



The Hebrew University of Jerusalem

Syllabus

Precision Medicine in Cancer- From Dreams to Reality - 94844

Last update 04-03-2019

HU Credits: 2

Degree/Cycle: 2nd degree (Master)

Responsible Department: Bio-Medical Sciences

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Ein Karem

Course/Module Coordinator: Prof. T. Peretz

Coordinator Email: tamary@hadassah.org.il

Coordinator Office Hours: 8-9

Teaching Staff:

Prof Tamar Peretz
Dr. Amichay Meirovitz
Dr. Jonathan Cohen
Dr. Grinshpon ALBERT
Dr. Michal Lotem
Prof Hovav Nechushtan
Prof Mazeh
Dr. Giladw Vainer
Dr.
Dr. Polina Stepensky

Course/Module description:

The course is designed to allow medical students to participate and experience the practice of precision medicine in Oncology

Course/Module aims:

- Understand the principles of precision medicine
- Understand current challenges in treatment selection and understanding the molecular pathology
- Take part in real-life scenarios across the treatment sequence; from genetic alterations detection to choosing the proper therapy to given patient

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

- Basic understanding of molecular changes in cancer
- Basic molecular detection tools
- Basic approaches for treatment selection

Attendance requirements(%):

100

Teaching arrangement and method of instruction: Introductory lectures, than case studies of real patients- discussing on tumor board, visiting diagnostic laboratories, treatment facilities, interaction with patients in clinics

Course/Module Content:

Molecular genetics
Molecular pathology
Oncogenic pathways
Monoclonal antibodies
Small molecules
Checkpoint inhibitors
Abscopal effect of radiation
Combination therapies
Side effects of therapies
Definitions of response by imaging and molecular surrogate markers

Required Reading:
Seminal papers

Additional Reading Material:
De Vita, Cancer Principles & Practice of Oncology, 2016

Course/Module evaluation:

End of year written/oral examination 50 %
Presentation 0 %
Participation in Tutorials 50 %
Project work 0 %
Assignments 0 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information: