



**"Annex 4" updated on 1<sup>st</sup> August 2018**  
(The updates and the corrections are highlighted in red colour)

(ANNEX 4)

**CALL FOR PHD POSITIONS – 34 cycle**  
**PHD PROGRAMME IN PHARMACEUTICAL AND BIOMOLECULAR SCIENCES**

PhD Programme Coordinator	Prof. Gianmario Martra
Department	Chemistry
PhD Programme Length	3 years
PhD web site	<a href="http://dott-sfb.campusnet.unito.it/do/home.pl">http://dott-sfb.campusnet.unito.it/do/home.pl</a>
Course start date	1 October 2018
Departments involved in PhD programme	Department of Chemistry, Department of Pharmaceutical Science and Technology, Department of Life Science and Systems Biology, Department of Public and Pediatric Health Sciences, Department of Molecular Biotechnology and Health Sciences

Positions offered <sup>1</sup>	
n. <b>4 2</b> positions with scholarship	Of which : - n. 1 scholarship funded by Department of Molecular Biotechnology and Health Sciences - n. 1 scholarship funded by Huvepharma Italia S.r.l.
n. 1 without financial support	

***Titles of Research Projects / Research Fields***

The list of research projects/research fields is available at the end of this Information Sheet. This list may be updated until the deadline of Call for Admission to PhD positions.

***Entrance examinations***

Schedule with information on dates and venues of entrance examinations will be published on the websites: <http://www.unito.it/ricerca/fare-ricerca-unito/dottorati-di-ricerca> and <http://en.unito.it/research/phd/phd-programmes>, starting from **6<sup>th</sup> September 2018**.

<sup>1</sup> 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 <http://www.unito.it/ricerca/fare-ricerca-unito/dottorati-di-ricerca> and <http://en.unito.it/research/phd/phd-programmes> until Call's deadline.



# UNIVERSITÀ DEGLI STUDI DI TORINO

## Application fee

**Application fee is €50.00 for each application submitted.**

Candidates with international qualifications are exempted from paying the application fee.

**Application fee deadline: 5<sup>th</sup> September 2018 (mandatory deadline).**

Candidates who do not pay the application fee within the deadline will be excluded from the competition.

<b>Admission procedure</b>	
Assessment of qualifications, research project and interview	
<b>Qualifications to be uploaded in the on-line application</b>	
<ul style="list-style-type: none"> <li>• Application form (duly signed and including identification document/passport);</li> <li>• Candidates applying with international qualifications: submit on-line documentation as specified in art. 4 of this Call;</li> <li>• Candidates applying under condition: Self-declaration (available on the websites of the University or alternatively as per Annex 2 of the call for applications) with degrees from the Bachelor's and Master's Degree with relative marks, CFU and weighted average. For candidates applying under condition of obtaining a second level degree within 31<sup>st</sup> October 2018, issued by a non- Italian university, please check also art. 5 of the Call for admission to PhD positions.</li> <li>• Research project (max 400 words, references excluded) written in English by the candidate choosing a title within those offered by the PhD Programme;</li> <li>• Thesis Abstract of 2<sup>nd</sup> Cycle Degree (max. 400 word). See the section "Further information on examinations".</li> <li>• Publications (max. 3)</li> </ul>	
<b>Assessment criteria</b>	<b>Maximum score 100 points</b>
<b>Assessment of qualifications:</b>	<b>maximum score 20 points</b>
Final grade of second cycle degree  <ul style="list-style-type: none"> <li>• 110 e lode _____ 12 points</li> <li>• 110 _____ 11 points</li> <li>• 107-109 _____ 10 points</li> <li>• 104-106 _____ 9 points</li> <li>• 99-103 _____ 8 points</li> <li>• &lt;98 _____ 7 points</li> </ul> weighted average of list of examinations taken during the Laurea Magistrale/2nd cycle degree for candidates applying under condition :  <ul style="list-style-type: none"> <li>• Average from 29/30 to 30/30 ____ 12 points</li> <li>• Average from 27/30 to 28/30 ____ 10 points</li> <li>• Average from 25/30 to 26/30 ____ 9 points</li> <li>• Average from 23/30 to 24/30 ____ 8 points</li> </ul>	maximum score 12 points



