PHD PROGRAMME TABLE 37TH CYCLE

Section "Available Positions and Scholarship" integrated on 29/04/2021

Section "Available Positions and Scholarship" integrated on 06/05/2021

Section "Available Positions and Scholarship" modified on 20/05/2021

Section "Available Positions and Scholarship" modified on 11/06/2021

PROGRAMME'S NAME	ONCOLOGY, HEMATOLOGY AND PATHOLOGY
DURATION	3 years
PROGRAMME START DATE	01/11/2021
LANGUAGE	Italian, English
MANDATORY STAY ABROAD	3 months
COORDINATOR	Prof. Manuela Ferracin (manuela.ferracin@unibo.it)
CURRICULA	N/A
RESEARCH TOPICS	<u>Detailed list at the bottom of the present document</u>
PhD POSITIONS	24
ADMISSION PROCEDURE	Qualifications evaluation Oral examination

Available Positions and Scholarships

Pos. n.	Financial Support	Description	Positions linked to research topics
1	PhD Scholarship	Totally funded by the University of Bologna general budget	
2	PhD Scholarship	Totally funded by the University of Bologna general budget	
3	PhD Scholarship	Totally funded by the University of Bologna general budget	
4	PhD Scholarship	Totally funded by the University of Bologna general budget	
5	PhD Scholarship	Totally funded by the University of Bologna general budget	
6	PhD Scholarship	Totally funded by the University of Bologna general budget	
7	PhD Scholarship	Funded by the University of Bologna general budget and the Department of Experimental, Diagnostic and Specialty Medicine	Differentiation of perinatal stem cells into insulin- producing beta-pancreatic cells
8	PhD Scholarship	Funded by the University of Bologna general budget and the Department of Experimental, Diagnostic and Specialty Medicine	Novel prognostic and therapeutic approaches in elderly patients with acute myeloid leukemia
9	Intersectoral PhD	Position reserved for employees of Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori "Dino Amadori" - IRST S.r.l. IRCCS	
10	Intersectoral PhD	Position reserved for employees of Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori "Dino Amadori" - IRST S.r.l. IRCCS	
11	Intersectoral PhD	Position reserved for employees of Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori "Dino Amadori" - IRST S.r.l. IRCCS	

12	Intersectoral PhD	Position reserved for employees of Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori "Dino Amadori" - IRST S.r.l. IRCCS	
13	Research Grant	Provided by the Department of Experimental, Diagnostic and Specialty Medicine. Th research grant will have a duration of 12 months, renewable up to 36 months, and a gross percipient amount of € 20,354.99	Genomics, transcriptomics and metabolomics in trisomy 21
14	PhD Position without Scholarship		
15	PhD Position without Scholarship		
16	PhD Position without Scholarship		
17	Intersectoral PhD	Position reserved for employees of ARPAE Agenzia Regionale per la Prevenzione, Ambiente e Energia dell'Emilia-Romagna	
18	Intersectoral PhD	Position reserved for employees of Azienda Provinciale per i Servizi Sanitari – Provincia Autonoma di Trento	
19	Intersectoral PhD	Position reserved for employees of Azienda Provinciale per i Servizi Sanitari – Provincia Autonoma di Trento	
20	Intersectoral PhD	Position reserved for employees of Azienda Provinciale per i Servizi Sanitari – Provincia Autonoma di Trento	
21	PhD Position without Scholarship		Development of predictive models in interventional radiotherapy
22	PhD Position without Scholarship		Metagenomic and metabolomic characterisation of the nutritional profile in paediatric patients undergoing chemotherapy
23	PhD Scholarship	Funded by IRCCS Istituto Ortopedico Rizzoli	Impact of DNA repair mechanisms in osteosarcoma progression
24	PhD Scholarship	Funded by IRCCS Istituto Ortopedico Rizzoli	Analysis and validation of genetic polymorphisms in osteosarcoma

Admission Exams

	DATE AND TIME	RESULTS
Qualifications evaluation	Applicants' participation is not required	Available from 10/06/2021 **
Oral examination	Date: starting from 24/06/2021 – 9:00 a.m. CEST* Place: Remotely, using Microsoft Teams	Available from 30/06/2021 **

^{*} 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 evaluation. During the oral examination applicants may express their interest in the topic-specific positionS.

^{**} 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.

