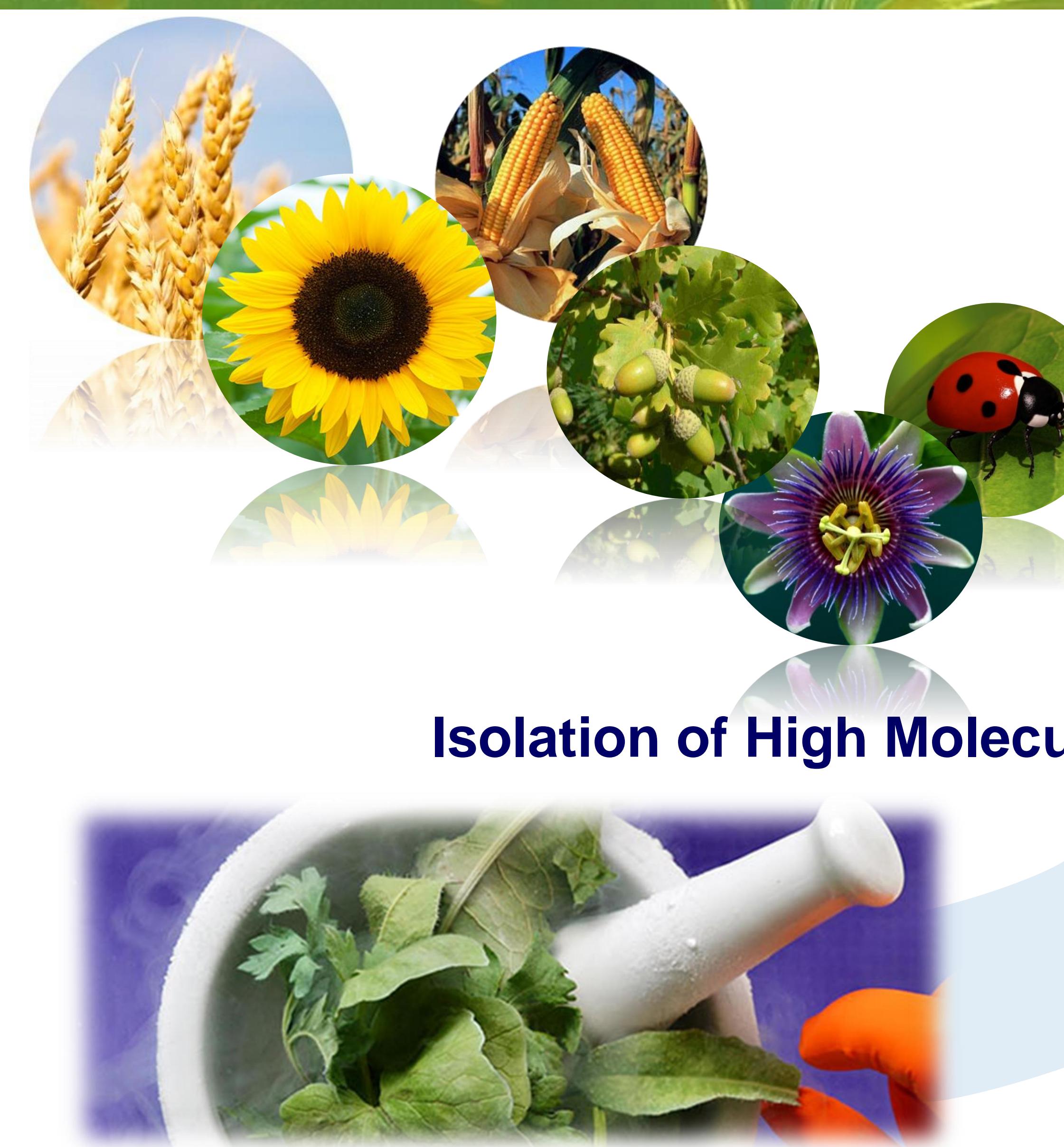


Optical Mapping with