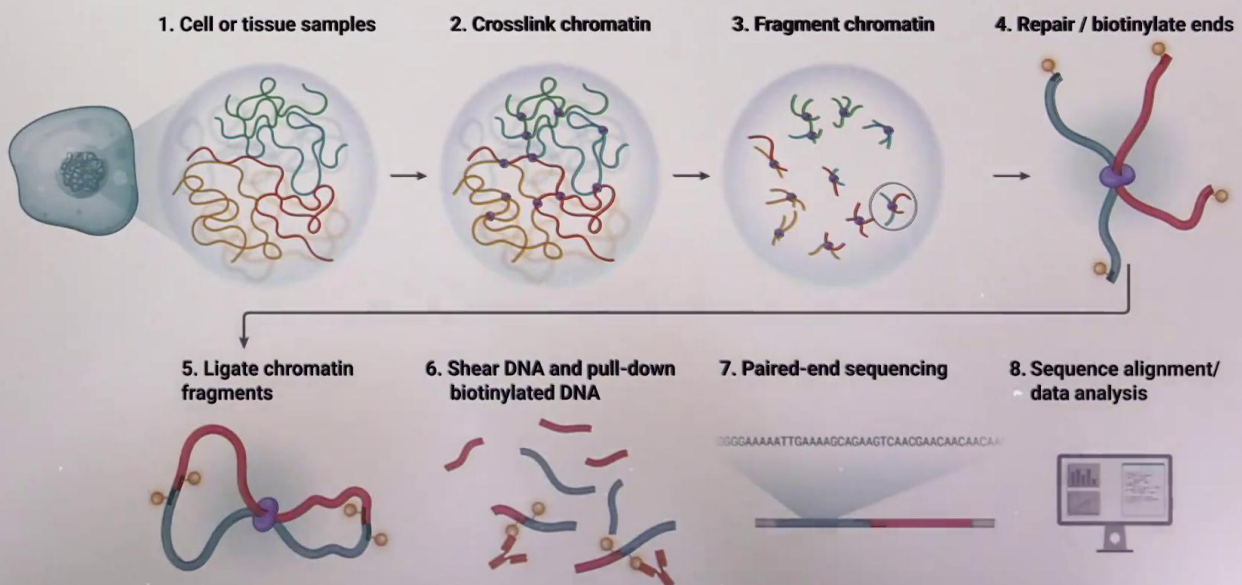


# NEUROSCIENCE RECONSTRUCTED

## Further epigenomic tools

**Hi-C** detects genome-wide chromatin interactions by cross-linking interacting DNA domains before sequencing the chimeric DNA molecules



The way I see works is that we start from a nucleus, the chromatin in its native state. We go for a cross cross-linking step that generates length of of the chromatin and a further fragmentation, it creates structures that can be of DNA that have the typical [inaudible 00:00:34] structure that can be repaired to introduce biotin-related nucleotides and extremity and they can eventually be gated to form this common loop structure and further sheared so that no one gets fragments of different nature. But some of them in particular, the biotin-related one, are originated of by the link of two stretches of DNA that were originally in the cell, actually, not to immediately contact with you. They were distal. Then one can prepare a sequencing library from this pull of fragment that one can isolate by specific through providing biotin pull down. The information one gets from these fragments is the structures, fragments that look like this. They have two parts, and this part will map to a part of the genome. These other parts will map to another part of the genome, two sets of the genome that will be distal, will be far from each other, and evidence that we captured them like edit to each other.

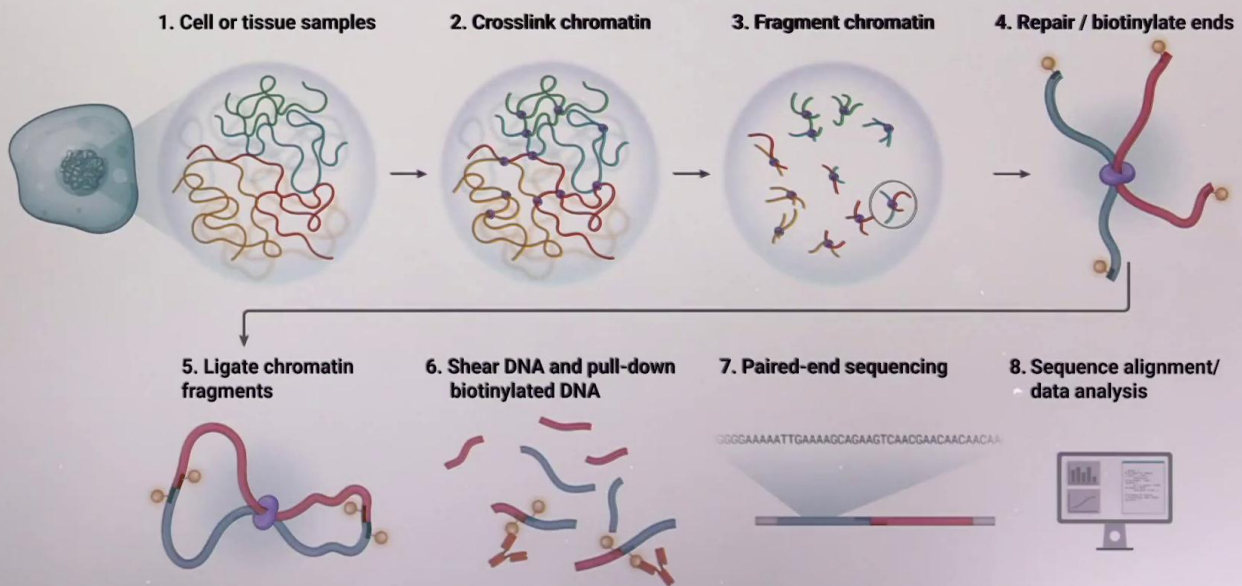
Notes

Summary



## Further epigenomic tools

**Hi-C** detects genome-wide chromatin interactions by cross-linking interacting DNA domains before sequencing the chimeric DNA molecules



It's allow us to compare that at the level here, if we go back from what we did at the level of the native state of the chromatin just to sequence. They must have found each other, close to each other. Now evaluating the frequency at which different parts of the different loci are found close to each other. We can reconstruct some of the interaction and the structure of the chromatin in the three-dimensional conformation.

Notes

Summary

