

THE TREE OF LIFE

EUKARYOTA

This domain includes all of the plants, animals, and fungi, and some single-celled organisms. Eukaryotes are distinguished by their complex cells, which contain a membrane-enclosed nucleus.

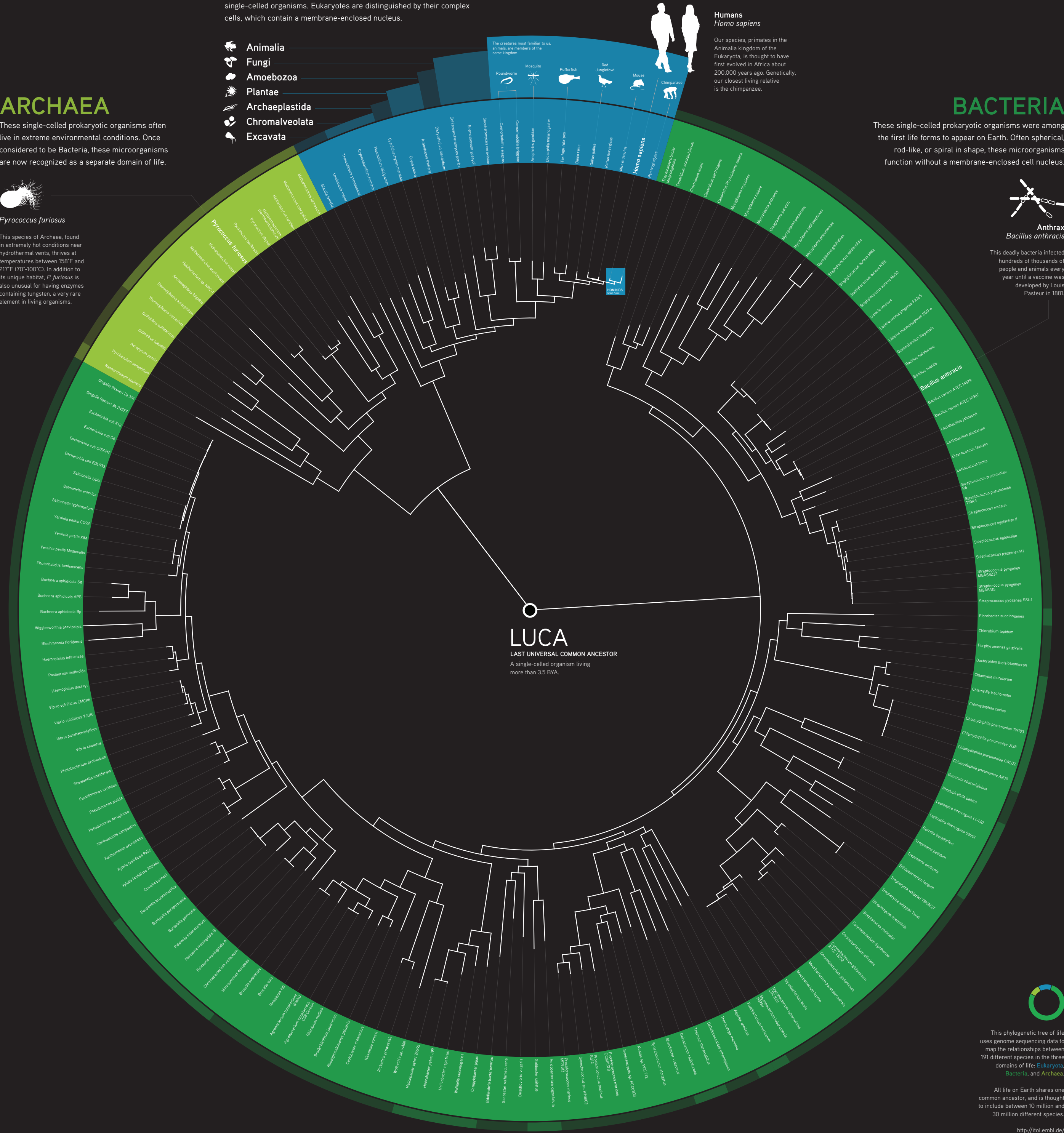
ARCHAEA

These single-celled prokaryotic organisms often live in extreme environmental conditions. Once considered to be Bacteria, these microorganisms are now recognized as a separate domain of life.



