

The Hebrew University of Jerusalem

Syllabus

Methods of Targeting the Ttumor Microenvironment - 64888

Last update 31-07-2021

HU Credits: 2

Degree/Cycle: 2nd degree (Master)

Responsible Department: School of Pharmacy

<u>Academic year:</u> 0

Semester: 2nd Semester

Teaching Languages: Hebrew

<u>Campus:</u> Ein Karem

Course/Module Coordinator: Ofra Benny

Coordinator Email: ofrab@ekmd.huji.ac.il

<u>Coordinator Office Hours:</u> Tuesd 9-10 under coordination <u>Teaching Staff:</u> Prof Ofra Benny

Course/Module description:

The course provides an overview of the various topics related to tumor microenvironment (TME) and ways to treat cancer based on changes in this environment. First a basic background on the biology of cancer cells and various components of TME. Then details the components and processes involved in cellular and TME will be introduced including metastatic involvement, creating vascular network and changes tissue composition. Finally we will study about the different therapeutic approaches involving modifications of TME, including nanotechnology strategies.

Course/Module aims:

Course aims:

Study the component of tumor microenvironment (TME), their role in cancer progression and therapeutic strategies.

- summarizing literature of broad field, presentation and designing research prposal

Learning outcomes - On successful completion of this module, students should be able to:

Knowing the components of TME and related therapeutic approaches

- summarize broad literature and construct abstract.

-present a topic

- develop research approcah and design research plan

<u>Attendance requirements(%):</u> 100

Teaching arrangement and method of instruction: Frontal lectures + self learning + presenting seminar

<u>Course/Module Content:</u> Basic cancer cell biology Tumoural processes and metastasis *Stroma and ECM Angiogenesis Therapeutic approaches Nanomedince and drug delivery*

<u>Required Reading:</u> will be provided in the first lecture

Additional Reading Material:

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<u>Course/Module evaluation:</u> End of year written/oral examination 40 % Presentation 50 % Participation in Tutorials 10 % Project work 0 % Assignments 0 % Reports 0 % Research project 0 % Quizzes 0 % Other 0 %

<u>Additional information:</u> Final Exam, will be related to the presented project