BioNano Genomics Technology

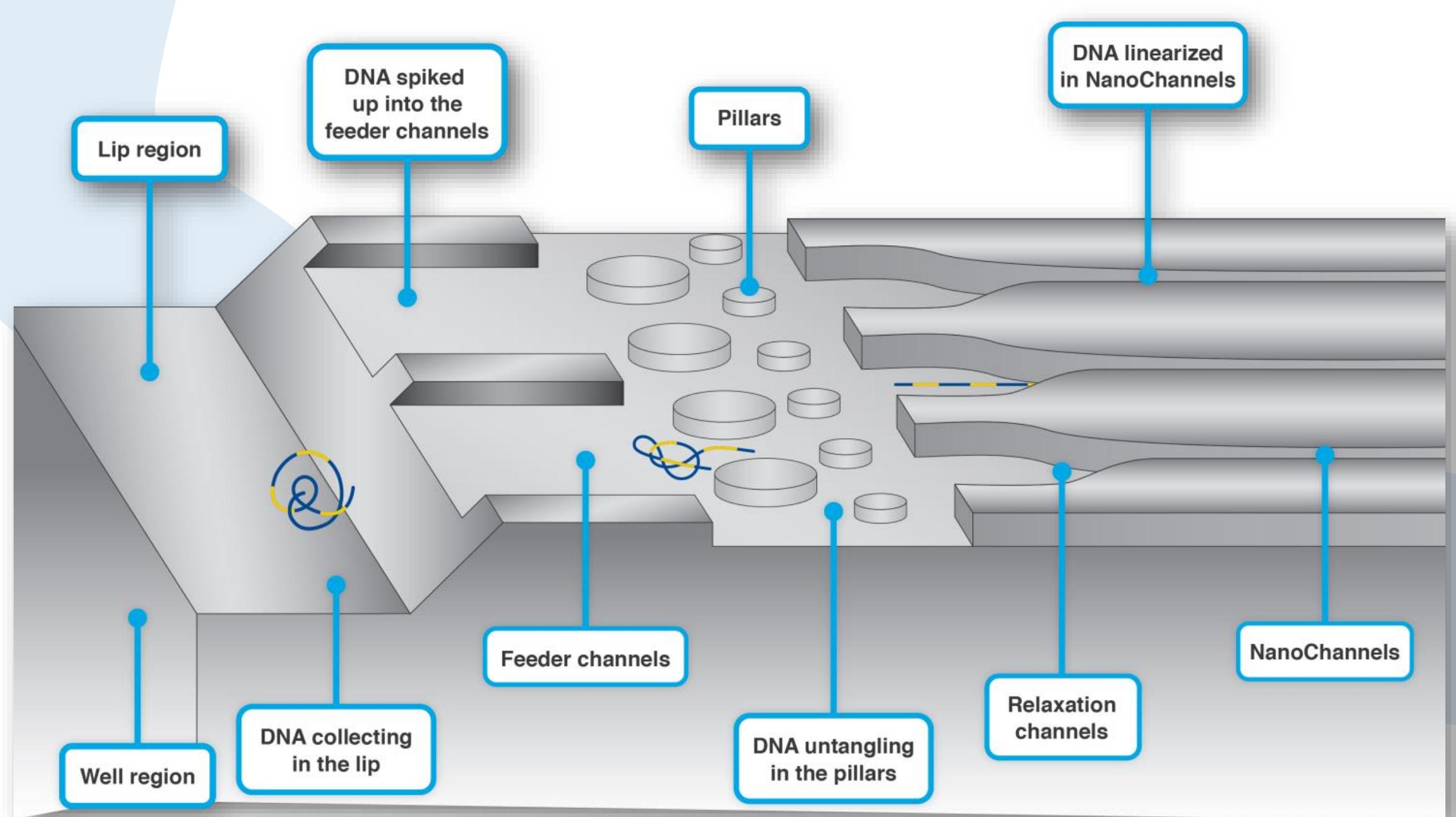
