

Figure from: Hunter, Lawrence. "Molecular biology for computer scientists." *Artificial intelligence and molecular biology* (1993): 1-46.

$$\{\bigcirc \bigcirc \bigcirc = A, \bigcirc \bigcirc \bigcirc = C, \bigcirc \bigcirc \bigcirc = G, \bigcirc \bigcirc = T\}$$

Real genomes very unlike "random" genomes

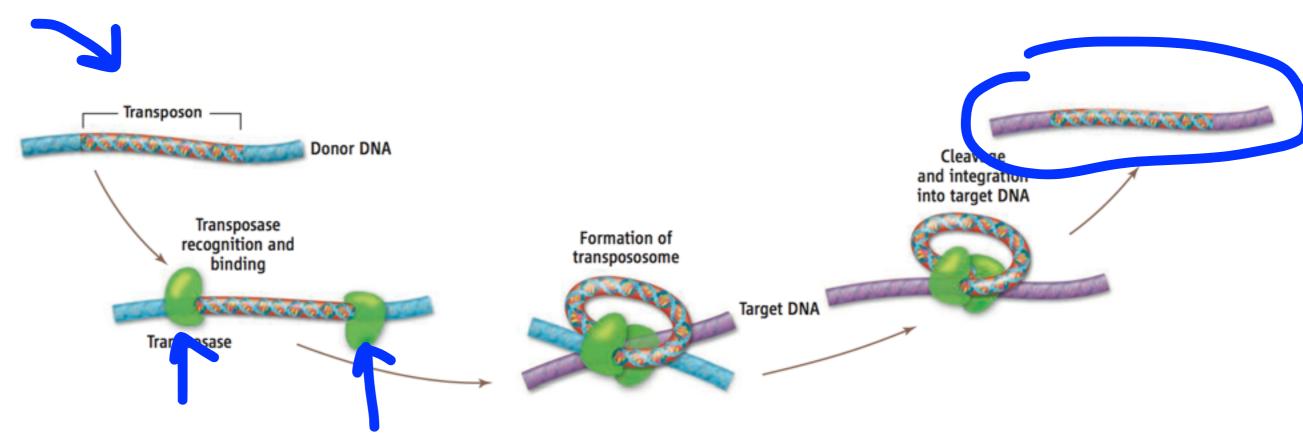
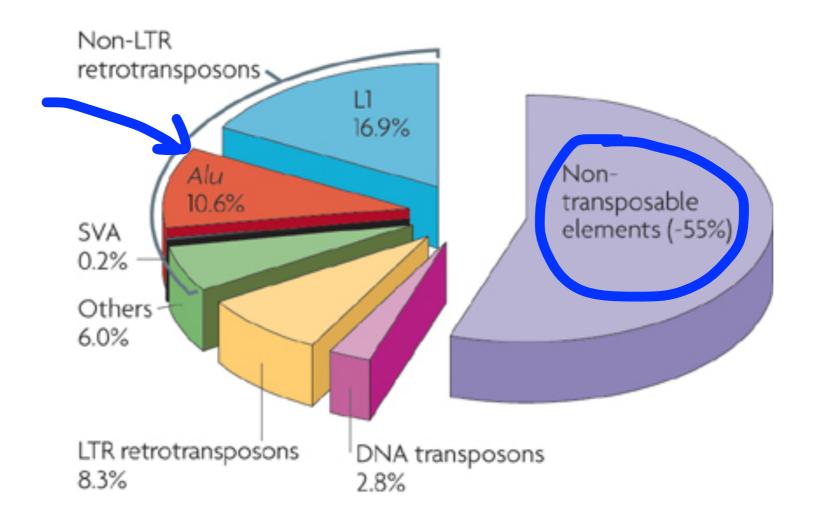
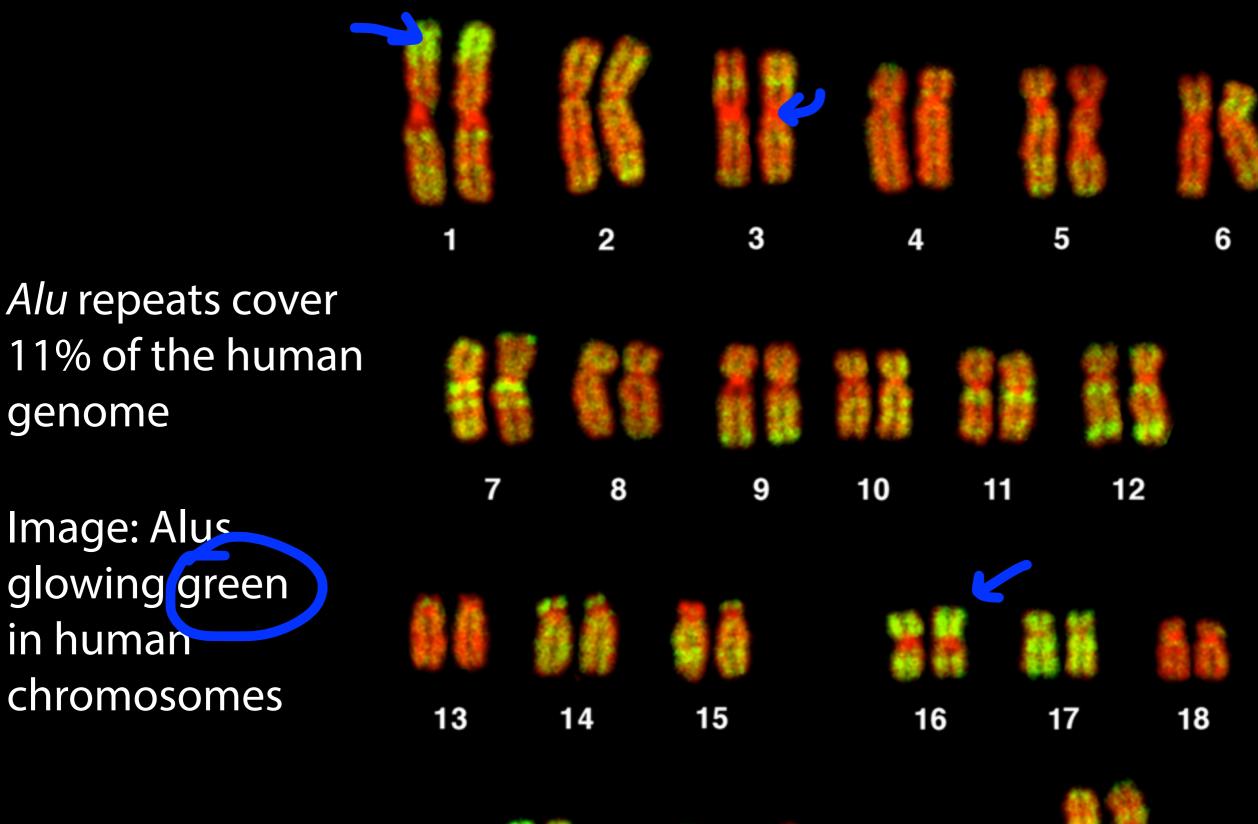
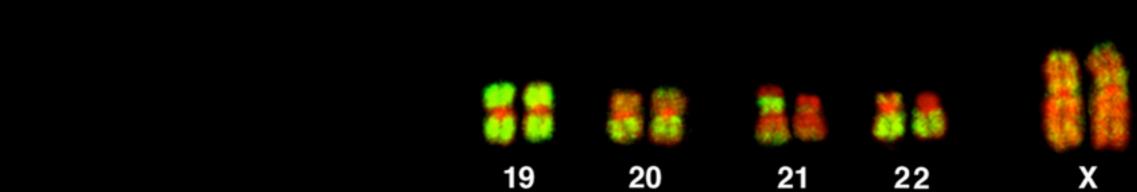


