



## TRASLATIONAL MEDICAL AND SURGICAL SCIENCES

<b>Cycle</b>	<b>XXXIV</b>
<b>Coordinator</b>	Prof. Carlo FERRARI Department of Medicine and Surgery email: <a href="mailto:carlo.ferrari@unipr.it">carlo.ferrari@unipr.it</a>
<b>Duration</b>	3 years
<b>Starting date of the PdD programme</b>	01/11/2018
<b>Research Topics</b>	
<ol style="list-style-type: none"><li>1) Stem cells in diagnosis and treatment of neoplasms, chronic and degenerative disorders, cardiovascular diseases and bone, joint and muscle diseases;</li><li>2) Translational medicine in the immune dysregulation of respiratory, digestive, skin, infectious, endocrine, and kidney diseases and of vasculitides;</li><li>3) Plasticity, function and theranostics of genomic, transcriptomic, proteomic and metabolomic platforms in cells, tissues and organs, for prevention or in presence of neoplasms, infections, chronic, dysmetabolic and degenerative diseases, of ob-gyn and neonatal diseases, or for study of the response to environmental and/or lifestyle factors and to pharmacologic agents;</li><li>4) Development and theranostics of technologically advanced imaging and phenotyping in prevention or in presence of neoplasms, infections, chronic, dysmetabolic and degenerative diseases, of ob-gyn and neonatal diseases, or for study of the response to environmental and/or lifestyle factors and to pharmacologic agents;</li><li>5) Development and application of technologically advanced devices and/or biological tools, to measure and/or to support and/or to replace the function of cells, tissues or organs in medical and/or surgical diseases;</li><li>6) Advanced and innovative strategies of functional recovery and rehabilitation in prevention or in presence of neoplasms, infections, chronic, dysmetabolic and degenerative diseases, of ob-gyn and neonatal diseases, or for study of the response to environmental and/or lifestyle factors and to pharmacologic agents;</li><li>7) Roles of governance and organization in health care organizations and systems in the prevention and care of socially and economically highly relevant disorders, including, but not limited to, environmental and professional diseases;</li><li>8) Role of microbiota and microbiome in translational medicine and surgery;</li><li>9) "Big data": their extraction and their role in translational medicine and surgery;</li><li>10) Role of advanced technologies, including robotics, in translational surgery.</li></ol>	
<b>Training Objectives</b>	
<p>The PhD Program in Translational Medical and Surgical Sciences is a typical multidisciplinary PhD program, in which the common denominator among most diverse research pathways is the critical transition from bench to bedside, i.e. clinical application in real patients. This close link between bench research and clinical research will expedite the transfer of experimental discoveries and methods to clinical practice. The close contact with clinical activity will allow the PhD students to face also real problems in the clinical arena, ranging from diagnosis to treatment and from prevention to rehabilitation, all of which are deeply involved in human disease and in patient care.</p> <p>The fast, two-way exchange between clinics and lab will bring back to the lab the results of clinical and epidemiological observations, closely linking experimental research to questions and goals stemming directly from real world data and unmet needs of the patient.</p> <p>The final goal of the PhD Program in Translational Medical and Surgical Sciences, therefore, is to provide a highly qualifying PhD educational pathway, offering the students top notch opportunities, know-how and technological tools and enabling them to carry out cutting edge translational research in national or foreign, public or private Institutions, including, but not limited to, Universities, Research Centers and PharmaMed Industries.</p>	



## Admission requirements

Applicants who have one of the following degrees may participate in the selection:

- Laurea specialistica or Laurea magistrale (second cycle degree)
- Laurea Vecchio Ordinamento (degree obtained under the Italian previous regulations);
- an academic Master's degree obtained abroad, comparable to the above mentioned Italian degrees and recognized as suitable for the admission to doctoral programmes.

Undergraduate applicants may also submit applications with the obligation of getting their degree by **October 31<sup>st</sup> 2018**.

### POSITIONS PUT OUT TO COMPETITION\*

(\*Amended by Rector's Decree n. 1762 of 24.07.2018)

<b>With Scholarship</b>	10
<b>Without Scholarship</b>	1
<b>TOTAL</b>	<b>11</b>

### Positions with University Scholarship

N°	Funding entity	Research Topic, if any
2	Scholarship Ministerial funds	---
2	Scholarship University funds	---
1	Scholarship co-funded by Fondazione Cariparma	---

### Position with Scholarship LINKED TO SPECIFIC TOPICS (art. 11 of the Call for applications)

During the Written Exam, applicants may express their interest in being assigned a scholarship dedicated to a specific research topic to the Examination Board. The Board will express its judgement on eligibility to be assigned the scholarship in consideration of the specific competences, experience and specific aptitudes of the applicants.

