Les mardis de L'IAB



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UNVEILING CANCER AGGRESSIVENESS: FROM OMICS TO SINGLE-CELL mIRNA PROFILING

4.JUNE 2024 - 11 AM - LECTURE HALL

Omics technologies have revolutionized our understanding of cancer for decades. mRNA sequencing of tumor samples has emerged as a powerful tool for predicting tumor aggressiveness. However, recent research reveals a fascinating twist: peritumoral tissues, previously considered "normal" for comparison, exhibit altered mRNA profiles and surprisingly, hold even stronger predictive power for cancer aggressiveness. We will explore this exciting new avenue and present our ongoing research focused on kidney cancer.

microRNAs (miRNAs) have been recognized as key players in cancer since the early 2000s. Not only can they predict aggressiveness, but miRNAs are implicated in all stages of tumor development, from initiation to invasion. While single-cell mRNA sequencing is now widely used, single-cell miRNA sequencing remains an emerging field. We will present our ongoing efforts to predict miRNA expression at the single-cell level and identify the cells responsible for their production.

Bridging the gap, this presentation of bioinformatics research will be adjusted to resonate with our biologist colleagues.

Invited by : Anouk Emadali

Twitter : IAB_Officiel //Website <u>: https://iab-grenoble.fr</u>

Allée des Alpes, 38700 La Tronche (tram line B, stop : Grand Sablon) The seminar is followed by discussions and exchanges with the speaker and a sandwich buffet is offered

