

Cancer, Ageing and Rejuvenation Graduate School - CARE

Master's Program

2023 - 2024

Title of the Teaching Unit (UE): Oncogene & tumor suppressor genes, microenvironment & emerging therapies (optional learning)		
Semester: 10	Number of ECTS: 3	Hourly volume: 27
Teaching Team	G. Favre, C. Colacios, B Ségui, C. Broccardo, B. Gerby, O. Calvayrac, JP Delord, A. Lemarié, Giulia Leonardi	
Objective	The teaching will develop the fundamental cellular and molecular concepts of cell differentiation and oncogenesis applicable to the understanding of the pathophysiology and treatment of cancers. Emphasis will be placed on study methods and research strategies.	
Content	<u>Lectures (13.5 H) + Tutorials (13.5 h) :</u> Molecular Bases of oncogenesis (G. Favre) Cell death signaling (B Ségui) Basis on immune responses (C. Colacios) Cancer immunotherapy (B. Ségui) Clinical development of targeted therapies (JP Delord, Giulia Leonardi) Cellular senescence and plasticity in cancer (O Calvayrac) Animal models in cancer research (C. Broccardo) Hematopoietic stem cells and Leukemia (B. Gerby) Radiotherapy and radiobiology (A. Lemarié)	
Assessment	<u>1st Session :</u> <ul style="list-style-type: none"> Terminal control (written): 50 % Terminal control (oral): 50 %. Only students who have passed the written exam (>10/20) are admitted to the oral examination. <u>2nd Session :</u> <ul style="list-style-type: none"> Terminal control (written): 50 % If the written examination of the first session is >10/20, the mark is retained. <ul style="list-style-type: none"> Terminal control (oral): 50 % Only students who have passed the written exam (>10/20) are admitted to the oral examination.	
Pre-requisites	Students from M1 in science, in engineering, veterinarian, pharmacy, medical, odontology, M1 CARE students.	
Keywords	Molecular understanding of cancers. New approaches in cancer therapy. Personalized medicine. New methodologies in cancer research. Innovative strategies.	
Skills	Fluent in English, basic knowledge in cell and molecular biology.	