Molecular Biology BIOS-09/A Clinical Biochemistry and Clinical Molecular Biology BIOS-10/A Cellular and applied Biology BIOS-11/A Pharmacology BIOS-12/A Human Anatomy BIOS-13/A Human Histology and embryology BIOS-15/A Microbiology MEDS-24/A Medical Statistics BIOS-14/A Genetics MEDS-02/A General Pathology MEDS-03/A Microbiology and Clinical Microbiology MEDS-21/A Gynecology and Obstetrics MEDS-24/B General and Applied Hygiene MEDS-26/D Technical sciences of laboratory medicine MEDF-01/A Methods and Teaching of Motor Activities MEDF-01/B Methods and teaching of sports activities
How to apply	The application must be submitted exclusively via the online procedure available at: https://pica.cineca.it/uniurb/dottorato40 by and no later than June 25th, 2024, h 1:00 p.m. (Italian time).		



	<p>The documents must be attached in PDF format (max 30 MB). The submission of the application and documentation to the University occurs automatically upon the definitive closure of the online procedure. Therefore, no delivery or shipping of paper materials to the Offices should be made."</p>
Compulsory documentation to be attached to the application	<p>Curriculum vitae et studiorum (form available at the following address: https://www.uniurb.it/international/regular-students/phd-programs/admission-information)</p> <p>Scientific Publications Master's Thesis (abstract in case discussion of master's thesis is pending)</p> <p>Other Titles</p>
Selection mode	<p>Preselection for evaluation of qualifications Oral exam (by video conference)</p>
Criteria for the evaluation of qualifications	<p>Title evaluation points: maximum 20 <i>Curriculum vitae et studiorum</i> up to a maximum of 8 points Scientific publications up to a maximum of 8 points (master's thesis may be included) Other qualifications up to a maximum of 4 points (max 2 letters of reference can be included, up to a maximum of 1 points) Points for the oral exam: maximum 60 (including the research project and knowledge of the English language) For the evaluation of the discussion the following aspects will be considered: clarity and linearity of exposition, argumentative ability, theoretical and practical methodological knowledge in the context of the proposed research project. Furthermore, the technical-practical skills acquired during the laboratory internship period at university facilities or laboratories of companies or research institutions for experimental theses will be evaluated. Finally, the congruence of study interests and research objectives with the research themes of the doctoral program will be assessed and motivational aspects will also be considered.</p>
Publication of the results of the evaluation of qualifications	<p>The results of the evaluation of the qualifications will be published on July 10th, 2024 in the Official Documentation section of the website: www.uniurb.it/biomolecular-and-health-sciences</p>
Information on the oral exam	<p>Oral examination: it will be conducted in English and will mainly focus on a research project related to the theme chosen by the candidate and on the research objectives that the candidates intend to pursue during the doctoral program. The project should describe a possible research activity to be carried out during the doctoral program and should be articulated in: a) rationale, b) experimental design and objectives, c) materials and methods, d) expected results</p>
Oral exam calendar	<p>The interviews for those admitted to the oral examination will take place starting from the day July 16th, 2024 via video conference. If the number of candidates to be examined is high, the commission reserves the right to complete the interviews on the following day. Any changes will be published on the doctoral program's web page www.uniurb.it/biomolecular-and-health-sciences</p>
Oral exam link	<p>The link to the Zoom platform for the oral exam will be indicated in the "Oral exam calendar /Calendar of interviews" file at www.uniurb.it/biomolecular-and-health-sciences</p>
Final merit ranking	<p>The final merit ranking will be published at the following link: www.uniurb.it/biomolecular-and-health-sciences</p>



Information on the activities of the Ph.D. Programme	www.uniurb.it/biomolecular-and-health-sciences
For information requests regarding scientific aspects of the Programme	Coordinator: Prof. Ferdinando Mannello, tel. 0722-304261 Email: ferdinando.mannello@uniurb.it Vice-Coordinator: Prof. Elena Barbieri, tel. 0722-303417 Email: elena.barbieri@uniurb.it
For information requests regarding administrative aspects and support with the online application procedure	Ph.D. Office: dottorato@uniurb.it Please indicate "Ph.D. in Biomolecular and Health Sciences - XL cycle" in the email subject, a.a. 2024/2025