Socio-economic & Environmental Stimuli Effects on Human Microbiome

It may be interesting to try to understand the potential relationship between social forces and variation among individual microbiomes.

How those living in, for example, poorer areas, in close proximity to chemical plants or polluted areas, or those exposed to unsafe drinking water may have different microbiomes than those living in cleaner, more affluent areas.

Team: Bio-scientists, Data analysts, Epidemiologists, Geo-spatial

- Data Sources:
 - Microbiome data from Qiita Studies

AGM

- Super Fund sites
- OpenAQ Air quality data
- US Census Data

Packages:

- phylogenize a web app to associate microbial genes with microbial prevalence in, and/or specificity to, a given environment.
- Leaflet Leaflet is one of the most popular open-source JavaScript libraries for interactive maps.
- Ropenaq accessing the openaq API
- <u>Superfundr</u> Super fund sites.