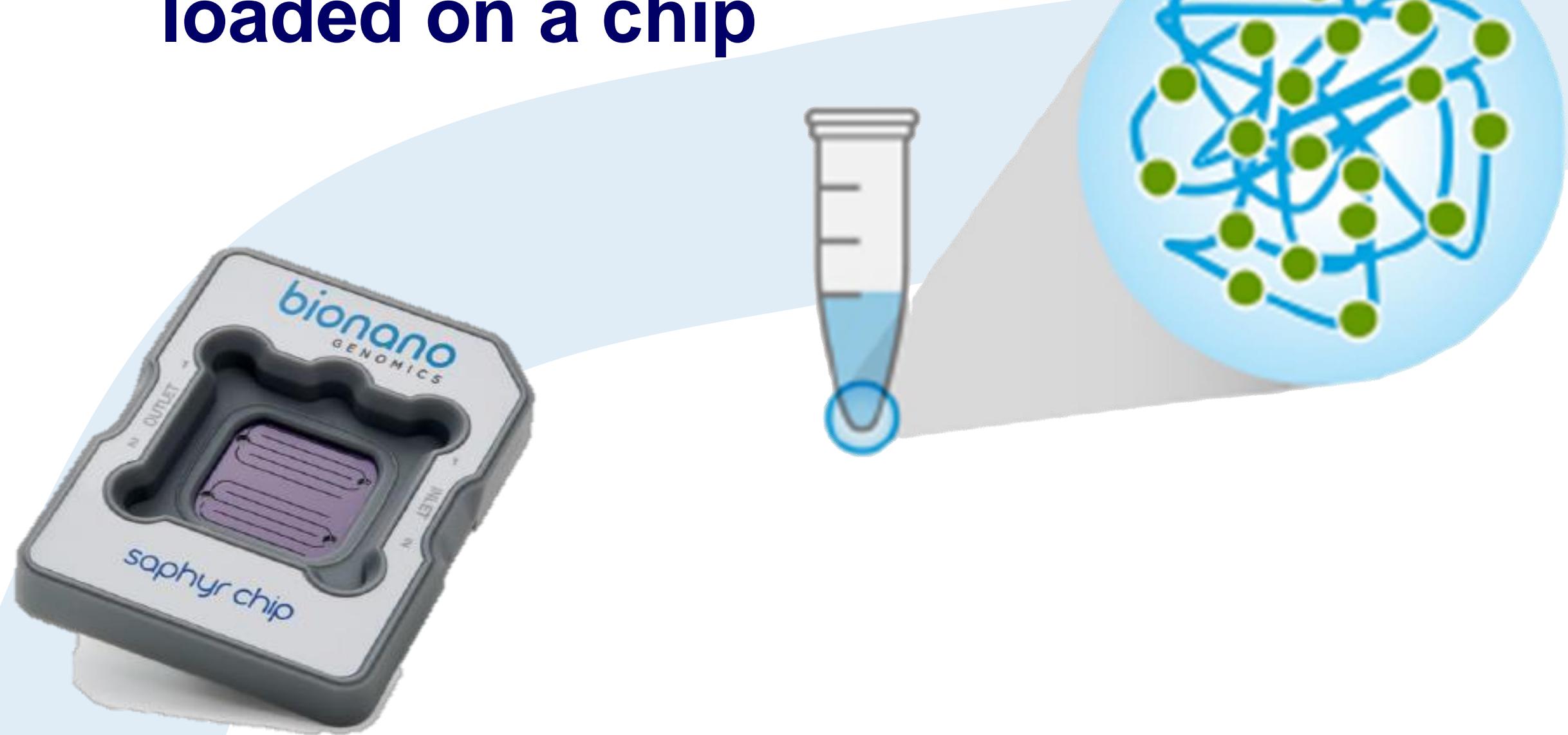
General workflow



