

Instructions:

1. Download `common_core8.csv` and `Mucus_Code.R` from `Codes_and_data` folder.
2. Download all the packages listed in `Rstudio_package_list` from `Codes_and_data` folder.
3. Run `Mucus_Code.R` in the same directory as `common_core8.csv` (This code was found to have issues with some computers running Windows OS, specifically with points not popping up on the plots).
4. Locate `Figure_S2_Mucus_Source.pdf`.
5. From folder `Mucus_soruce`, locate `Figure_S2_Mucus_Source.svg` in the folder. Add number of data points in inkscape.
6. From the folder locate `Figure_S2_Mucus_source`, locate `Figure_S2_Mucus_source_'(a-f)_'_data.csv`. These are data files that make up panel **a-f** of `Figure_S2_Mucus_Source.pdf`.
First row is the header. Each data file a-f contains information on their respective panel: Effective diffusion, anomalous exponent, Size, Charge, Temperature, and pH, respectively. Columns refer to Mucus source: `Human_cervix` is mucus from human cervix, `Hydrogel` is artificial hydrogel, `Pig_stomach` is mucus from pig's stomach, `Human_lung` is mucus from human lung, and `Pig_intestine` is mucus from pig's intestines.

Output(s):

`Figure_S2_Mucus_Source.pdf` is a pdf of box plots effective diffusion, anomalous exponent, particle size, charge, temperature and pH based on mucus source (mucus originating from certain tissue).