

MEDICINE RESIDENCY II (ML0194)

1. language

English

2. course contents

Coordinator: Prof. MATTEO BONINI

Year Course: 5°

Semester: Annual

UFC: 22

Modules and lecturers:

- CARDIOLOGY (ML0205) - 2 cfu - ssd MED/11

Prof. Gaetano Antonio Lanza, Giovanna Liuzzo, Felicita Andreotti

- CARDIOLOGY PROFESSIONAL TRAINING (ML0195) - 2 cfu - ssd MED/11

Prof. Felicita Andreotti, Tommaso Sanna, Giovanna Liuzzo, Carlo Trani, Antonella Lombardo, Antonino Maria Tommaso Buffon, Francesco Burzotta, Gaetano Antonio Lanza, Gemma Pelargonio

- CLINICAL GENETICS II (ML0208) - 1 cfu - ssd MED/03

Prof. Maurizio Genuardi

- DERMATOLOGY (ML0211) - 1 cfu - ssd MED/35

Prof. Clara De Simone, Ketty Peris

- DERMATOLOGY PROFESSIONAL TRAINING (ML0202) - 1 cfu - ssd MED/35

Prof. Alessandro Di Stefani, Cristina Guerriero, Giacomo Caldarola, Barbara Fossati

- GERIATRICS (ML0209) - 1 cfu - ssd MED/09

Prof. Emanuele Marzetti, Graziano Onder, Giuseppe Zuccalà, Francesco Landi

- GERIATRICS PROFESSIONAL TRAINING (ML0199) - 1 cfu - ssd MED/09

Prof. Emanuele Marzetti, Graziano Onder, Giuseppe Zuccalà, Francesco Landi

- INFECTIOUS DISEASES III (ML0210) - 1 cfu - ssd MED/17

Prof. Antonella Cingolani, Mothanje Barbara Patricia Lucia

- INFECTIOUS DISEASES PROFESSIONAL TRAINING (ML0201) - 1 cfu - ssd MED/17

Prof. Giancarlo Scoppettuolo, Rita Murri, Mothanje Barbara Patricia Lucia, Katleen De Gaetano Donati, Simona Di Giambenedetto, Antonella Cingolani

- NEPHROLOGY (ML0206) - 1 cfu - ssd MED/14

Prof. Fouque Denis

- NEPHROLOGY PROFESSIONAL TRAINING (ML0197) - 1 cfu - ssd MED/14

Prof. Luca Calvaruso, Silvia D'Alonzo, Rocco Baccaro

- ONCOLOGY (ML0203) - 3 cfu - ssd MED/06

Prof. Alessandra Cassano, Emilio Bria, Giovanni Schinzari

- ONCOLOGY PROFESSIONAL TRAINING (ML0200) - 1 cfu - ssd MED/06

Prof. Alessandra Cassano, Giovanni Schinzari

- PNEUMOLOGY (ML0204) - 1 cfu - ssd MED/10

Prof. Matteo Bonini, Luca Richeldi

- PNEUMOLOGY PROFESSIONAL TRAINING (ML0196) - 1 cfu - ssd MED/10

Prof. Matteo Bonini, Giuseppe Maria Corbo, Riccardo Inchingolo

- RHEUMATOLOGY (ML0207) - 2 cfu - ssd MED/16

Prof. Elisa Gremese, Stefano Alivernini, Maria Antonietta D'Agostino, Silvia Laura Bosello

- RHEUMATOLOGY PROFESSIONAL TRAINING (ML0198) - 1 cfu - ssd MED/16

Prof. Silvia Laura Bosello, Elisa Gremese

3. BIBLIOGRAPHY

Paperwork presented and/or provided during classes (PPT, PDF, videos, websites etc.) are considered mandatory learning materials. Additional textbooks of reference for a further and more systematic knowledge may be:

“Harrison’s principles of internal medicine” 21st Edition (Cardiology, Clinical Genetics, Dermatology, Geriatrics, Infectious Diseases, Nephrology, Oncology, Pneumology, Rheumatology sections)

“ERS Handbook of Respiratory Medicine” 3rd Edition (Pneumology)

“Comprehensive Clinical Nephrology” 7th Edition (Nephrology)

“Hazzard’s Geriatric Medicine and Gerontology” 7th Edition (Geriatrics)

“The Washington Manual of Oncology” 4th Edition (Oncology)

“EULAR textbook of Rheumatology” (Rheumatology)

“Oxford Desk Reference: Clinical Genetics and Genomics” 2nd Edition (Clinical Genetics)

Although students are expected to consolidate and elaborate learning acquired from class attendance through more structured textbook chapters, the specific use of suggested textbooks is considered optional.

4. LEARNING OBJECTIVES

Students are expected to attain competencies into:

Knowledge and understanding - Integrated clinical care and management of patients with kidney, infectious, rheumatic, oncological, pulmonary, dermatological, genetic and cardiovascular diseases: international guidelines recommendations, diagnostic flowcharts, clinical decisions, multidisciplinary approaches, therapeutic strategies. Pain management and palliative care for cancer and non-cancer patients. Integrated approach to multidimensional assessment and treatment of frail elderly patients

Applying knowledge and understanding – Students will learn how to apply and relate theoretical knowledge to clinical practice, with special reference to patients affected by kidney, infectious, rheumatic, oncological, pulmonary, dermatological, genetic and cardiovascular diseases, as well as to frail elderly patients.

Making judgements – Students will develop skills and capabilities to independently make judgments and take clinical decisions when facing patients affected by kidney, infectious, rheumatic, oncological, pulmonary, dermatological, genetic and cardiovascular diseases, as well as to frail elderly patients.

