

Fusion Parameters

Cell fusion occurs when multiple cells get together and form one cellular object. It can come from an actual fusion where for example two colonies merging into one or from cells migrating so close together that segmentation technique consider them a single cell.

Enable Cell Fusion

If enabled, the cell tracker will assign a new unique global ID number to the fused region and will consider all the cells from the previous frame as dead. If disabled, the cell tracker will separate the cellular area in the current frame into group of single cells by relying on the previous frame information.

Min Fusion Overlap

This parameter represents the amount of overlap in percent of cell area, above which an area at the current frame is considered as a group of cells from the previous frame and that this area needs to be split into multiple single cells. For example: if 2 cells A & B at frame t have tracks to the same cell C at frame t+1 and the amount of overlap between A&C = 45% of size A and the overlap between B&C = 50% of size B, then C should be split into 2 single cells.

Min Cell Area

This parameter represents the minimum size that any cellular object must have in order to be recognized as a cell. Any object with size smaller than this threshold will be discarded after splitting the group of cellular area into single cell segments