

| MEDICAL SCIENCES | |
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| Cycle | XXXI |
| Duration | 3 years |
| Supervisor | Prof. Antonio Mutti – Department of Clinical and Experimental Medicine E-mail: antonio.mutti@unipr.it |
| Research Topics | <ol style="list-style-type: none"> 1. Translational research in the induction of specific tolerance to organ transplants and bone marrow 2. Innovative strategies for hematopoietic stem cell transplantation from haploidentical donors 3. Pathophysiology of multiple myeloma and study of the molecular mechanism of action of new anti myeloma agents 4. Development of non-invasive methods for the early diagnosis of chronic degenerative diseases and cancer 5. Immunological markers of tumor progression 6. Optimization of new anticancer therapeutic strategies through preclinical studies. 7. Morphology and function in pulmonary disease and implications for clinical management and pharmacological approach 8. Epidemiological research in the geriatric field 9. Pathophysiology of renal failure 10. Genetic and environmental aspects in vasculitis 11. Secondary hyperparathyroidism and vitamin D: risk of cardiovascular disease in patients with chronic renal failure at various stages of severity 12. Molecular identification of collagens and inflammatory factors conditioning the progression of renal glomerular disease towards renal sclerosis 13. Studies of clinical and genetic factors associated with the phenotype of renal calculi and studies on primary and secondary prevention 14. Studies in vitro, in vivo on the immune system in aging 15. In vitro and in vivo studies on diagnostic and clinical aspects of metabolic bone diseases. 16. Identification of risk factors in the workplace, particularly with regard to exposure to carcinogenic agents 17. Primary health care: organization of local services - the impact of health houses. 18. Epidemiological and environmental studies on the health impact of incinerators. 19. Common endotypes and phenotypes in allergic multimorbidity. 20. Genetics and pathophysiology of diabetes mellitus 21. Novel technologies in the treatment of diabetes mellitus 22. Systems biology of dysmetabolic conditions 23. Influence of guideline application on the end points of hospital admissions in patients with diabetes mellitus 24. Novel diagnostic tools for thyroid nodules 25. Metabolic Syndrome and Hypogonadism 26. Regulatory mechanisms in autoimmunity and proliferative disorders of the skin |

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| Training objectives | <p>The Doctoral Program in Medical Sciences aims to develop skills and expertise to facilitate the integration between clinical and epidemiological studies and experimental research in the laboratory. The close link with the clinic allows doctoral students to tackle real problems, ranging from diagnosis to treatment and from prevention to rehabilitation, concerning human disease and care for the sick. The connection between laboratory research and clinical research will allow for a quick transfer to the medical practice of discoveries and methods acquired through experimental studies. The objectives of the PhD include the commitment to bedside clinical or epidemiological studies of populations at-risk, searching the pathophysiological bases of clinical conditions, through the systematic verification of the hypothesis of cellular systems. The rapid interchange between application contexts (clinical and laboratory) in its bi-directionality (the laboratory will report the results of clinical and epidemiological research) will at the same time anchor the experimental research on issues that arise from clinical settings and verify hypotheses arising from laboratory research in humans. In addition to a core group of teachers / researchers involved in MED/09 and MED/44, the School Committee can count on a wide range of scientific sectors belonging to the Area 06.</p> | | |
| Academic degree required | <p>Laurea pursuant to the previous university system, laurea specialistica or laurea magistrale, or a foreign academic qualification that has been recognized as equivalent</p> | | |
| Positions put out to competition | | | |
| With scholarship | | 8 | |
| Without scholarship | | 2 | |
| TOTAL | | 10 | |
| Scholarship types | No. | Description (funding entity and research topic, if any) | |
| | 3 | Scholarships of the University of Parma | |
| | 2 | <p>Funded by the NHS Local Agency of Parma on the following research topics:</p> <p>1) Primary health care: the organization of local services - the impact of health houses;</p> <p>2) Evaluation of impact on health: epidemiological analyzes and environmental implications of incinerators</p> | |
| | 1 | <p>Funded by Istituto Ospitalieri of Cremona on the research topic "Development of non-invasive methods for early detection of chronic degenerative diseases and cancer"</p> | |
| | 1 | <p>Funded by Department of Clinical and Experimental Medicine</p> | |
| 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 | | | |
| List of QUALIFICATIONS to be submitted and their assessment | Graduation thesis | Abstract of the graduation thesis (mandatory qualification) | Up to 5 points |

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| | <p>Curriculum Vitae et studiorum and other qualifications</p> | <p>Covering the candidate's university career, as well as postgraduate experience, scholarships and prizes, accompanied with a statutory declaration in lieu of the certification of the exams sat and passed, with the relevant marks, as well as the final graduation mark (mandatory qualification)</p> | <p>Up to 20 points</p> |
| | <p>Scientific publications</p> | <p>Articles on national and international journals, papers presented at conferences or symposia, book chapters etc.</p> | <p>Up to 5 points</p> |
| <p>Foreign language</p> | <p>Language the fluency of which shall be assessed during the Oral Exam: ENGLISH.</p> <p>The assessment will consist in reading and translating a short scientific report.</p> | | |
| <p>Schedule of the admission exams</p> | <p>WRITTEN EXAM DATE: 16 September 2015 TIME: 10:00am PLACE: Department of Clinical and Experimental Medicine Via A. Gramsci, 14 – 43126 PARMA, ITALY</p> <p>ORAL EXAM DATE: 16 September 2015 TIME: 4:00pm PLACE: Department of Clinical and Experimental Medicine Via A. Gramsci, 14 – 43126 PARMA, ITALY</p> | | |
| <p>Written Exam topics</p> | <p>The Written Exam will focus on a research project on which to develop the PhD, including the abstract in English.</p> | | |
| <p>Oral Exam topics</p> | <p>The Oral Exam will focus on the research project submitted during the written examination.</p> | | |