Fall 2021

ADVANCED TOPICS in IMMUNOLOGY
Course Director: J Magarian Blander
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Module II – Cancer: Immunity and Immunotherapy

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Date: October 27- December 8, 2021 (Wednesday)

Time: 1:00 – 4:00 PM

Room: L [C222], M [C224], RRL-B22, and RRL-B20
Remote: https://weillcornell.zoom.us/j/94521903256
Password will be provided by email.

Course Description: This course is designed to provide second year IMP graduate students with analytical and critical thinking skills within the context of a current and fast-moving research area in Immunology. Through multiple classes, each addressing a subtopic within the larger selected research topic, students will acquire a deeper knowledge of the biology and learn how to approach a research problem including conceptualization, experimental strategy design, data interpretation, and research proposal development.

Format: The format of the lecture will be a very short didactic introduction to the topic by the faculty member followed by an in-depth discussion of 1 (or sometimes 2) paper (s).

- For each paper, a pre-assigned student will prepare the introduction and a discussion slide***.

- All students will have needed to read the paper in depth prior to the session discussion as each will take a different figure to present. The expectation is that each student has pre read the papers prior to the meeting and is well versed in them and remaining gaps.
  in the field, technical caveats, assumptions made and the systems and methods used (a basic grasp).
- The students are graded on their participation and ability to engage in a critical productive dialogue which the faculty member will help to coordinate and engage.
- The faculty member will help to conduct a brainstorming session after the paper to generate 2 specific aims.

One of the major goals of the class, beyond the knowledge itself, is to help the students prepare for their ACE. Therefore, the paper discussion will aim to frame a set of specific aims:

- Can the results described in the paper be the scientific premise for a new grant proposal?
- What would the aims be?
- What would be the major criticisms if the aims were directly derived from the results described in the paper?
- What would be alternative scenarios that could explain the results and end-up being a fatal flaw in the application?
- ***The student who is pre-assigned to generate the introduction and discussion slides will scribe the Specific Aims/subaims/experiments agreed upon by consensus and refinement (performed by the group as a whole), and will turn these over to the TAs at the end of the session.

Grading:
Your grades are based on attendance (40%) and presentation (clarity and the depth of discussion, 60%).

SCHEDULE

DATE	FACULTY	LECTURE	Room
October 27, 2021	Justin Perry	Phagocytosis checkpoints in cancer immune evasion and immunotherapy	L [C222], M [C224]
November 3, 2021	Samuel Bakhoum	cGAS-STING in cancer development and oncotherapy	RRL-B22
November 10, 2021	Joseph Sun	Macrophages and natural killer cells in cancer	L [C222], M [C224]
November 17, 2021	Niroshana Anandasabapathy	Dendritic cells and tumor antigen presentation	L [C222], M [C224]
November 24, 2021	**Thanksgiving**		
December 1, 2021	Andrea Schietinger	T cell exhaustion and immune checkpoint inhibition in cancer	RRL-B20
December 8, 2021	Michel Sadelain	Adoptive cellular therapies including CAR therapy	L [C222], M [C224]

*Rooms: **L [C222], M [C224]** are located in WCMC Campus; 1300 York Ave 2nd floor
** Rooms: **RRL-B22** and **RRL-B20** are located in Rockefeller Research Laboratories (430 East 67th Street) at the lower level**