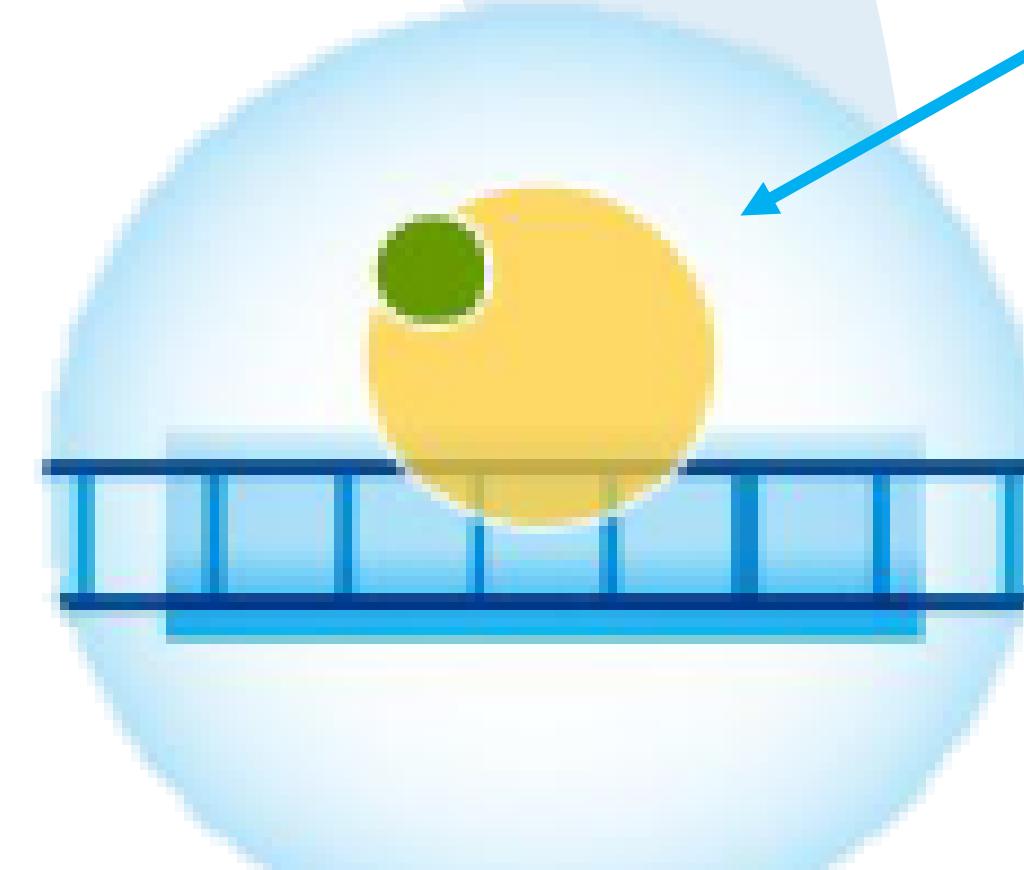
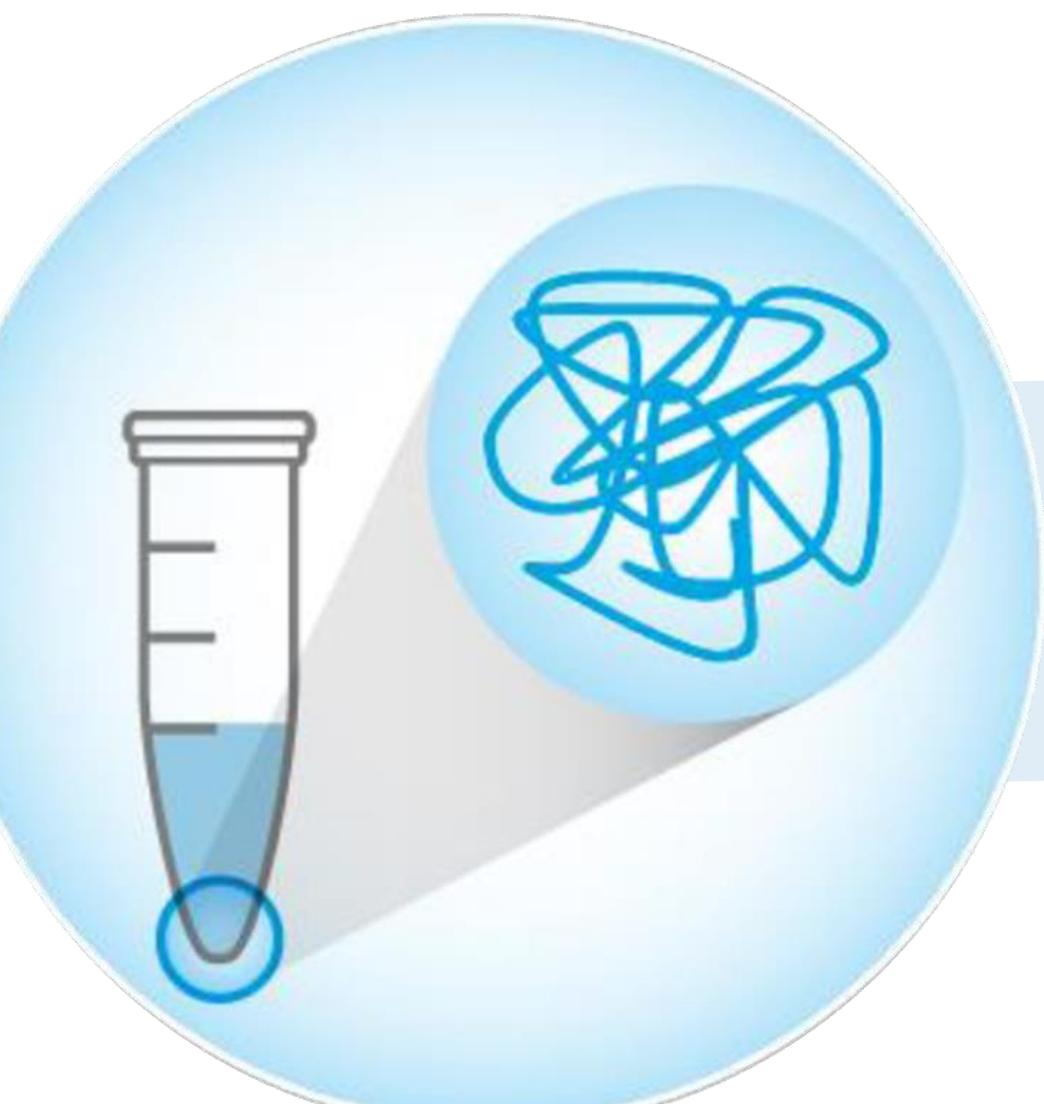
Isolation of High Molecular Weight DNA