Pyrococcus furiosus

This species of Archaea, found in extremely hot conditions near hydrothermal vents, thrives at temperatures between 158°F and 217°F (70°-100°C). In addition to its unique habitat, *P. furiosus* is also unusual for having enzymes containing tungsten, a very rare element in living organisms.



BACTERIA

These single-celled prokaryotic organisms were among the first life forms to appear on Earth. Often spherical, rod-like, or spiral in shape, these microorganisms function without a membrane-enclosed cell nucleus.

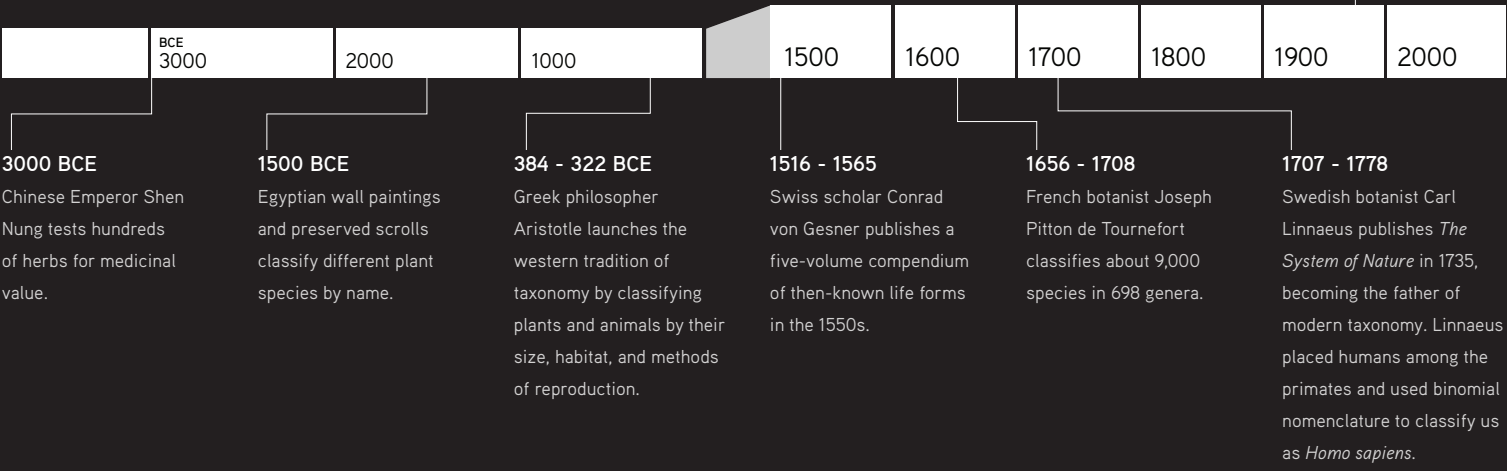


Anthrax
Bacillus anthracis

This deadly bacteria infected hundreds of thousands of people and animals every year until a vaccine was developed by Louis Pasteur in 1881.

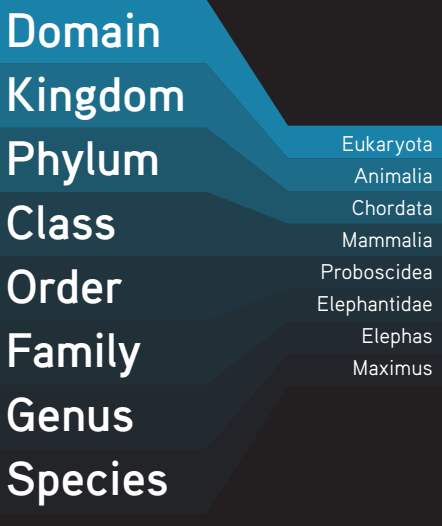
A BRIEF HISTORY OF TAXONOMY

Taxonomy is the science of naming and classifying different life forms. Oral traditions of taxonomy predate writing and were first used when human ancestors described different food sources, predators, and medicinal or poisonous plants. The advent of writing enabled more detailed, recorded taxonomies.



BIOLOGICAL CLASSIFICATION

Scientists refer to a specific life form using its **Genus** and **species** classifications. This naming technique is called binomial nomenclature.



BIG HISTORY PROJECT