Communication skills – Students will learn how to critically illustrate clinical cases in the context of multidisciplinary settings. Furthermore, students will acquire evidence to discern how to privilege patient-centered, tailored and evidence-based clinical approaches. Students will also learn how to identify, present and contextualize harms and benefits of a broad spectrum of innovative pharmacological and surgical strategies.

Learning skills – Students will learn how to develop, consolidate and extend the breadth and

depth of clinical and scientific knowledge and how to progress in continuing their medical education remaining updated on the rapidly evolving fields of biomedical science. By the end of the teaching period, students will master the search and evaluation of scientific evidence from textbooks, literature articles, online platforms and web-based applications.

5. prerequisites

Adequate knowledge of anatomy, biochemistry, physiology and general pathology.

6. TEACHING METHODS

Frontal lessons (13 UFC), professional training (9 UFC), self-learning, problem-based learning.

Knowledge and understanding: Teaching methods will include frontal classes (13 CFU/UFC) including slide presentations, face-to-face interactions with the classroom and clinical case discussion.

Applying knowledge and understanding: The course will provide professional trainings for a total of 9 CFU/UFC to translate theoretical knowledge to clinical practice.

Making judgements: The students will be stimulated to improve their judgment ability through clinical case discussion.

Communication skills: The students will improve communicative skills during class interactive discussions.

Learning skills: Frontal classes and educational materials.

7. OTHER INFORMATION

None

9. FULL program

Cardiology:

- The normal heart and regulation of cardiac function
- Electrocardiography
- Pathophysiology of coronary circulation
- Stable ischemic heart syndromes
- Acute coronary syndromes with ST elevation
- Acute coronary syndromes without ST elevation
- Heart valve disease
- Myocardial and pericardial disease
- Heart failure
- Bradyarrhythmias
- Tachyarrhythmias
- Syncope and sudden death

Clinical Genetics II:

- Genetic tumor risk syndromes: epidemiology and clinical identification
- Lynch syndrome
- Intestinal polyposis
- Li-Fraumeni syndrome
- Hereditary arrhythmia syndromes: long QT, Brugada, catecholaminergic polymorphic ventricular tachycardia. Genetics of sudden cardiac death (SCD).
- Genetics of hypertrophic and dilated cardiomyopathies. Transthyretin amyloidosis
- The role of genetics in precision health and precision medicine. Issues in clinical genetic testing: incidental/secondary findings, opportunistic screening, variants of uncertain significance (VUS)

Dermatology:

- Anatomy and function of the skin
- Inflammatory diseases
- Allergic and contact dermatitis
- Atopic dermatitis
- Psoriasis
- Lichen planus
- Bullous diseases
- Pemphigus
- Pemphigoid diseases
- Dermatitis herpetiformis
- Urticaria and angioedema
- Connective tissue diseases
- Dermatomyositis
- Systemic sclerosis and morphea
- Lupus erythematosus
- Vitiligo
- Acne
- Rosacea
- Alopecia
- Melanocytic nevi
- Melanoma
- Noninfectious Granulomatous diseases:
- Sarcoidosis
- Granuloma annulare
- Necrobiosis lipoidica
- Epithelial skin cancers
- Actinic keratosis
- Basal cell carcinoma
- Squamous cell carcinoma
- Paget disease
- Bacterial diseases:
- Impetigo

- Erysipela
- Lyme Borelliosis
- Fungal Diseases
- Dermatophytes (Tinea capitis, barbae, pedis and manum, corporis and faciei, inguinalis and unguium)
- Yeasts (Malassezia)
- Arthropods (scabies, pediculosis)
- Viral diseases caused by Human Herpes viruses and Papillomaviruses
- Syphilis

Geriatrics:

- Pathophysiology and assessment of frailty in older adults
- Multidimensional geriatric assessment and physical performance assessment in older adults
- Nutrition and sarcopenia
- Pharmacotherapy in older adults
- Frailty and reverse epidemiology
- Prevention in advanced age
- Pain management (Professional training)
- Palliative medicine (Professional training)

Infectious diseases III:

- Pneumonia
- Meningitis
- Chronic viral hepatitis
- Malaria and other vector-borne infections
- Infective endocarditis

Nephrology:

- Diagnostic tests in nephrology
- Chronic kidney disease
- Acute kidney injury
- Glomerulopathies
- Acid-base and electrolyte disorders
- Renal replacement therapies
- Nephrolithiasis and Renal cystic diseases

Oncology:

- Introduction to medical oncology
- Breast cancer
- Lung cancer
- Colo-rectal cancer
- Gastric cancer
- Pancreatic and biliary duct cancer
- Kidney cancer
- Bladder cancer
- Testis cancer
- Melanoma
- Antineoplastic therapies
- Pain management (Professional training)
- Palliative medicine (Professional training)

Pneumology:

- Clinical and functional approach to respiratory diseases
- Idiopathic and secondary Interstitial Lung Diseases
- Bronchial Asthma
- Chronic obstructive pulmonary disease (COPD)
- Idiopathic chronic cough
- Bronchiectasis
- Pulmonary embolism
- Cystic fibrosis
- Sarcoidosis
- Pulmonary hypertension

Community acquired and Healthcare associated pneumonia
Tuberculosis
Obstructive sleep apnea syndrome
COVID-19

Rheumatology:

Epidemiology of rheumatic diseases
Clinical approach to rheumatology patient
Osteoarthritis
Osteoporosis and metabolic bone diseases
Rheumatoid arthritis
Spondylarthritis
Systemic lupus erythematosus and related disorders
Crystal related arthritis
Septic and infectious arthritis
Sjogren syndrome
Vasculitis
Fibromyalgia
Scleroderma disease and mixed connective tissue diseases
Sarcoidosis
Amyloidosis
Therapeutic drugs and strategies of rheumatic diseases