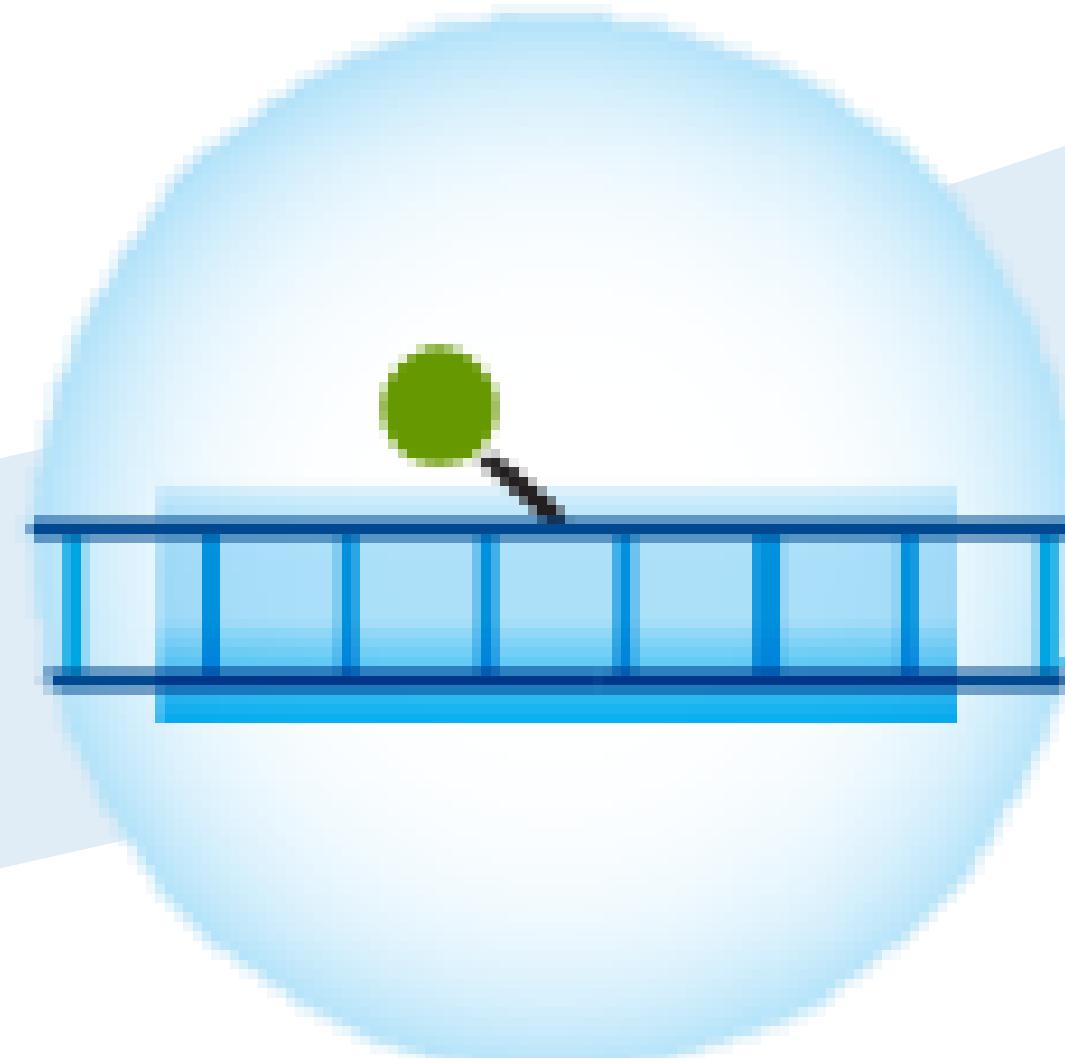
The labeled DNA is stained with YOYO-1 and loaded on a chip



