PhD Programme Table - 39th cycle

Call for Applications for the admission to the PhD programmes (39th cycle) A.Y. 2023/2024 for scholarships funded by Next Generation EU – NRRP ex M.D. 117/2023 and M.D. 118/2023 and from other sources









PROGRAMME'S NAME	BIOTECHNOLOGICAL, BIOCOMPUTATIONAL, PHARMACEUTICAL AND PHARMACOLOGICAL SCIENCES
DURATION	3 years
PROGRAMME START DATE	01/11/2023 (DD/MM/YYYY)
LANGUAGES	Italian
COORDINATOR	Prof. Maria Laura Bolognesi (<u>marialaura.bolognesi@unibo.it</u>)
PhD POSITIONS	14
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	Funded by the University of Bologna general budget and by the Department of Pharmacy and Biotechnology	Development of solid tumors 3D models for the identification of new molecules of pharmacological interest
2	PhD Scholarship	Funded by the University of Bologna general budget and by the Department of Pharmacy and Biotechnology	Neuropharmacology
3	PhD Scholarship	Funded by the University of Bologna general budget and by the Department of Pharmacy and Biotechnology	Design and synthesis of inhibitors of protein kinases involved in neuroinflammatory processes
4	PhD Scholarship	Funded by the University of Bologna general budget and by the Department of Pharmacy and Biotechnology	Development of miniaturized bioanalytical systems
5	PhD Scholarship	Funded by the Department of Pharmacy and Biotechnology	Development of analytical platforms based on immobilized enzymes and proteins to improve automation and cost-effectiveness
6	PhD Position without Scholarship		Research and characterization of genetic material of viruses in patients with autoimmune syndromes
7	PhD Scholarship PNRR ex M.D. 118/2023 - Public Administration	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 1, Investment 4.1 (M.D. 118/2023) - Public Administration	Management and valorisation of vegetable food waste in schools

8	PhD Scholarship PNRR ex M.D. 118/2023 - Green and digital transitions	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) Mission 4, Component 1, Investment 3.4 (M.D. 118/2023) — Green and digital transitions	Green synthesis of nanoparticles for biomedical application
9	PhD Scholarship PNRR ex M.D. 118/2023 - PNRR 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 (M.D. 118/2023) – PNRR Research	Study of the activity profile and biorecognition processes between compounds of pharmaceutical interest and molecular targets
10	PhD Scholarship PNRR Partenariati Estesi	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Partenariati Estesi (PE13 - INF-ACT) - CUP J33C22002870005	Drug delivery systems to treat emerging infectious diseases
11	PhD Scholarship PNRR Infrastrutture di Ricerca	Funded by the EU - NextGenerationEU with funds made available by the National Recovery and Resilience Plan (NRRP) - Infrastrutture di Ricerca (IR ElixirxNextGenIT) - CUP B53C22001800006	Machine learning tools and Interoperability resources for the management and analysis of biomedical data in the context of the European infrastructure ESFRI ELIXIR
12	Borsa di studio PNRR ex DM 117/2023	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 117/2023) and by INDENA S.P.A. (Milano)	Study of bioactive molecules extracted from selected plant matrixes. Evaluation of cellular bioenergetic activity, with the aim of identifying new molecules with pharmacological activity
13	Assegno di Ricerca	Provided by Department of Pharmacy and Biotechnology. The research grant will have a duration of 12 months, renewable up to 36 months, and percipient gross amount of €20,335.35 per year	Drug discovery
14	Research grant	Provided by Department of Pharmacy and Biotechnology. The research grant will have a duration of 12 months, renewable up to 36 months, and percipient gross amount of €20,335.35 per year	Drug discovery

All PhD positions winners shall fulfill the learning and research obligations decided by the Academic Board and the obligations foreseen in the relevant regulations, funding schemes and eventual agreements, and in the Call for Applications. Moreover, applicants awarded with PhD scholarships funded by Next Generation EU shall fulfill specific obligations foreseen in the relevant funding scheme, in the relevant regulations and in the Call for Applications.

Admission Exams

	DATE AND TIME	RESULTS
Qualifications and research proposal evaluation	Applicants' participation is not required	Available from 30/06/2023 **
Oral examination	Date: starting from 12/07/2023 – 9.00 a.m. CEST* Place: Remotely, using Microsoft Teams	Available from 20/07/2023 **

^{*} In case that the oral examination cannot be completed in one day due to the large number of applicants, the oral examination detailed schedule shall be made available on the webpage Studenti Online together with the results of the qualifications and research proposal evaluation. During the oral examination, applicants may express their interest in one or more positions linked to specific research topics.

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 DOCUME	NTS		
Identity document	Valid identity document with photo (i.e. identity card, passport)		
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)		
Curriculum Vitae	The Curriculum Vitae must be drawn up using exclusively the Curriculum Vitae form, in Attachment 1 to the present PhD programme table and downloadable in .docx from the University Website (select the PhD Programme → "More information", then check "Notices" at the bottom of the page). A 5 points penalty on the total qualification evaluation score shall be applied to applicants not using the attached form. The curriculum vitae must contain the following pieces of information, subject to evaluation: Name and final mark of the awarded second cycle degree, name of the awarding institution, thesis title and supervisor Lists of publications (i.e. monographs, articles on scientific journals), minor publications (i.e. contributions in proceedings of national and international conferences, book chapters) and abstracts and posters presented during academic conferences Research activity (please, indicate the kind and lengths of the research period; include research activities covered by research grants, and as a staff member of research units) Periods of study abroad, outside the country of origin (e.g. Erasmus programme or other similar mobility programmes Chosen position/s linked to a specific research topic (max n. 2)		
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 be drawn up in English; it must mention on the cover page the topic-specific position/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; outlining of the criteria meant to be used to assess the research results; references. 		

