UNIVERSITÀ DEGLI STUDI DI TORINO

"Annex 1" updated on 4th June 2020

(The updates and the corrections are highlighted in red colour)

(Annex 1)

CALL FOR PHD POSITIONS – 36th CYCLE
PHD PROGRAMME IN MEDICAL PHYSIOPATHOLOGY

PhD Programme Coordinator	Prof. Franco Veglio
Department	Medical Sciences
PhD Programme Length	3 years
PhD web site	http://dott-fisiopatologia.campusnet.unito.it
Course start date	1st October, 2020
Departments involved in PhD programme	Department of Medical Sciences, Department of Molecular Biotechnologies and Health Sciences, Department of Surgical Sciences

Positions offered[1] by the PhD Programme	
n. 12 positions with scholarship, of which n. 1 reserved to candidates with international qualifications	of which: - 6 scholarships funded by the University of Torino - 3 scholarships funded by Como-Turco School of Medicine (on Mrs Simonetta Maria Como's donation) - 3 scholarships funded by Department of Medical Sciences *(Dipartimenti di Eccellenza Project)*
n. 4 positions without scholarship	

CALL FOR NON-RESERVED (ORDINARY) POSITIONS
Admission procedure for non-reserved (ordinary) positions
Assessment of qualifications and interview
Qualifications to be uploaded in the on-line application

[1] All additional scholarships and apprenticeship contracts (Legislative Decree no. 81/2015 art.45), which may become available after the publication of this Call, will be announced on the University websites Dottorati di Ricerca and PhD until Call's deadline.

• Research project (max 4000 words, bibliography included) written by the candidate choosing among those listed and offered by the Doctorate • Thesis abstract of second cycle degree • Publications (max. 3)	
Assessment criteria (for non-reserved positions)	**maximum score 100 points**
Assessment of qualifications:	**maximum score 30 points**
Final grade of Master/2nd cycle degree (or weighted average with list of examinations taken during the 1st cycle degree and the Master's degree/2nd cycle degree for candidates applying under condition) • 110-110L or weighted average of transcripts >28/30 14 points • from 107 to 109: 13 points • from 104 to 106 or weighted average of transcripts 27-28/30: 12 points • from 100 to 103: 11 points • =< 99 or weighted average of transcripts <27/30: 10 points Candidates with international qualifications will be assessed considering their Curriculum studiorum et vitae (as per information provided in the online application) and not exclusively according to the score of the Master's degree.	maximum score 14 points
Thesis abstract	maximum score 5 points
Publications: 2 points for each publication (max 3 publications already published will be assessed)	maximum score 6 points
Other qualifications: Second/additional master degree: 5 points Italian specialising master 1st and 2nd level degree if relevant: 4 points Any other pertinent specialising courses: 4 points	maximum score 5 points

International research stage, at least 3 months: 3 points	
Minimum threshold for admission to the interview	***18 points***
Interview	**Maximum score 70 points**
Minimum threshold for passing the interview	***40 points***
Further information on examinations: During the **interview** candidates will discuss the **research project** (max 4000 words, bibliography included) written by the candidate choosing among those listed and offered by the PhD Programme. Candidates are allowed to support their discussion with reference materials.	

CALL FOR POSITIONS RESERVES TO APPLICANTS WITH INTERNATIONAL QUALIFICATIONS	
Admission procedure for positions reserved to applicants with international qualifications	
Assessment of qualification and research project	
Qualifications to be uploaded in the on-line application	
●Research project (max 4000 words, bibliography included). Candidates are required to choose a title from those offered by the PhD Programme and write the project proposal on that topic. ●Thesis Abstract ●Publications (max. 4)	
Assessment criteria for positions reserved to applicants with international qualifications	**maximum score 100 points**
Curriculum studiorum et vitae (as by the information provided in the online application)	maximum score 40 points
Thesis abstract	maximum score 10 points
Publications: 3 points for each publication (max 4 publications already published will be assessed)	maximum score 10 points
Research project	maximum score 30 points
Other qualifications: Second/additional master degree: 5 points	maximum score 10 points

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Italian specialising master 1st and 2nd level degree if relevant: 10 points Any other pertinent specialising courses: 10 points	
Minimum threshold for admission	***70 points***

Further information on assessment on reserved positions

Candidates are required to write the research project (max 4000 words, bibliography included) choosing a title from those offered by the PhD Programme.
The Examining Board will evaluate the scientific dimension of the project, its feasibility, target setting, scientific impact of outcomes.