Required and Supporting Documents to be attached to the application

(only documents in Italian, English, French, German and Spanish shall be considered as valid and be assessed by the Admission Board)

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 DO	CUMENTS
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). Please, upload together with the second-cycle degree certificate, the Attachment 1 form , duly filled, including the weighted average of the exam marks (WAM).
SUPPORTING	DOCUMENTS
Thesis abstract	Abstract of the second cycle degree thesis . Graduands may submit the draft of their thesis (abstracts cannot exceed 5.000 characters, including spaces and formulas, if present. The above figure does not include: title, outline, images such as graphs, diagrams, tables etc. if present)
Personal Statement	The statement shall include the reasons prompting the applicant to attend the PhD Programme and those relevant experiences and research interests, that make the applicant suitable for the specific PhD Programme (3000 characters maximum, including spaces).
Reference Letter/s	No more than 2 reference letters signed by Italian and/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 for the scientific research. Letters shall be drawn up according to the attached form n.2 (the same form can be downloaded in .docx from the the University website, selecting the relevant PhD Programme > "More information", section "Notices" at the bottom of the page) and shall be uploaded following the procedure on Studenti Online, detailed in the Call for Applications (Art. 3.2).
Publications	List of publications (i.e. monographs, articles on scientific journals, volume chapters), minor publications (conference papers, etc.) and abstracts and posters presented during academic conferences
Other documents	Language proficiency certificates

Evaluation criteria *

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

1. Qualifications evaluation

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

1 /	
Weighted Average Mark (WAM) referred to the University studies	25 points max
Publications	7 points max
Coherence between the master's degree thesis – for graduands thesis draft - and the topics covered by the PhD programme	10 points max
Reference letter/s	5 points max
Personal statement	3 points max

2. Oral examination

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

English proficiency	10 points max
General knowledge of issues encompassed by the PhD Programme	40 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 research topics at the bottom of the present document).

During the oral examination, 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", at the bottom of the page in the section "Notices".

Final Ranking List and Enrollment

Considering the expressions of interest for **topic-specific positions only** (Art. 9 of the Call for Applications), the Admission Board will establish if the applicants can be considered eligible for the allocation of the said positions, taking into account their skills, experience and aptitude. Topic-specific positions will be awarded according to a sub-ranking list of eligible applicants.

After the publication of the results of the oral examination, the **final ranking list** will be available on the <u>University website</u>, selecting the relevant PhD Programme > "More information", section "Notices" at the bottom of the page. Following the publication of the final ranking list, successful applicants shall **enroll** on <u>Studenti Online</u> by the deadline indicated on the <u>University website</u>, selecting the relevant PhD Programme > "More information".

If a successful applicant withdraws from a position, the following applicant in the ranking list, who is also eligible for the specific position, will be contacted. During the replacement procedure, the new terms of enrollment shall be communicated via e-mail to the chosen applicant.

Research Topics

- Immunoprevention and immunotherapy of tumors
- Oncology, genomics, proteomics and targeted therapy of musculoskeletal sarcomas
- Development of new therapies, biological and cellular therapies in pediatric onco-hematology (neuroblastoma, acute myeloid leukemia, leukemias and lymphomas of B cells)
- Radiotherapy, oncological radiodiagnostics, radiomics and radiobiology
- Rare tumors
- ERBB family receptors
- Resistance to targeted therapies
- Acute and chronic myeloproliferative syndromes
- Lympho(immuno) proliferative diseases, monoclonal gammopathies and multiple myeloma
- Molecular basis, genetic studies, and development of innovative and targeted drugs against adult onco-hemopathies (acute and chronic leukemias, lymphomas and multiple myeloma)
- Molecular pathology of infections associated with implants: search of virulence factors of opportunistic microorganisms as etiologic agents of periprosthetic infections and pathogenic mechanisms
- Cytotoxic mechanisms of plant toxic enzymes and development of immunotargeting for experimental therapy in oncology and transplant rejection
- Alterations of protein glycosylation in pathological processes
- Changes in ribosome biogenesis, cell proliferation and tumorigenesis
- Immunology, genetics and epigenetics of aging, longevity and age-associated diseases
- Allelic polymorphisms to identify risk factors associated with dementia and Alzheimer disease
- Chronic pain
- OMIC- data analysis
- Genetic and epigenetic alterations as cancer diagnostic or prognostic biomarkers
- Role of non-coding RNA in human cancer
- Shiga toxin and hemolytic uremic syndrome
- Human genomics and transcriptomics in normal conditions and in genetic disorders
- Stem cells, differentiation and development
- Nutrition, microbiota and cancer
- Asbestos and cancer
- Chemo-immune therapy toxicity control

