MEDICINE RESIDENCY II (ML0194)

1. language

English.

2. course contents

Coordinator: Prof. FERRARO PIETRO MANUEL

Academic Year: 2022/2023

Year Course: 5

Semester: Annual

UFC: 22

Modules and lecturers:
- CARDIOLOGY (ML0205) - 2 cfu - ssd MED/11
Prof. Gaetano Antonio Lanza, Luigi Marzio Biasucci, Felicita Andreotti
- CARDIOLOGY PROFESSIONAL TRAINING (ML0195) - 2 cfu - ssd MED/11
Prof. Antonella Lombardo, Gaetano Antonio Lanza, Francesco Burzotta, Antonino Buffon, Luigi Marzio Biasucci, Tommaso Sanna, Carlo Trani, Felicita Andreotti, Giovanna Liuzzo, 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. Barbara Fossati, Alessandro Di Stefani, Giacomo Caldarola, Cristina Guerriero
- GERIATRICS (ML0209) - 1 cfu - ssd MED/09
Prof. Graziano Onder, Roberto Bernabei, Francesco Landi, Giuseppe Zuccala'
- GERIATRICS PROFESSIONAL TRAINING (ML0199) - 1 cfu - ssd MED/09
Prof. Francesco Landi, Roberto Bernabei, Giuseppe Zuccala', Graziano Onder
- INFECTIOUS DISEASES III (ML0210) - 1 cfu - ssd MED/17
Prof. Mothanje Barbara Patricia Lucia, Antonella Cingolani
- INFECTIOUS DISEASES PROFESSIONAL TRAINING (ML0201) - 1 cfu - ssd MED/17
Prof. Mothanje Barbara Patricia Lucia, Angela Raffaella Losito, Giancarlo Scoppettuolo, Simona Di Giambenedetto, Katleen De Gaetano Donati, Rita Murri, Antonella Cingolani
- NEPHROLOGY (ML0206) - 1 cfu - ssd MED/14
Prof. Pietro Manuel Ferraro, Matteo Bargagli
- NEPHROLOGY PROFESSIONAL TRAINING (ML0197) - 1 cfu - ssd MED/14
Prof. Pietro Manuel Ferraro, Luca Calvaruso, Rocco Baccaro, Silvia D'Alonzo, Matteo Bargagli
- 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
- PULMONARY PROFESSIONAL TRAINING (ML0196) - 1 cfu - ssd MED/10
Prof. Giuseppe Maria Corbo, Flaminio Mormile, Matteo Bonini, Riccardo Inchingolo
- RHEUMATOLOGY (ML0207) - 2 cfu - ssd MED/16

Prof. Silvia Laura Bosello, Elisa Gremese, Maria Antonietta D'Agostino, Stefano Alivernini
- RHEUMATOLOGY PROFESSIONAL TRAINING (ML0198) - 1 cfu - ssd MED/16
Prof. Elisa Gremese, Silvia Laura Bosello

3. bibliography

All documentation presented in the classroom, including PPT, PDF, videos, movies, URL, websites etc. should be considered as mandatory learning material and it will be made available to the students. Reference textbooks for a more systematic learning are:

"Comprehensive Clinical Nephrology" 6th Edition (Nephrology)
"Harrison's principles of internal medicine" 19th Edition (Cardiology, Infectious Diseases III, Pneumology, Rheumatology)
"Hazzard's Geriatric Medicine and Gerontology" 7th Edition (Geriatrics)
"The Washington Manual of Oncology" 3rd Edition (Oncology)
"EULAR textbook of Rheumatology" (Rheumatology)
"Oxford Desk Reference: Clinical Genetics and Genomics" 2nd Edition (Clinical Genetics)

Although students are encouraged to consolidate and elaborate learning from classroom material into more systematically treated textbook chapters, the acquisition of textbooks should be considered optional.

4. learning objectives

Students are expected to attain competencies into:

Knowledge and understanding - Integrated clinical care and management for patients with kidney, infectious, rheumatic, oncological, pulmonary, dermatological, genetic, or cardiovascular diseases: indications, clinical decisions, therapeutic strategies, diagnostic approaches. Pain management and palliative care for oncological patients.

