PhD Programme Table - 38th cycle NRRP "National Recovery and Resilience Plan" Call for Applications







Section "Available Positions and Scholarships" integrated on 19/07/2022

Section "Available Positions and Scholarships" integrated on 27/07/2022

PROGRAMME'S NAME	BIOMEDICAL AND NEUROMOTOR SCIENCES
DURATION	3 years
PROGRAMME START DATE	01/11/2022 (DD/MM/YYYY)
LANGUAGES	Italian, English
COORDINATOR	Prof. Matilde Yung Follo (<u>matilde.follo@unibo.it</u>)
RESEARCH TOPICS	- Biomedical and Molecular Sciences
	- Clinical and Experimental Physiopathology
	- Basic and Clinical Neurosciences
	- Morphology, Differentiation and Stem Cells
	- Personalized Medicine in Biomedical and Neuromotor Sciences
PhD POSITIONS	9
ADMISSION PROCEDURE	Qualifications and research proposal evaluation Oral examination

Available Positions and Scholarships

Pos. n.	Financial Support	Description	Positions linked to research topics
1	PhD Scholarship Ex M.D. 351/2022 - NRRP Research	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 1, Investment 4.1 (MD 351/2022) – NRRP Research	Innovative prosthetic solutions on dental implants
2	PhD Scholarship Ex M.D. 351/2022 - NRRP Research	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 1, Investment 4.1 (MD 351/2022) – NRRP Research	Bioinspired machine-learning methods for sensorimotor control applied to intelligent human-machine interfaces and instrument control (Research Project Multifunctional, adaptive and interactive AI system for Acting in multiple contexts)
3	PhD Scholarship Ex M.D. 352/2022	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (MD 352/2022) and by CYTOSENS SRL	Advanced flow cytometric single cell analysis of the metabolic and functional profiling of patients with acute myeloid leukemia for the validation of liquid biopsy as a diagnostic and translational research tool

4	PhD Scholarship Ex M.D. 352/2022	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (MD 352/2022) and by IRCCS Istituto delle Scienze Neurologiche	Research and experimental studies in the field of brain neoplasms
5	PhD Scholarship Ex M.D. 352/2022	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (MD 352/2022) and by IRCCS Istituto delle Scienze Neurologiche	Medical and psychiatric comorbidity and long-term outcome of narcolepsy and central hypersomnia in adult and pediatric patients
6	PhD Scholarship Ex M.D. 352/2022	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (MD 352/2022) and by Botiss Biomaterials	Biomaterials in periodontal surgery
7	PhD Scholarship Ex M.D. 352/2022	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (MD 352/2022) and by Istituto Romagnolo per la studio dei tumori "Dino Amadori"	Identification of prognostic factors in patients with early stage non-small cell lung cancer
8	PhD Scholarship Ex M.D. 352/2022	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (MD 352/2022) and by Istituto Romagnolo per la studio dei tumori "Dino Amadori"	Development and validation of nanodrugs to be used in oncology
9	PhD Scholarship Ex M.D. 352/2022	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 2, Investment 3.3 (MD 352/2022) and by Biotec Srl	Clinical outcome of subperiosteal implants in maxillary atrophy

Applicants awarded with Ex M.D. 351/2022 or Ex M.D. 352/2022 PhD scholarships shall have specific obligations (i.e. mandatory research periods abroad and/or in a firm) during their PhD programme. For detailed information, refer to the Call for Applications, articles 1.2 and 1.3, and to the text of the law.

For any other eventual PhD positions, a 3-month research period abroad is mandatory.

Admission Exams

The admission exams detailed schedule shall be published starting from July 12th, 2022:

- on the <u>University website</u>, selecting the relevant PhD Programme > "More information", at the bottom of the page in the section "Notices";
- on <u>Studenti Online</u> (select "summary of the requests in progress" > "see detail" and open the .pdf file at the bottom of the page). **No personal written communication will be sent to applicants**.

Required and Supporting Documents to be attached to the application

All the documents listed below **shall be drawn up in English or in Italian**. In case of documents originally issued in any other language (e.g. identity document, qualifications), an official translation is required.

Only qualifications obtained **during the last 5 calendar years** shall be taken into consideration, except for the University Degree. The Admission Board will assess the relevance of the supporting documents to the PhD Programme.