N°	Funding entity	BOUND RESEARCH TOPIC
2	Funded by the Department of Medicine and Surgery	<ul style="list-style-type: none"> <li>• Optimization of endoscopic control of chronic inflammatory bowel diseases after biological therapy induction and in long-term follow-up of patients with intestinal mucosa dysplasia</li> <li>• Technological and experimental applications in plastic surgery: use of mesenchymal cells derived from adipose tissue in plastic and reconstructive surgery</li> </ul>
1	Funded by the Department of Medicine and Surgery with funds from the "Feliciani-Ferretti" legacy	<ul style="list-style-type: none"> <li>• reserved for graduates of the Faculty of Medicine and Surgery and Faculty of Pharmacy</li> </ul>
1	Associazione Italiana contro le Leucemie, Linfomi e Mieloma onlus AIL – sezione di Parma	<ul style="list-style-type: none"> <li>• Tolerance induction in haploidentical transplant</li> </ul>
1	Associazione Italiana contro le Leucemie, Linfomi e Mieloma onlus AIL – sezione di Parma	<ul style="list-style-type: none"> <li>• Oncolytic Virotherapy in Myeloma Multiple</li> </ul>



## ADMISSION PROCEDURES

**Assessment of QUALIFICATIONS:** up to 30 points

**WRITTEN EXAM:** up to 60 points

**ORAL EXAM:** up to 30 points

**Minimum score for ELIGIBILITY:** 70/120

### Foreign Language

Language the fluency of which shall be assessed during the Oral Exam:

**ENGLISH.**

The evaluation of the knowledge of this language will be oral and will consist in reading and translating of a scientific text.

## LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT

### Mandatory documents to be attached to the on-line application

- **ANNEX A** (art. 5 of the Call for Applications)
- Scanned Copy of a **valid identification document** with photo
- **Curriculum Vitae et studiorum** (art. 4 of the Call for Applications)
- **Abstract of the second cycle master's degree thesis.** Undergraduate applicants may submit the draft of the thesis approved by their supervisor (10.000 characters including spaces)
- **Certificates and academic transcript of records for both the Bachelor' and the Master' degrees** containing the following details for each degree held: (art. 4 of the Call for Applications):
  - University that granted the degree
  - Type of degree (first cycle/second cycle/single cycle)
  - Name of the degree programme
  - Date of graduation
  - Final mark
  - List of exams and corresponding scores (academic transcript of records)
  - Translation into Italian or English (only for degrees issued in languages other than Italian or English).

### Further qualifications that may be attached to the application, if in possession of the applicant

(only qualifications attested by a document drawn up in Italian or in English)

- **Research Project:** The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focus on an original research topic and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation;  
it does not represent a constraint with respect to the following choice of the doctoral thesis, that shall be defined together with the supervisor and approved by the Academic Board;
- **Scientific Publications:** Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.;
- **Reference Letters:** A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities;
- **Academic qualifications:** other Master's and/or specialization degree in subjects consistent with the research topics of this PhD programme
- **Mobility experience abroad** (e.g. Erasmus or similar);
- **Any other document** certifying the applicant's training and abilities (grants, awards, etc.).

## EVALUATION CRITERIA

### QUALIFICATION

### EVALUTATION CRITERIA

### POINTS



<b>Curriculum Vitae et studiorum</b>	Including academic career and postgraduate experience, accompanied by a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark	<b>Up to 7 points</b>
<b>Graduation thesis</b>	Abstract della tesi di laurea	<b>Up to 5 points</b>
<b>Research Project</b>	The research project shall consist of a maximum of 3 pages, be written in Italian or in English, focus on an original research topic and it shall be structured as follows: introduction of the problem in the scientific context, significance of the problem, expected results, argumentation	<b>Up to 8 points</b>
<b>Scientific Publications</b>	Articles on national and international journals, papers presented at conferences or symposia, book chapters etc	<b>Up to 5 points</b>
<b>Reference Letters</b>	A maximum of 2 written by professors or researchers at the University of origin of the candidate or from other universities or from experts in the research areas working in public or private research facilities	<b>Up to 3 points</b>
<b>Other qualifications</b>	Awarding of Scholarships, prizes, trainings, etc.	<b>Up to 2 points</b>
<b>WRITTEN EXAMINATION</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The WRITTEN EXAM will focus on a research project compatible with this PhD Program; it must include an English abstract.	<ul style="list-style-type: none"> <li>○ good argument about the project: up to 10 points</li> <li>○ scientific relevance: up to 15 points</li> <li>○ Experimental design: up to 15 points</li> <li>○ Translationality: up to 10 points</li> <li>○ Feasibility: up to 10 points</li> </ul>	<b>Up to 60 points</b>
<b>ORAL EXAMINATION</b>	<b>EVALUATION CRITERIA</b>	<b>POINTS</b>
The ORAL EXAM will focus on the Research Project presented to the written exam.	<ul style="list-style-type: none"> <li>○ knowledge of the foreign language: up to 6 points</li> <li>○ good argument about the project: up to 6 points</li> <li>○ Discussion of the critical points of the project: up to 6 points</li> <li>○ Framing of the project in the field of knowledge of the sector: up to 6 points</li> <li>○ Ability to mitigate risks deriving from unexpected results: up to 6 points</li> </ul>	<b>Up to 30 points</b>
<b>SCHEDULE OF THE ADMISSION EXAMS</b>		
<b>WRITTEN EXAM</b>	<b>WRITTEN EXAM DATE:</b> 18 September 2018 <b>TIME:</b> 09:00am <b>PLACE:</b> Department of Medicine and Surgery Building 26 – Internal Medicine CLASSROOM Via A. Gramsci, 14 43126 PARMA - ITALY	



**UNIVERSITÀ  
DI PARMA**

**ORAL EXAM**

**ORAL EXAM DATE:** 18 September 2018

**TIME:** 04:00pm

**PLACE:** Department of Medicine and Surgery  
Building 26 – Internal Medicine CLASSROOM  
Via A. Gramsci, 14 43126 PARMA - ITALY