

PHD PROGRAMME IN CLINICAL SCIENCES

Chairman: prof. Marco Matucci Cerinic

BIOMEDICAL AREA

ADMINISTRATIVE OFFICE	Department of Experimental and Clinical Medicine
CURRICULA	<ol style="list-style-type: none"> 1. Clinical Pathophysiology and of Aging and Nursing Sciences 2. Clinical and Experimental Medicine 3. Pathology and Clinic of the Locomotor Apparatus and the Calcified Tissues 4. Anaesthetic and Surgical Sciences 5. Psychology and Pain Management 6. Global health and international cooperation on mobile populations
THEMATICS	<p>Curriculum in Clinical physiopathology, aging and nursing sciences</p> <p><u>Nursing area</u></p> <ol style="list-style-type: none"> 1. Organ donation in nursing sciences 2. Clinical risk in nursing sciences 3. Nursing Management of signs and symptoms <p><u>Medical Area</u></p> <ol style="list-style-type: none"> 1. Pathogenetic and Therapeutic Mechanisms of immunovascular diseases 2. Physiopathology of atherosclerosis 3. Mechanisms of action, efficacy and safety of antithrombotic therapy i 4. Physiopatology of acute coronary syndromes 5. atherogenic dyslipidemias: from the genetic diagnosis to the treatment 6. Venous thromboembolic disease: new pathogenetic mechanisms 7. Aging and age correlated disease biomolecular mechanisms 8. Physiopathology and clinical epidemiology of age correlated fragility and disability 9. Aging of cardiovascular system and age correlated myocardiopathies. 10. Physiopathology and clinical epidemiology of the cognitive decline in the elderly 11. The management of major traumas in Italy and Europe 12. Deelopment of new methodologies of advanced simulation for the implementation of the trauma team efficiency. <p>Curriculum in clinical and experimental Medicine and Radiology:</p> <ol style="list-style-type: none"> 1. The biological bases (cellular, molecular, genetic, metabolic, microbiologic, hormonal) of immune disregulated diseases (chronic inflammatory diseases, immunodeficiencies, cancer, chronic autoimmunity) 2. Biomarkers phenotipization, gender and precision therapies in immunodisregulated diseases 3. The role of the new MRI (Diffusion, Perfusion, Spettroscopy) and CT parameters (Perfusion with techniques of reduction of the dose in MultiSlice–CT and ConeBeam–CT) in the pre and post therapy evaluation of the different anatomic areas (neuro and head, heart and chest, abdomen and pelvis). 4. New Imaging techniques in the evaluation od skin, lung, and microcirculation of fibrosing autoimmune diseases. 5. Study of genetic bases and clinical/laboratory stratification of common variable immunodeficiency as prototype of immunodisregulation diseases, infections, autoimmunity and tumors. 6. Predisposing factors, physiopathology, organ involvement and therapeutic approaches to autoimmunity, allergic diseases and fibrosing autoimmune

diseases

7. Study of the correlation between the immune system and the microbiota in the genesis of chronic inflammatory diseases and neoplasias.
8. Study of the intratumoral and peripheral immune response in solid tumors
9. Translational aspects of chronic hepatopathies and primitive tumors of the liver.
10. Cancer immunotherapy: strategies of implementation and personalisation of the treatment
11. Oncogenesis and biomarkers of neoplastic evolution secondary to hepatic viruses
12. Cryoglobulinemic syndromes and lymphoproliferative disorders in hepatic viruses infections
13. Immunotherapy in autoimmunity and rare immunomediated diseases.
14. New classification and organ involvement in rheumatic diseases.

Curriculum in Clinical Pathology, in Musculoskeletal diseases and calcified tissues

1. innovative surgical methodologies of prosthetic surgery
2. Biomaterials for orthopedic surgery
3. Analysis and evaluation of prostheses interaction
4. Mineral and bone metabolism in clinical models of the diseases of the calcified tissues.

Curriculum in anesthesiology and surgery

1. Surgical area
2. New minimally invasive technology in general, urologic and vascular surgery
3. Molecular precision medicine in gastrointestinal oncology
4. Guided surgery guided by the virtual reality in 3D-D
5. New technologies in the minimally invasive and conservative surgery in Crohn disease
6. Optimization of the surgical procedure in the pre-, intra- and postoperative phase in IBD
7. Role of simulation in the learning of new surgical techniques
8. The development of renal transplantation: from immunotherapy to surgery
9. Technological innovations in the surgical treatment of benign prostate hypertrophy
10. Gender dysphoria: from psychological to surgery problems.
11. Anesthesiology Area
12. Advantages and limits of the use of long term central venous catheterism
13. The pathways of perioperative medicine
14. Perioperative acute renal damage perioperative in high complexity interventions

Curriculum in Psychology and pain therapy

1. The role of neuronal and non-neuronal TRP channels in inflammatory neuropathic and oncologic pain
2. Molecular bases of the GPCR dependent mechanism in the genesis of pain in headache
3. Psychological and Psychosocial mechanisms implicated in the onset and maintenance of pain and disease
4. Psychological interventions in chronic and non-chronic pain disturbances

Curriculum in global health and International cooperation on mobile populations

1. Epidemiology and clinics of emergent/re-emergent infections in countries with

	<p>a medium low income and in mobile/migrant populations</p> <ol style="list-style-type: none"><li data-bbox="416 230 1457 297">2. Diagnostic approach emergent/reemergent infections in countries with a medium low income and in mobile/migrant populations<li data-bbox="416 297 1457 365">3. Parasitoses and allergic diseases in countries in development and in mobil epopulations.<li data-bbox="416 365 1457 432">4. Tuberculosis and host response in countries with a medium low income and in mobile/migrant populations<li data-bbox="416 432 1457 477">5. Allergic diseases in mobile populations
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