

November 2, 2015  
MSE 2101 topics

- How did life begin?
  - the Miller-Urey experiment
  - chemical reactions near deep-sea vents
  - organic material from meteorites, comets
- The transition from chemistry to biology
  - chicken or egg?
  - ribozymes
  - mineral clay
  - vesicles
- The RNA world
  - transition to DNA?
  - The rate of replication → path to natural selection
- The *panspermia* model
  - interplanetary sneezing
  - the three parts of the journey
  - interstellar sneezing?
  - is sparking life so hard or so easy?
- So how do we know if Martians are really ... Martian?