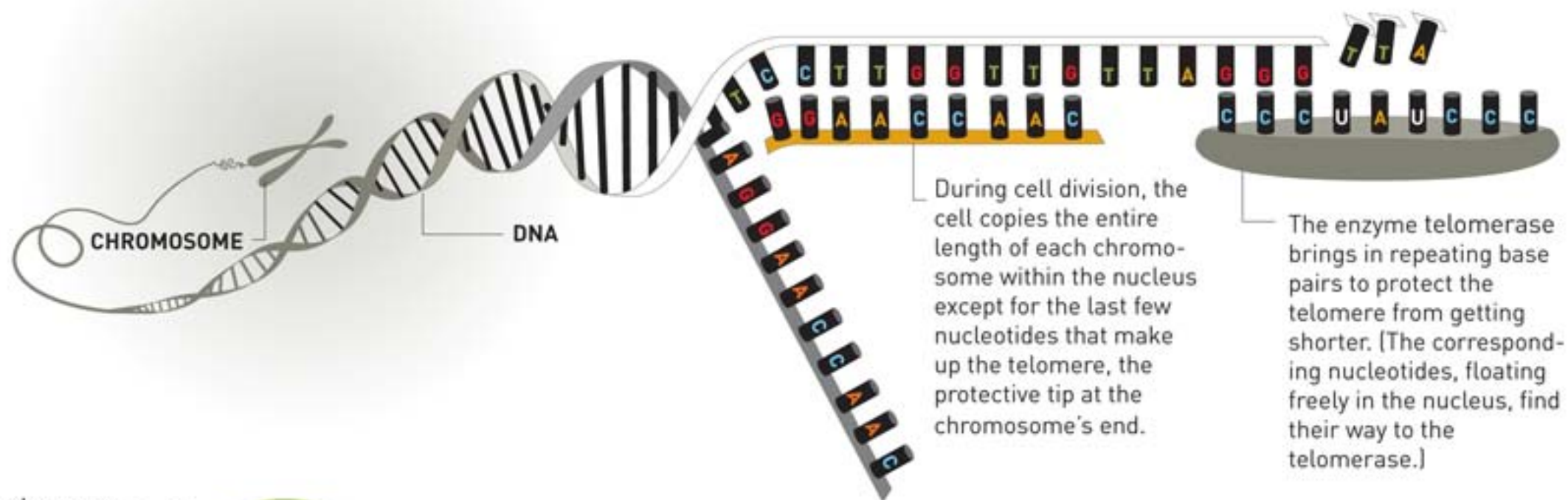
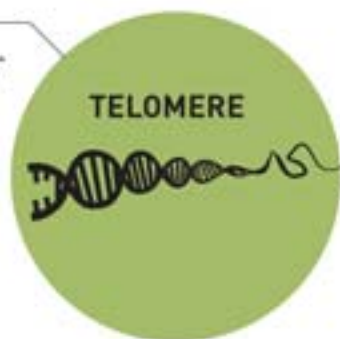


The Long and Short of It //

When a cell divides, so does its DNA. Telomeres and telomerase not only ensure that the code is copied faithfully, but also determine when cells can and can't divide.



When we're young, telomerase keeps our telomeres long so DNA can be copied many times without losing its protective tips. But too much telomerase activity later in life can lead to uncontrolled cell division: cancer.



Some researchers are looking to block telomerase as a way to prevent cancer...



...whereas others hope to boost telomerase to stave off aging.

CHROMOSOME

As we age, telomerase production drops off; telomeres shorten, sending cells into senescence.