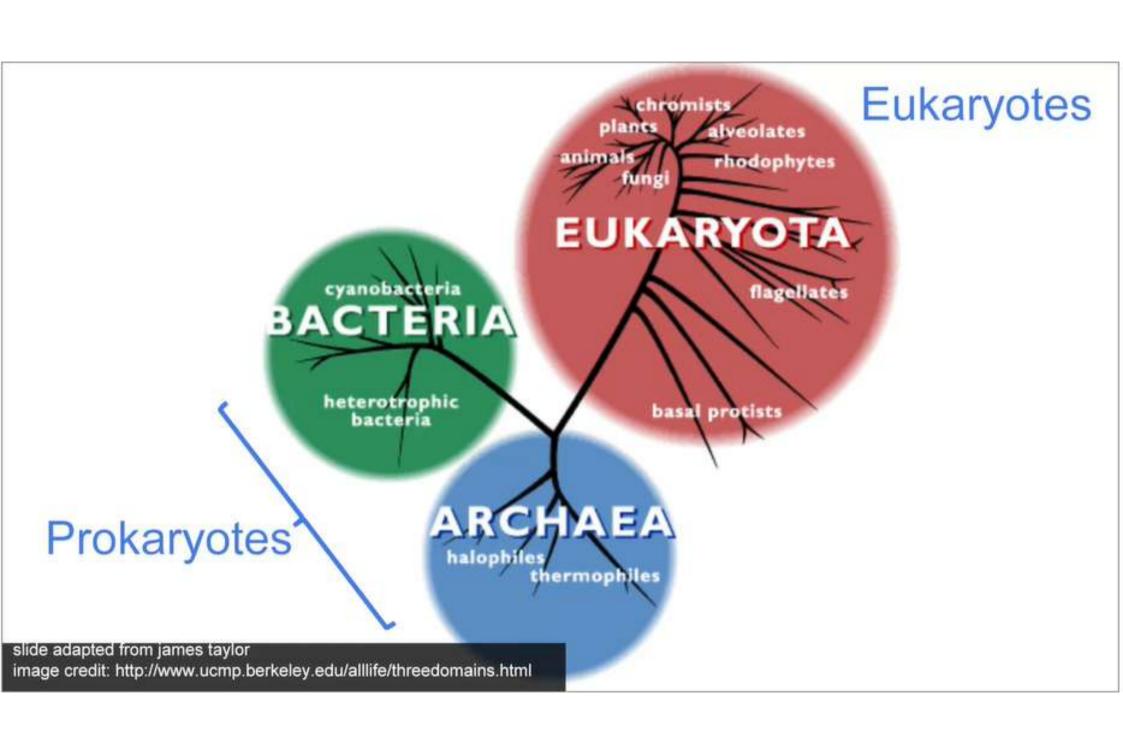
Just enough cell biology



Steven Salzberg



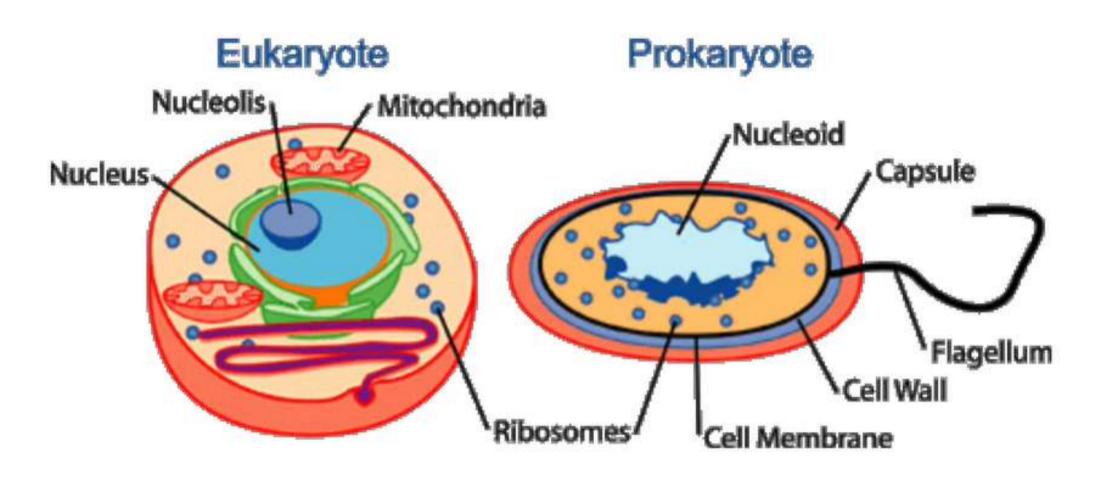


image credit: http://commons.wikimedia.org/wiki/File:Celltypes.png slide adapted from james taylor

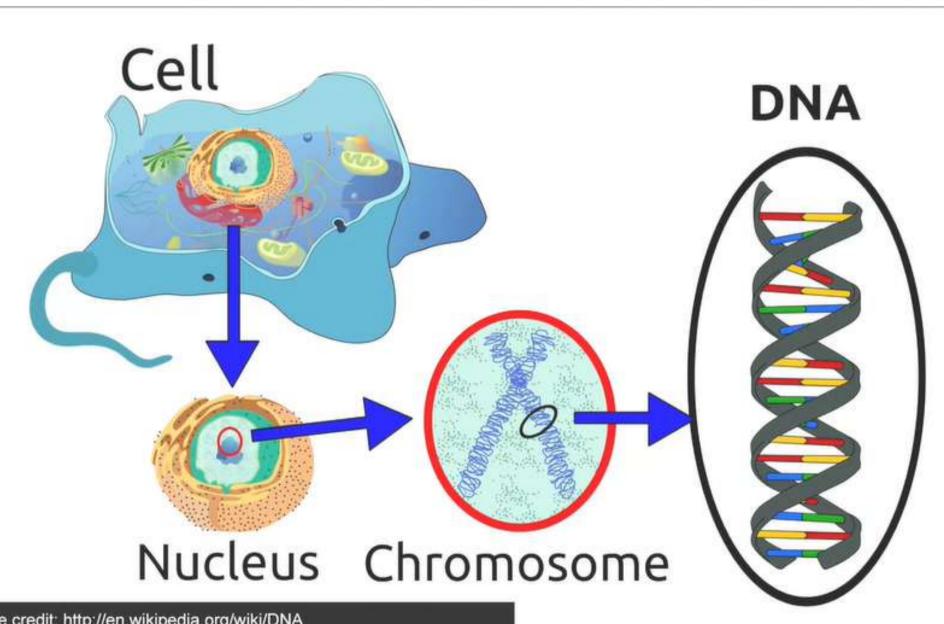


image credit: http://en.wikipedia.org/wiki/DNA

image credit: http://en.wikipedia.org/wiki/Mitosis#mediaviewer/File:Animal_cell_cycle.svg Telophase and Cytokinesis Nuclear membrane reforms, nudeoli reappear, chromosomes unwind into chromatin Myosin II and actin filament ring Cleavage furrow contract to cleave cell in two Daughter cells Resting Phase G. Anaphase Cell leaves cycle Chromosomes break at centromeres, and sister chromatids move to opposite ends of the cell Sotur chromatida Metaphase Gap I G Chromosomes line up along Cell grows metaphase plate (imaginary plane) The Cell Cycle (Animal Cells) Interphase Mitotic Phase M-Phase Prometaphase Nuclear membrane breaks down **DNA Synthesis Phase** S-Phase Overson Nucleoke Kinetochore microtubules invade nuclear space, Cell duplicates its DNAand attach to kinetochores Centrosome duplicates* Polar microtubules push against each other, moving centrosomes apart Prophase Chromatin condenses into chromosomes Gap II G Nucleolus disappears Cell grows some more