Image from: Fedoroff, Nina. "Transposable elements, epigenetics, and genome evolution." *Science* 338.6108 (2012): 758-767.



Cordaux R, Batzer MA. The impact of retrotransposons on human genome evolution. Nat Rev Genet. 2009 Oct;10(10):691-703





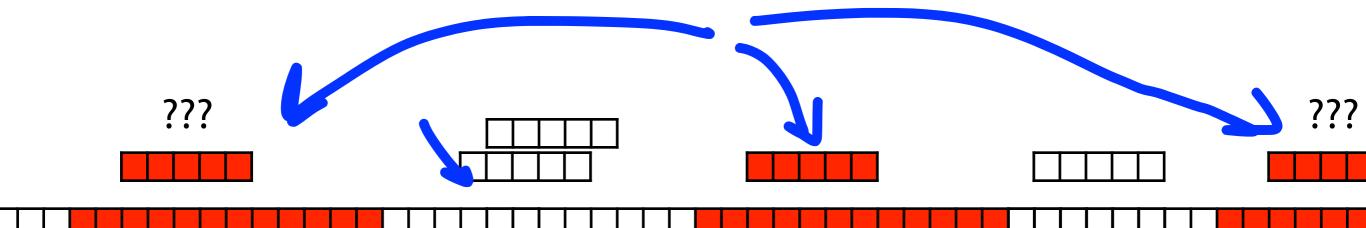
genome

Image: Alus

in human

glowinggreen

chromosomes



Genome: non-repetitive, repetitive