^{**} The results of the admission exams will be available on the webpage <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 concerning the examinations results.

The research proposal that successful applicants shall carry out during their PhD career may possibly differ from the one proposed at the application stage. This shall be defined together with the supervisor and approved by the Academic Board.			
SUPPORTING DOCUMENTS			
Publications	 Full text publications (i.e. monographs, articles on scientific journals) Full text minor publications (conference papers, abstracts and posters presented during national and international conferences, 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

	I	: 30 points, Maximum score: 50 points	
Qualifications	Second cycle degree	10 points max distributed as follows:	
evaluation	(Master's) final mark.	(in brackets the points awarded to applicants holding a non-	
		Italian degree, calculated according to the percentage with	
		respect to the maximum score)	
		- 10 points - 110 e lode	
		(maximum score with honour)	
		- 8 points - from 109 to 110 included	
		(98-100% with respect to the maximum score)	
		- 6 points - from 105 to 108 included	
		(95-97% with respect to the maximum score)	
		- 4 points from 101 to 104 included	
		(90-94% with respect to the maximum score)	
		- 3 points from 95 to 100 included	
		- (89-90% with respect to the maximum score)	
	(for graduands only)	8 points max	
	Weighted Average Mark	(in brackets the points awarded to applicants holding a non-	
	(WAM)	Italian degree, calculated according to the percentage with	
		respect to the maximum score)	
		- 8 points - from 29 to 30 included	
		(98-100% with respect to the maximum WAM score)	
		- 6 points da 27 a 28 included	
		(95-97% with respect to the maximum WAM score)	
		- 4 points da 25 a 26 included	
		(90-94% with respect to the maximum WAM score)	
		- 3 points da 23 a 24 included	
		(89-90% with respect to the maximum WAM score)	
	Publications	7 points max	
	1 donedions	- 3 points for each pubblication on an internationally	
		renowned scientific journal	
		- up to 1 point for minor publications, posters and other	
		evaluable publications	
	Other qualifications (research	3 points max	
	activities, period of study or	- up to 1 point per month, for postgraduate experiences	
	training, in Italy or abroad for	- up to 0,5 per month for Erasmus or other curricular	
	no less than 1 continuative	experiences	
	month)	experiences	
Research proposal	Scientific value and ground-	7 points max	
evaluation	breaking nature of the	/ points max	
Evaluation	_		
	proposal Structure of the proposal	7 noints may	
	Structure of the proposal	7 points max	
	Consistency of the proposal	12 points max	
	with the PhD programme's		
	main research topics and		

woth the research topics linked to the available PhD positions	
Proposal feasibility and potential impact	4 points max

2. Oral examination

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

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English language proficiency	5 points max
Research proposal presentation	20 points max
General knowledge of the PhD programme's main research topics and of the research topics	25 points max
linked to the available PhD positions	

Oral examination aims to assess the suitability of the applicant for scientific research as well as the general knowledge of the PhD programme's main research topics and of the research topics linked to the available PhD positions.

During the oral examination, the applicant's English language proficiency shall be assessed.

The oral examination is carried out in Italian or in English.

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

> "More information".

Curriculum Vitae

PhD Programme in Biotechnological, Biocomputational, Pharmaceutical and Pharmacological Sciences

Personal information	
First name(s) / Surname(s)	
Nationality	
Date of birth [day, month, year]	
Gender	

University Education

Master	(2-years)
1,1,00000	

Musier (2-years)				
Dates (start -end or planned end)				
Awarding institution	(e.g. University of Bologna - Italy)			
Title of qualification awarded	(e.g. MSc in Biology)			
Marks	YOUR mark	Minimum PASS mark	Maximum mark	ECTS conversion (if available)
Final grade (if available)				
Weighted average of the exams (if you are yet to obtain your degree)				
Title and topic of the Master's Thesis				

Master (5-years / Single cycle)

Musier (5-years / Single Cycle)				
Dates (start -end or planned end)				
Awarding institution	(e.g. Univers	ity of Bologna -	Italy)	
Title of qualification awarded	(e.g. MSc in	Pharmacy)		
Marks	YOUR mark	Minimum PASS mark	Maximum mark	ECTS conversion (if available)
Final grade (if available)				
Weighted average of the exams (if you are yet to obtain your degree)				
Title and topic of the Master's Thesis				

Employment

Currently employed	□Yes	□No
Summary of current employment		
Past employment record and skills obtained		

Publications

Please, list:

- Publications of the last five years (considering the last day of the call)
- Only papers accepted or published at the last day of the call will be considered Submitted papers will be excluded
- Abstracts/posters to conferences already held at the last day of the call

ALL PAPERS/ABSTRACT MUST BE UPLOADED (or they will not be evaluated)

The state of the s
Abstract/poster presented in national and international conferences
Publication on national and international journals
1 ubication on national and international journals
Chapters in books

Research Experiences

nstit.	utions occurred <u>after getting the Master's degree.</u> Periods of time are calculated at the date of closure of the call
•	Periods must be within the last 5 years excluding the calendar year of this call.
publi	e, list scholarships, fellowships and research periods at foreign Universities or in c/private institutions occurred during your Master's degree (including Erasmus periods of abroad, "Tesi all'estero", etc.).
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Rese	c/private institutions occurred during your Master's degree (including Erasmus periods of abroad, "Tesi all'estero", etc.). Periods of time are calculated at the date of closure of the call Periods must be within the last 5 years excluding the calendar year of this call arch topic selection e, list which research topic/s you are applying for (the list of the positions and the related