MCB Student Seminar Prof. Ravid Straussman's lab



Tuesday, January 18th, 2022 at 11:00

The seminar will start with an introduction by the PI.

Please follow the zoom link to enter:

https://weizmann.zoom.us/j/99525455626?pwd=aU9Wclg4NWc4dmhRQmZiT0ptNXo5QT09



Lian Narunsky Haziza

Will lecture about:

Pan-cancer characterization of the tumor mycobiome and its clinical effects

While the study of the tumor microbiome mainly focused so far on bacteria and viruses, the fungal kingdom was left behind. Recently, a few studies demonstrated that specific fungi may promote tumor progression, stressing the importance of comprehensively studying the tumor mycobiome and its effects. To address this, we have characterized the mycobiome in 1183 human tumors and their adjacent tissues, originating from eight major solid tumor types. Imaging demonstrated the presence of fungi in both cancer and immune cells, with a tumor-type specific distribution pattern. Characterizing the tumor mycobiome by ITS2 sequencing demonstrated cancer-type specific mycobial signatures with relatively high similarity between tumors and their normal adjacent tissues as well as significant connections with specific bacteria. We also found significant correlations of specific fungi with clinical metadata such as patient's age, tumor stage, progression-free survival, overall survival, and response to immune checkpoint blockade therapy.