

November 19, 2021  
MSE 2101 topics

- Carbon intake
  - source of carbon
  - source of energy
  - photo/chemo-auto/hetero-throphs
- $ATP \rightarrow ADP \rightarrow ATP \rightarrow ADP \rightarrow \dots$
- The three domains of life
  - archea
  - bacteria
  - eukarya
- Extremophiles
  - the possibility of panspermia – interplanetary sneezing?
- The role of mitochondria and chloroplasts
  - the DNA of mitochondria and chloroplasts
- Think ahead: what does it mean that mitochondrial and cellular DNA are fundamentally different?