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<p>• Average &lt; 23/30 _____ 7 points</p> <p>The average is rounded up if the decimal part is <math>\geq 5</math>, otherwise it is rounded down (<math>&lt;5</math>).</p>	
<p>Thesis Abstract of 2<sup>nd</sup> Cycle Degree (see the section "Further information on examination")</p>	<p>maximum score 3 points</p>
<p>Publications 1 point for each publication (max 3 already published JCR papers will be evaluated, only if relevant to the PhD programme)</p>	<p>maximum score 3 points</p>
<p>Other qualifications:</p> <ul style="list-style-type: none"> <li>- Honours for the dissertation ("menzione", "dignità di stampa", awards): 1 point</li> <li>- Second/additional master degree: 2 points</li> <li>- Italian specialising master 1<sup>st</sup> and 2<sup>nd</sup> level degree if relevant with PhD Programme: 1 point</li> <li>- Non-university Master : 0.3 point</li> <li>- Post-graduation research periods (supported by an official declaration of the hosting laboratory): 1.2 points per year (and in proportion for shorter periods)</li> <li>- Any other pertinent specialising course: 1 point</li> <li>- Communications to congresses: 0.2 points (max 5 communications)</li> </ul> <p>For candidates applying under conditions: 1 point for each examination with laude (max. 3 exams). (Titles relating to professional skills, not pertinent with the research activity, will not be evaluated)</p>	<p>Maximum score 2 points</p>
<p><i>Minimum threshold for admission to the next examination</i></p>	<p><i>11 points</i></p>
<p>Research Project (see the section "Further information on examination")</p>	<p><b>maximum score 20 points</b></p>
<p><i>Minimum threshold for admission to the interview</i></p>	<p><i>11 points</i></p>
<p><b>Interview</b></p>	<p><b>Maximum score: 60 points</b></p>
<p><i>Minimum threshold for passing the interview</i></p>	<p><i>40 points</i></p>
<p><b>Further information on examinations:</b></p> <p>Knowledge of the English language for scientific purpose is compulsory.</p>	



Thesis Abstract: max 400 words. The candidate must develop the following points:

- a) purpose of the thesis;
- b) methods used;
- c) results achieved

Moreover, the name of the supervisor must be indicated

The **Research project** must be written in English, max 400 words, references excluded. Candidates are required to choose a title from those offered by the PhD Programme.

The candidate must develop the following points:

- a) state of the art of the chosen topic;
- b) targets of the project;
- c) research plan over 3 years.

The examining board will evaluate the scientific dimension of the project, its feasibility related to the length of the PhD, the target setting, the scientific impact of outcomes.

The **interview** will cover the qualifications and the publications submitted by the candidates, their studiorum and professional curricula, their scientific and cultural interests and will assess the level of basic knowledge of the subjects involved in the PhD Programme. The examination board will focus on:

- level of knowledge of the topic and the ability to present it;
- level of knowledge of the topic of the research project;
- originality and interdisciplinarity of the research proposal.

The skill in the use of English will be assessed as well.

The interview, on request of the candidate and duly authorised by the examination board, may be taken via Skype (art. 8 of the Call).

## Titoli dei progetti / Titles of research projects

- Studio dell'accumulo di Gadolinio nel cervello e nei principali organi di modelli murini sottoposti alla somministrazione multipla di agenti di contrasto a base di Gadolinio e identificazione dei determinanti principali dei percorsi di biodistribuzione/escrezione/Study of Gadolinium retention in the brain and principal organs of murine models upon multiple administration of Gadolinium based contrast agents and identification of the principal determinants of biodistribution/escretion pathways (**progetto collegato alla borsa di Dottorato istituita dal Dipartimento di Biotecnologie Molecolari e Scienze per la Salute/PhD sponsored by the Department of Molecular Biotechnology and Health Sciences; tutor: Prof. Silvio Aime**)
- Photocontrolled release of nitric oxide: new strategies to amplify activity of anticancer drugs / Fotorilascio di ossido di azoto: nuove strategie per migliorare l'attività di farmaci antitumorali (**Tutor: Prof.ssa Loretta Lazzarato**)



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- Determinazione della permeabilità ai farmaci di modelli di muco via HPLC-MS/Determination of drug permeability on mucus models by HPLC-MS (**Tutor: Prof.ssa Sonja Visentin**)

**Titolo abbinato a posto con borsa finanziato da / scholarship funded by Huvepharma Italia S.r.l.**

- Economia circolare nella produzione industriale: gli scarti come risorsa fanghi biologici e rifiuti liquidi. (referente: prof. Giancarlo Cravotto)