PHD PROGRAMME TABLE 37TH CYCLE

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

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

PROGRAMME'S NAME	CARDIO NEPHRO THORACIC SCIENCES
DURATION	3 years
PROGRAMME START DATE	01/11/2021
LANGUAGES	Italian, English
MANDATORY STAY ABROAD	No
COORDINATOR	Prof. Gaetano Domenico Gargiulo (gaetano.gargiulo@unibo.it)
CURRICULA	1. Cardiology/Cardiac Surgery 2. Nephrology/Urology 3. Pulmonary Diseases/Thoracic Surgery
RESEARCH TOPICS	Detailed list at the bottom of the present document
PhD POSITIONS	10
ADMISSION PROCEDURE	Research proposal evaluation Oral examination

Available Positions and Scholarships

Pos. n.	Financial Support	Description	Position linked to a specific research topic
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 Associazione Piccoli Grandi Cuori	Treatment of heart failure in GUCH patients
8	PhD Scholarship	Funded by Fondazione Fanti Melloni	Severe pulmonary vascular diseases in pediatric age
9	PhD Scholarship	Funded by Fondazione Fanti Melloni	Indications and clinical management of left ventricular care
10	PhD Scholarship	Funded by Fondazione Fanti Melloni	Therapeutic approaches in amyloidosis

Admission Exams

	DATE AND TIME	RESULTS
Research proposal evaluation	Applicants' participation is not required	Available from **14/06/2021****
Oral examination	**Date**: starting from **28/06/2021 – 10 a.m. CEST*** **Place**: Biblioteca Possati, Pad 25, IRCCS S. Orsola, Via Massarenti 9, Bologna or remotely, using Microsoft Teams	Available from **05/07/2021****

* 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. Applicants will also be informed on the possibility to sit the oral examination face to face, depending on the Covid-19 situation. **During the oral examination applicants may express their interest in one or more positions linked to specific research subjects**.

** The **results of the admission exams** will be available on the webpage Studenti Online (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 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)
SUPPORTING DOCUMENTS	
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 first page the Curriculum and the research topic** of the PhD Programme associated to the research proposal; - it **cannot exceed 20.000 characters**, including spaces and formulas, if present. This figure does not include: the title, the outline, references and images (such as graphs, diagrams, tables etc. - where present); - it must include: state of the art; project's description; expected results; timeline of the proposed research activities; outline of the proposed findings assessment criteria; references.
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)
Publications	List of publications (i.e. monographs, articles on scientific journals, volume chapters) and minor publications (conference papers, etc.)
Other documents	- University Master Courses (Master Universitari di I e II livello), Postgraduate vocational training programmes and/or specialisation programmes relevant to the PhD Programme - Specialisation thesis (abstract or full text) - 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, prizes, etc)

Evaluation criteria *

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

1. Research proposal evaluation

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

Scientific value and innovative nature of the proposal	20 points max
Description and structure of the proposal	15 points max
Proposal feasibility	15 points max

2. Oral examination

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

English proficiency	10 points max
Research proposal presentation	30 points max
General knowledge of issues encompassed by the PhD Programme	10 points max

Oral examination includes the presentation of the research proposal and 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), with reference to the qualifications attached to the application. The oral examination is carried out in Italian or in English.
*Possible further evaluation criteria will be available on the University website, 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 above for **topic-specific positions**, the Admission Board shall express its view on the suitability of the interested applicants, taking into account their specific skills, experience and aptitude. Topic-specific positions will be awarded on the basis of the eligibility stated by the Admission Board. Topic-specific positions will be awarded on the basis of the eligibility stated by the Admission Board. Should one or more of the abovementioned positions remain vacant, eligible applicants from the general ranking list may be contacted.
After the publication of the results of the oral examination, the **final ranking list** will be available on the University website, 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 Studenti Online by the deadline indicated on the University website, 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

Curriculum 1 - Cardiology/Cardiac Surgery

- Pulmonary Hypertension: Pharmacotherapy of induction
- New perspectives in the treatment of acute and chronic ischemic heart disease
- New approaches to percutaneous treatment of aortic and mitral valve disease
- Personalized therapy, "genetic driven", of cardiomyopathies
- New techniques of catheter ablation for the treatment of arrhythmias
- Brain protection in aortic arch surgery
- Myocardial protection in cardiac surgery
- Heart transplantation
- Aortic valve replacement with prosthesis 'sutereless'
- 'Frozen elephant trunk technique' surgery for extensive diseases of the thoracic aorta
- Decellularized scaffolds in pediatric cardiac surgery.

Curriculum 2 - Nephrology/Urology

- Imaging in the diagnosis, staging and restaging of prostate cancer evaluation of the role of new radiotracers for PET and identify the presence of lymph node metastases using the histological gold standard diagnostic
- To determine the role of PET in restaging of patients with recurrent disease and assess the main clinical indicators may be related to a positive imaging
- To evaluate the multiparametric MR in the local staging of disease prior to surgery and in patients in active surveillance for prostate cancer indolent
- Laparoscopy in urology oncology
- Application of laser technology for the treatment of benign prostatic hypertrophy (HoLEP)
- Retrograde treatment of kidney stones through the use of flexible instruments (RIRS, retrograde intrarenalsurgery) and the technique combined antegrade-retrograde (ECIRS endoscopiccombinedintrarenalsurgery)

Curriculum 3 - Pulmonary Diseases/Thoracic Surgery

- Technological innovations in the treatment of acute and cronic respiratory failure
- Physiopathological mechanisms of exacerbation of chronic respiratory disorders
- Home monitoring for chronic respiratory patients
- Prevention of the respiratory infections in critically ill patients
- Surgical therapy of experimental model of pulmonary hypertension
- Pathogenetic factors of fibrosis in the esophageal gastro-esophageal reflux disease
- Biomolecular characteristics of pathogenesis of esophageal adenocarcinoma
- The neuroendocrine tumors of the chest: from neuroepithelial bodies & Co. to disease
- The role of the genetic and biomolecolar markers for a multidsciplinary tailored therapy
- The minimally-invasive diagnostic and therapeutic approach to lung cancer: between present time and future perspectives
- Study of pulmonary regeneration after pneumonectomy: experimental models and their applications - Enhancing lung transplantation: ex-vivo lung perfusion another techniques.