DNA molecules are linearized in the NanoChannels



The DLE enzyme directly binds at recognition sites

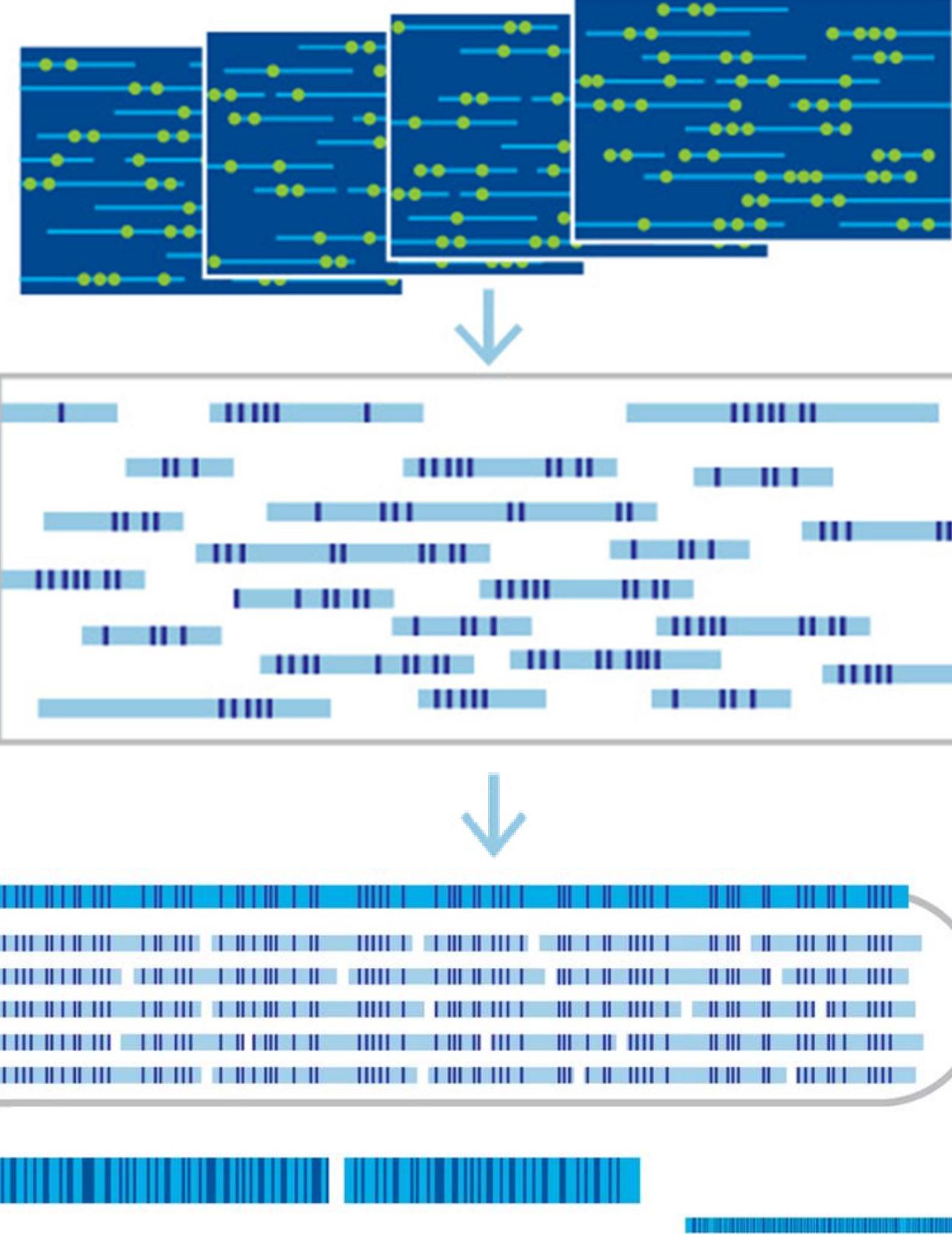


Fluorescent label is fixed to enzyme recognition sites



The Irys System collects images of linearized DNA molecules

Algorithms convert images into digital molecules



De Novo assembly is made to construct a consensus genome map