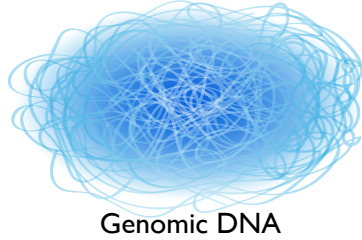
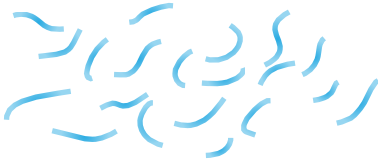


Human Genome Sequencing

Generating a Reference Genome Sequence (e.g., Human Genome Project)



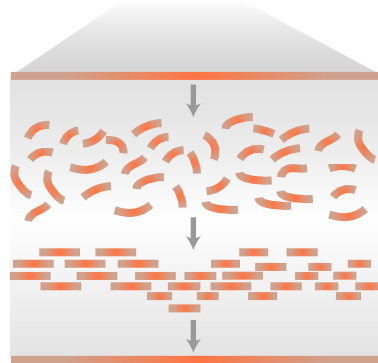
Break genome into large fragments and insert into clones



Order clones

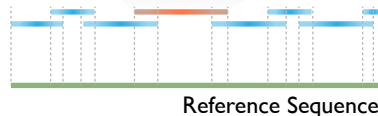


Break individual clones into small pieces

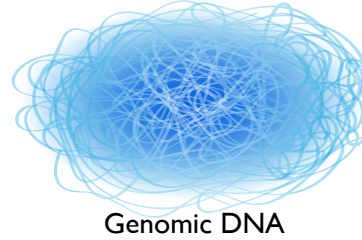


Generate thousands of sequence reads and assemble sequence of clone

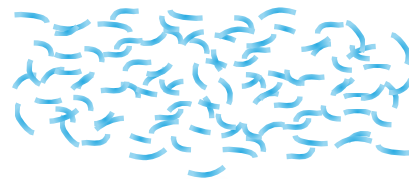
Assemble sequences of overlapping clones to establish reference sequence



Generating a Person's Genome Sequence (e.g., Circa ~2016)



Break genome into small pieces



Generate millions of sequence reads

... TATGCGATGCGTATTTTCGTAA ...

Align sequence reads to established reference sequence



Reference Sequence

Deduce starting sequence and identify differences from reference sequence