Integrated approach to multidimensional assessment and treatment of frail elderly patients

Applying knowledge and understanding – Students will learn how to apply and connect theoretical knowledge to practical understanding and applying them to the management of the most common clinical settings of patients with kidney, infectious, rheumatic, oncological, pulmonary, dermatological, genetic, or cardiovascular diseases as well as to frail elderly patients.

Making judgements – Students will develop abilities on how to autonomously make judgments and take clinical decisions when facing patients with kidney, infectious, rheumatic, oncological, pulmonary, dermatological, genetic, or cardiovascular diseases as well as frail elderly patients.

Communication skills – Students will learn how to critically illustrate clinical cases in the context of multidisciplinary teams. Furthermore, students will become able to discuss about care processes, clinical decisions as well as how to privilege patient-centered and value-based clinical care. Students will also learn how to present and contextualize harms and benefits of the different, modern therapeutic approaches 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 move to continuing medical education and stay atop in the rapidly evolving fields of biomedical science. By the end of the education period, students will master the search and evaluation of evidence from textbooks, articles as well as from online platforms, programs and web-based applications.

5. PREREQUISITES

Appropriate 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: Didactic methods for the achievement of knowledge will include frontal lessons (13 CFU/UFC) with slides, continuous face to face exchange with the classroom and clinical cases discussion.

Applying knowledge and understanding: The course provides professional trainings for a total of 9 CFU/UFC to apply theoretical knowledge and skills.

Making judgements: The student will be able to self-assess through the continuous interplay with the speaker

Communication skills: The student will improve his communicative skills during the presentation and discussion of clinical cases

Learning skills: Frontal lessons will provide all indications for further focused studies and updating. Moreover, will be shared extra materials as well as reviews and guidelines.

7. other informations

None

8. methods for verifying learning and for evaluation

The intermediate and the final exam will be in the form of a multiple-choice written quiz (5 options, one correct answer) with an amount of questions proportionate to each teaching module's CFU (5 questions per CFU). The student will be given 1 minute per question plus additional 5 minutes. Regarding marks, each correct answer will be assigned 0.48 points (31/65); after summing all the points, an additional point will be assigned. A grid with the correspondence between the number of correct answers and the final mark will be provided at the beginning of Module 1.
The intermediate exam will be at the end of Module 1; taking this test will be optional and failing it will have no effect on the final evaluation.
The final exam will be at the end of Module 2, covering the entire course (Module 1 + 2) or just the content of Module 2 for those student who successfully passed the intermediate test.

Knowledge and understanding: The final exam will be a multiple-choice written quiz with an appropriate amount of questions from each module. The quiz will be divided into 2 48-quiz subsets that must be completed in 1 hour.

Applying knowledge and understanding: The final exam will present some clinical cases that need the application of theoretical concepts.

Making judgements: The student will be stimulated to interact during frontal lessons in applying theoretical concepts in clinical cases. Student's evaluation might also be assessed with Intermediate written Tests.

Communication skills: The student will be required to improve communication skills during professional trainings and clinical case debates.

Learning skills: The final exam will evaluate the learning skills of the student.

9. 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 polyposes
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. Transyrethin 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 neoplasias
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 facei, inguinalis and unguium)
Yeasts (Malassezia
Arthropods (scabies, pediculosis)
Viral diseases caused by Human Herpes viruses and Papillomaviruses
Syphilis

Geriatrics:

Multidimensional assessment of frailty in the elderly
Multidimensional geriatric assessment and physical performance assessment in the elderly
Nutrition and sarcopenia
Pharmacotherapy in the elderly

- Frailty and reverse epidemiology
- Prevention in advanced age
- Pain management (PT)
- Palliative medicine (PT)

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
- COPD
- Bronchiectasis
- Pulmonary embolism
- Cystic Fibrosis
- Sarcoidosis
- Pulmonary Hypertension
- Community acquired and Healthcare associated Pneumonia
- Tubercolosis
- Obstructive Sleep Apnea Syndrome
- Covid-19

Rheumatology:

- Epidemiology of rheumatic diseases
- Clinical approach to rheumatology patient
- Osteoarthritis
- Osteoporosis and metabolic bone diseases
- Rheumatoid arthritis
- Spondyloarthritis
- 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