ATTACHMENT N. 1

REQUIRED INFORMATION

(to be attached to the second level degree's certificate)

Surname	Name	Date of birth
EDUCATION		
Bachelor's Degre <i>(or equivale.</i> Programme's name:		
Programme's type (es. Bachelo	r's degree,):	
Degree final mark:	(Highest possible mark:))
Programme's name	cle degree (or equivalent second cy s degree,):	.
Awarding institution:		
Degree final mark: (except for graduands)	(Highest possible mark:))
WEIGHTED AVERAGE MARK	(WAM): ned during the whole university c	carreer

To calculate the **media ponderata** (weighted average mark):

OR Exams passed during the Single-cycle programme)

1. Multiply the marks obtained by the number of CFUs (please, note that "30 e lode" is regarded as 30);

only for applicants submitting degrees awarded by Italian Higher Education Institutions

(i.e. Exams passed during the First cycle programme + exams passed during the Second cycle programme

- 2. Add up all the obtained results:
- 3. Divide the result by the total of the CFUs;
- 4. Multiply the obtained average by 110 and then divide by 30.

Attachment n. 2 MODELLO LETTERA DI PRESENTAZIONE Reference letter form

Riferimento del Candidato/a e del Referente Applicant and Referee details							
Nome del Candidato	and Ken	ei ee	uctaiis				
Name of Applicant							
Corso di Dottorato per cui							
ha presentato domanda PhD Course for which the							
applicant has applied							
аррисане наз арриса							
Nome del Referente Name of Referee					tolo itle		
Affiliazione				•			
Institution /Organisation							
Email							
Phone							
Reference for							
Il Coordinatore del Corso di Dottorato apprezz							
The Coordinator of the PhD Course will appre	cıate you	ır eva	luation c	of the app	licant's	capacity	/ .
Per quanto tempo ha supervisionato il Candidato/a							
How long have you known the applicant?							
In quale veste ha conosciuto il candidato)						
In what capacity have you known the applica							
, , , , , , , , , , , , , , , , , , , ,							
Per favore, valuti il Candidato confrontandolo			denti da	lei supe	rvisiona	ti (laure	andi dal
vostro istituto o attuali studenti senior presso							
Please rate the applicant in comparison with				n to you	(either	undergi	raduates
from your institution or current senior studen	ts at you	ır inst	itute):		T	T	
ATTITUDINE ALLA RICERCA/RESEARCH		Тор	Top	Top	Top 25	Top 50	Bottom
SKILLS		2%	5%	10%	23 %	30 %	50%
Potenziale Accademico / Academic potenti	ial				,,,	,,	
Capacità di ragionare in modo indipendente:							
creatività, curiosità, fiducia nelle proprie idee							
Intellectual independence: creativity, curiosity, self-							
confidence							
Capacità di giudizio: capacità di valutar							
problematica, consapevolezza, determina Capacity for analytical thinking: ability to ana							
problem, consciousness and determination.	aiyse a						
Attitudine alla ricerca: capacità pratiche	e e di						
comunicazione							
	cientific						
communication							
Motivazione / Motivation for graduate study	/						
SOCIALE/SOCIAL		Top 2%	Top 5%	Top 10%	Top 25%	Top 50%	Bottom 50%
Maturità / Maturity							
Affidabilità: senso di responsabilità							
Reliability: dependability and responsibility							
Capacità di lavorare in gruppo							
Ability to work with others		Note:	Non com	pilare se ir	npossihili	tati ad e	sprimere
			iudizio	pilare se II		tati au E	opiniioi e
	Note: leave blank if unable to assess						

Firma/Signature: Data / Date:

Per favore, scriva un giudizio sul Candidato/a e sull'esperienza nell'ambito della ricerca (se preferisce può scrivere una lettera su carta intestata e allegarla al presente modulo) Please write an assessment of the Candidate and his/her research activity (you may write a separate letter and attach it to this form):	
Firma/Signature: Data / Date:	
La ringraziamo per la sua valutazione Thank you for completing this evaluation. Per favore, inviare la valutazione entro il	
Please return this form within La valutazione deve essere caricata sul sito tramite il link ricevuto via email. You must upload the reference letter on the website through the link received in the email	