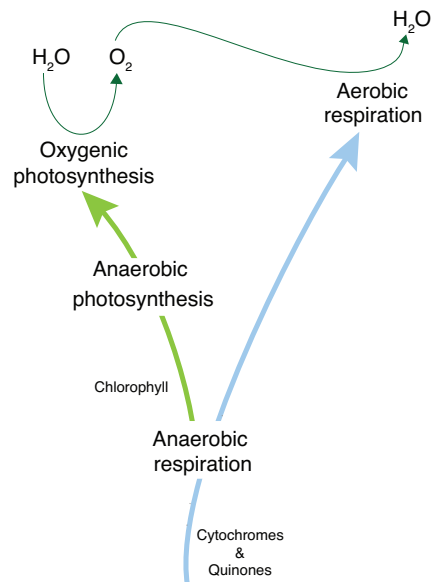
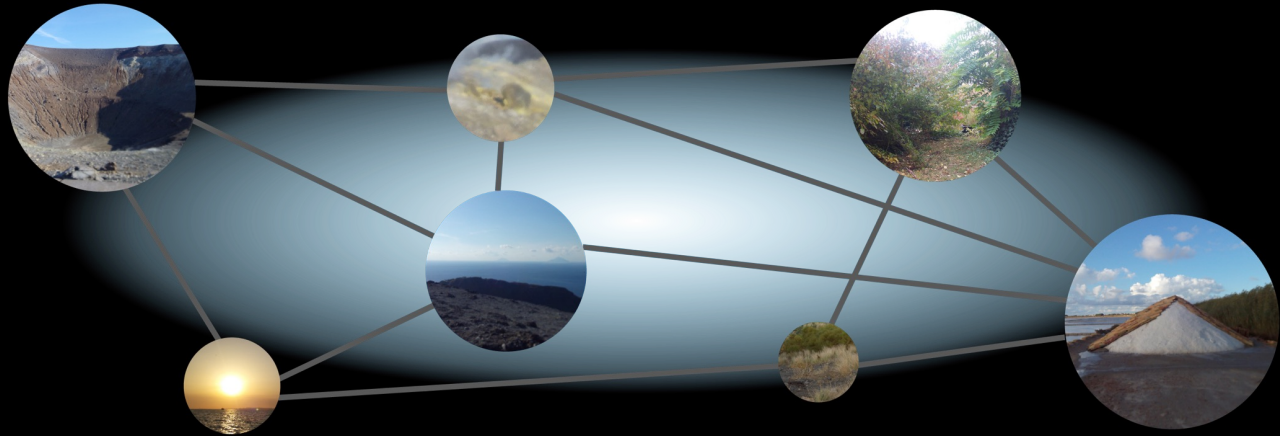


*Life: 4 billions year
changing (with) Earth*

Genome Evolution and Ecology

Filipa Sousa



What drives us? Prokaryotes have been co-evolving with our planet for over 4 billion years. During this time, they have adopted a myriad of ways to conserve energy from the environment, and survive in the most extreme conditions.

We are interested in the **expansion of biological energy conserving strategies and on how we can make use of meta(genomic) data to gain insights regarding the biology of newly sequenced lineages**, many of which, still without isolates.

What do we do? We use bioinformatic tools for the identification of proteins or pathways of interest, their distinction from similar proteins, and we study their evolution by performing large-scale phylogenetic analysis.

Several bachelor's projects are available within the current running projects of the group (<https://archaea.univie.ac.at/research/filipa-sousa-lab/>). The project will be adapted to the student's knowledge and no prior knowledge of a scripting language is required. If needed, this can be learned during the pratica.

Contact for further information: Filipa Sousa Email: filipa.sousa@univie.ac.at