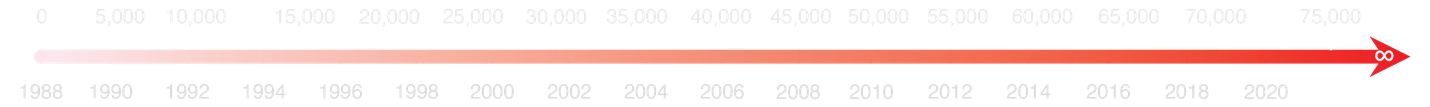
The Long-Term Evolution Experiment (LTEE) Data



* Organism: E. coli
* Current generation number: 75,000
* Information on the experimental evolution, you can find many more information and datasets from these websites and the dryad website associated with each publication listed:
  + <https://the-ltee.org/about/>
  + <https://lenski.mmg.msu.edu/ecoli/index.html>
* Overview:

In 1988 Feb, Dr. Richard Lenski started a long-term *E.coli* evolution experiment with the following rhythm. The routine was followed every single day except for a short disturbance during the Covid pandemic. Now the experiments have been transferred to the Barrick lab at UT Austin.

The inexorable rhythm of the project is as follows:

1. Every day, the cultures are propagated;
2. Every 75 days (500 generations), population samples are frozen away;
3. and Mean fitness, relative to the ancestor, is estimated using the population samples. Genomic mutations compared to the ancestral clone are documented.

* Strains:

Progenitors: REL606 and REL607 are the Ara- (unable to grow on arabinose) and Ara+ (able to grow on arabinose) ancestors, respectively. They are isogenic, with the exception of the spontaneous mutation to Ara+ in REL607.

Six populations were founded from each of the ancestral clones, giving 12 populations in all (Labeled Ara-1, Ara-2 to Ara-6, Ara+1, Ara+2 to Ara+6). Each population at every 500 generations was given a specific freezer number. For example, REL 768 is the mixed-population sample for population Ara+1 at generation 500.

* Data Folder:
  + Key publications:
    - Lenski & Travisano (1994): Overview of the experiment and fitness trajectories
    - Barrick and Lenski (2013) Nature Reviews Genetics: Genome dynamics during experimental evolution. *Definitions and terminologies*.
    - Tenaillon et al. (2016) Nature: Overview of the evolutionary dynamics during the first 50,000 generations.
  + Csv of the fitness\_trajectory till 2013
  + Csv of the recorded mutations till nows