REQUIRED DOCUMENTS	
Identity document Valid identity document with photo (i.e. identity card, passport)	
Curriculum Vitae	No specific CV format is required

Degrees	Documents attesting the awarding of the first and second cycle degrees, the exams taken and the marks obtained (see Art. 3 of the Call for Applications)
Research proposal	 Multi-annual research proposal, with special emphasis on the activities to be completed during the first-year course. The proposal must meet the following requirements: it must mention on the cover page the main research topic/s the applicant is interested to and the proposal is about; it cannot exceed 20,000 characters, including spaces and formula possibly used. This figure does not include: the title of proposal, the outline, references and images (such as graphs, diagrams, tables, etc if present); it must include: the state of the art; description of the proposal; expected results; articulation of the proposal and implementation times; references.
SUPPORTING DOCU	
Thesis abstract	Abstract of the second cycle degree thesis. Graduands applicants may submit the draft of the thesis. Abstracts cannot exceed 5,000 characters, including spaces and formula possibly used. The above figure does not include: the title of the thesis, the outline, references, and images such as graphs, diagrams, tables etc.
Reference letter/s	No more than 2 reference letters signed by Italian or international academics and professionals in the research field, which do not form part of the Admission Board, attesting the suitability of the applicant and his/her interest in the scientific research. Letters shall be uploaded following the procedure detailed in the Call for Applications (Art. 3.2)
Publications	Lists of publications (i.e. monographs, articles on scientific journals), minor publications (conference papers, etc.), abstracts and posters presented during national and international conferences, etc.
Other documents	 Postgraduate vocational training programmes relevant to the PhD Programme main research topics Specialisation programme thesis abstract (max 5000 characters) Research activity of any kind - whether basic, applied, translational, etc carried out in any capacity, including when covered by research grants, and as a staff member of research projects Curricular or non-curricular professional internships Periods of study abroad, completed by applicants outside their countries of origin (e.g. Erasmus programme or other similar mobility programmes) Other qualifications attesting the suitability of the applicants (scholarships, prizes, etc.)

Evaluation criteria*

Scores will be expressed in points out of 100, as follows.

1. Qualifications and research proposal evaluation

Minimum score for admission to the oral examination: 30 points, Maximum score: 50 points

Qualifications evaluation	First (Bachelor's) and Second cycle degree (Master's) final mark. Graduands shall be evaluated according to the Weighted Average Mark (WAM)	 5 points max distributed as follows: 110/110 e Lode (with honour): 5 points 110/110: 4 points 109/110-102/110: 3 points 101/110-90/110: 2 points
		- 89/110-66/110: 1 point For graduands Weighted Average Mark (WAM) - 5 points max distributed as follows:
		 30/30 e Lode: 5 points 30/30: 4 points 29/30-27/30: 3 points 26/30-24/30: 2 points 23/30-18/30: 1 point

		N.B. The evaluation of the degree grade/weighted average of the exams will be made with reference to the entire path of the studies and will be calculated as the arithmetic mean, mathematically rounded to the whole number, including the votes of MS and any BSc degrees. In case of foreign degrees, we will refer to the ECTS scale, using the most recent tables of conversion. The score for each qualification will be assigned as follows: A: 5 points, B: 4 points, C: 3 points, D: 2 points, E: 1 point.
	Publications	points max, distributed as follows: 1 point for each publication in extenso published in journals with IF (belonging to the categories "Research Papers" and "Review" on PubMed) 0.5 points for each book chapter of scientific text (not educational or informative) 0.1 points for each Abstract presented at National or International Congresses
	Thesis abstract (consistency with the main topics of the PhD programme and with the submitted research proposal)	3 points max
	Scholarships, research grants, vocational programmes or advanced training	1 point max
	Professional training, specialty thesis or other qualifications (e.g. study period abroad)	1 point max
Research proposal evaluation	Scientific value and ground-breaking nature of the proposal	10 points max
	Structure of the proposal Proposal feasibility	10 points max 10 points max

2. Oral examination

Minimum score for eligibility: 30 points, Maximum score 50 points

English language proficiency	10 points max
Research proposal presentation	20 points max
General knowledge of issues encompassed by the PhD Programme	20 points max

Oral examination aims to assess the suitability of the applicant for scientific research as well as the general knowledge of issues encompassed by the PhD Programme (see the list of <u>research topics</u> at the bottom of the present document). **The oral examination is carried out in English**.

^{*} Possible further evaluation criteria will be available on the <u>University website</u>, selecting the relevant PhD Programme > "More information".