Titoli progetti di ricerca

Dottorato di Ricerca in Fisiopatologia Medica

Titles of research projects

PhD Programme in Medical Physiopathology

1. Ruolo delle esposizioni in età precoce nella genesi delle malattie nel corso della vita / Role of early exposures in the development of diseases in the life-course
(Tutor: Prof.ssa M. Maule)
2. Fenotipo e storia naturale della neuropatia autonomica. Confronto tra forme primitive e secondarie / Phenotype and natural history of autonomic neuropathy. Comparison between primitive and secondary forms.
(Tutor: Prof.ssa G. Gruden)
3. Nuovi approcci tecnologici per la diagnostica dei tumori tiroidei / New technologies for the early diagnosis of thyroid tumours
(Tutor: Prof. E. Ghigo)
4. Approccio semiquantitativo e di radiomica allo studio delle patologie neurodegenerative tramite imaging funzionale /Semiquantitative and radiomic approach to neurodegenerative disease by functional imaging
(Tutor: Prof.ssa D. De Andreis)

5. Caratterizzazione di vescicole extracellulari urinarie in soggetti sottoposti a manipolazione dell'introito sodico / Characterization of urinary extracellular vesicles in individuals undergoing dietary sodium manipulation
(Tutor: Prof. P. Mulatero)

6. Ruolo della via lectinica di attivazione del complemento nel rigetto cronico di trapianto di rene / Role of the lectin pathway of complement activation in chronic rejection of Kidney Transplantation
(Tutor: Prof. L. Biancone)
7. Cirrosi epatica, danno renale acuto da mezzo di contrasto (ci-AKI) e marcatori precoci di danno renale tubulare: studio prospettico controllato/ Liver cirrhosis, contrast-induced acute kidney injury and early kidney tubular damage biomarkers: a prospective controlled study
(Tutor: Prof.ssa E. Bugianesi)
8. Strategie per limitare la fibrosi d'organo tramite il fattore anti-invecchiamento Klotho / Strategies to limit organ fibrosis through the anti-aging factor Klotho
(Tutor: Prof.ssa B. Bussolati)
9. Ruolo di ormoni periferici, neurormoni e molecole ad azione endocrina nel controllo del metabolismo idroelettrolitico / Role of hormones, neurohormones and molecules endowed with endocrine actions in the control of fluid and electrolyte metabolism
(Tutor: Prof. E. Ghigo)
10. Effetto del trattamento con vescicole extracellulari sul profilo di espressione dei non coding RNA in diversi modelli di fibrosi in vivo ed in vitro /Effect of extracellular vesicle treatment on non coding RNA expression profile in different in vitro and in vivo models of fibrosis
(Tutor: Prof. S. Bruno)
11. Simulazione medica avanzata: progetto didattico nella formazione sanitaria / Advanced medical simulation: educational project in health training
(Tutor: prof. F. Veglio)
12. Fisiopatologia delle infezioni nei pazienti con assistenza cardiaca meccanica impiantata permanentemente/Physiopathology of infections in patients with permanently implanted heart care
(Tutor:Prof. F.G. De Rosa)
13. Dai geni alle funzioni: comprendere l'impatto di nuove varianti sulla patogenesi di patologie renali ed epatiche ereditarie / From genes to functions: understanding the impact of novel variants on the pathogenesis of hereditary kidney and liver conditions
(Tutor: Prof.ssa Bussolati, co-Tutor Prof.ssa S. Deaglio)
14. Biomarcatori nel melanoma cutaneo/Biomarkers in cutaneous melanoma
(Tutor: Prof. F. Veglio, co-Tutor Prof. S. Ribero)
15. Metodi per machine-learning e inferenza causale in medicina"/"Methods for machine-learning and causal inference in medicine. (Tutor. Prof.ssa M. Maule) *(research project linked to the scholarship funded by Department of Medical Science)*

16. Extracellular matrix and tumor microenvironment: role of extracellular vesicles. / Matrice extracellulare e microambiente tumorale: ruolo delle vescicole extracellulari.

17. Generation of spike-extracellular vesicles: a model to assess and interfere SARS-CoV-2 binding and internalization. / Generazione di spike-extracellular vesicles come modello per valutare ed interferire col legame e l'internalizzaione del SARS-CoV2.

18. Biomarcatori nel melanoma cutaneo. *(tutor: prof. Pietro Quaglino) (titolo di progetto abbinato a borsa finanziata dal Dipartimento di Scienze Mediche / research project linked to the scholarship funded by Dipartimento di Scienze Mediche)*

*1*9. From genes to functions: understanding the impact of novel variants on the pathogenesis of hereditary kidney and liver conditions. *(tutor: prof. Silvia Deaglio) (titolo di progetto abbinato a borsa finanziata dal Dipartimento di Scienze Mediche / research project linked to the scholarship funded by Dipartimento di Scienze Mediche)*

20. Stile di vita attivo ed esercizio fisico evidence-based per una strategia preventiva di salute: Valutazione di efficacia in popolazioni con o senza patologie croniche esercizio sensibili. /
Active life style and evidence-based physical exercise for a healthy prevention strategy: Assessment of effectiveness in cohort of subjects affected or not by exercise-sensitive chronic diseases. *(Tutor: Prof Rainoldi)*

21. Pathophysiology of SARS-CoV2 infection and other respiratory viral infections in allogenic bone marrow transplant. / Fisiopatologia delle infezioni virali respiratorie e da SARS-CoV2 nel trapianto di midollo allogenico. (tutor: Francesco De Rosa)