

| SURGICAL AND MICROBIOLOGICAL SCIENCES | |
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| Cycle | XXXII |
| Duration | 3 years |
| Coordinator | Prof. Luigi RONCORONI – Department of Surgical Sciences E-mail: luigi.roncoroni@unipr.it |
| Research Topics (the applicant MUST indicate one research topic) | <ul style="list-style-type: none"> • New surgical technologies and associated risks of infection. Minimally invasive surgery and advanced laparoscopy. Synthetic and biological prosthesis materials • Risk factors for chronic pain after traditional versus laparoscopic surgery • Stem cells in plastic surgery • New devices for local treatment of pleural malignant mesothelioma and pleural infection risk • Surgical treatment of aneurysms with micro-organisms colonization and infection complications in reconstructive vascular surgery • Interventional radiology and advanced laparoscopic surgery • Art-reat: specific computational model to improve the quality of prediction for atherosclerosis • Immune-resistant infections in after-surgery intensive care and algorithms for early treatment of sepsis • Diagnosis ad therapies of endocarditis: clinical and microbiological implications • Study of the virus-cell relationships with regard to the cytoskeleton and to the viral genome regulation • Molecular approaches for the characterization and identification of Spirochaetes that are pathogen for humans • Innovative and molecula approaches for the study of malaria Plasmodia • Study of cellular compartmentalization of viral proteins and functional proteomics • Medical-surgical treatment of chronic otitis media. Cochlear implant: surgery and treatment of complications • Study of the evolutionary mechanisms of enteric viruses: the role of genetic and antigenic diversity in the virus-host relationships and their diagnostic and vaccine implication • The fast track surgery • Surgycal and medical oncology and palliative care • Molecular imaging in preoperative setting |
| Training objectives | This Doctorate Program aims at providing students with skills to carry out high-level research activities at public and private facilities, shall be qualifying also with regard to self-employed medical practice and shall contribute to the European High Education and Research Area. The skills acquired during the Doctorate Program and the research results are meant to enrich the scientific sectors relevant for the Program. The integrated study of advanced surgical and anaesthesiological technologies, of synthetic and biological prosthesis materials that are continuously evolving and the use of stem cells have the objective of acquiring new knowledge in the field of physiology and pathogenic action of emerging and/or re-emerging |

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| | infection agents. Similarly, new knowledge and use of state-of-the-art technologies in the microbiological field aim at identifying the surgical procedures showing lower risk of infection. | |
| Academic degree required | Laurea pursuant to the previous university system, laurea specialistica or laurea magistrale, or a foreign academic qualification that has been recognized as equivalent. | |
| POSITIONS PUT OUT TO COMPETITION | | |
| With Scholarship | | 3 |
| Without Scholarship | | 1 |
| Reserved to employees of companies having a “Industrial Engineering Doctorate” arrangement | | 1 |
| TOTAL | | 5 |
| KIND OF SCHOLARSHIP | | |
| N° | Funding entity | Research Topic, if any |
| 1 | Scholarship University funds | -- |
| 1 | Funded by Department of Surgical Sciences | -- |
| 1 | Fondazione Madonna dell'Uliveto Onlus | -- |
| Positions reserved to employees of companies having a “Industrial Engineering Doctorate” arrangement | | |
| N° | Company | |
| 1 | Poliambulatorio Dalla Rosa Prati | |
| ADMISSION PROCEDURES | | |
| Assessment of QUALIFICATIONS: up to 40 points WRITTEN EXAM: up to 40 points ORAL EXAM: up to 40 points Minimum score for ELIGIBILITY: 70/120 | | |
| Foreign Language | Language the fluency of which shall be assessed during the Oral Exam: ENGLISH or FRENCH. The evaluation of the knowledge of this language will be oral and will consist in translating of a scientific text. | |
| Possibility of videoconference for candidates residing abroad | | NO |
| LIST OF QUALIFICATIONS TO BE SUBMITTED AND THEIR ASSESSMENT | | |
| Graduation thesis | Abstract of the graduation thesis (mandatory qualification) | Up to 6 points |
| Graduation mark | Score related to the final mark: - 110 with honours (magna cum laude): 3 points; - 110: 2 points; - From 100 to 109: 1 point | Up to 3 points |
| Average of the exam marks (if the candidate will attain the degree no later than 31 October 2016) | Score related to the average of the exam marks: - 30/30: 2 points; - From 27/30 to 29/30: 1 point; | Up to 2 points |

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| Curriculum Vitae et studiorum and other qualifications | Including academic career and postgraduate experience, accompanied with a statutory declaration in lieu of the certification of the exams passed with the relevant marks, as well as the final graduation mark (mandatory qualification) | Up to 4 points |
| 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. <u>It shall amount to no commitment on the subsequent choice of the doctoral thesis</u> | Up to 11 points |
| Statement of Research Interest | Short text – maximum 2 pages – in Italian or in English, aimed at explaining the candidate's reasons to attend the PhD and at describing the specific research interests | Up to 10 points |
| Scientific publications | Articles on national and international journals, papers presented at conferences or symposia, book chapters etc. | Up to 2 points |
| 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 | Up to 2 points |
| Other qualifications | Awarding of Scholarships, prizes, trainings, etc. | Up to 2 points |
| SCHEDULE OF THE ADMISSION EXAMS | | |
| WRITTEN EXAM | WRITTEN EXAM DATE: 20 September 2016 TIME: 9:00am PLACE: Multimedia Classroom of the Department of Surgical Sciences Via A. Gramsci, 14 – 43126 PARMA, ITALY | |
| ORAL EXAM | ORAL EXAM DATE: 20 September 2016 TIME: 5:00pm PLACE: Multimedia Classroom of the Department of Surgical Sciences Via A. Gramsci, 14 – 43126 PARMA, ITALY | |
| Written Exam topics | The Written Exam will focus on surgery and Applied Microbiology. | |
| Oral Exam topics | The Oral Exam will focus on the discussion of the research project | |
| OTHER INFORMATIONS | For foreign candidates, the admission examinations may be held in English at the candidate's choice. | |