VARIOUS STEP in the MAASTRICHT data project

6m\_9m\_togheter

1. Divide the OTUs and the data
2. N.b. the file name has SPARCC in the name because it is already in the format correct for SPARCC!
3. Important to note: NO COVARIATES!
4. Imporrtant to note, there is an arbitrary choice on the prevalence: we focus on prevalence > 0.15 , while the default of the library is 0.25 and in the GUT MICROBIOMA <https://doi.org/10.1038/s41467-020-17840-y> they use 20%.
5. NB 🡪 in the Importing\_data\_MAGMA\_subset\_v1 🡪 It computes the difference when taking into account BOTH time points (LOO of all but one in two timepoints , … ). It is still interesting but NOT what we pursued later.
6. ONE PROBLEM: before in the one Importing\_data\_MAGMA\_subset\_v1, it calculates the non sharing taxas, but it does not took out the INDIVIUDAL not sharing the … 🡪 the one to eliminate
7. N.b. in the file matching 6m and 9m we have to be sure that the list is the same.
8. In the ISN file in the 6m\_9mtogheter 2 eliminated 1) eliminate the zero entry of the ISN ; 2) eliminate the individual at the 1st place
9. Added a flag in Individual\_Network\_computer\_MAGMA\_correctconfounder\_v2.R then it can do dubsequently both the one with eliminated the observation not tharing taxa and the not\_eliminated ones (less important).
10. N.b. sequence\_nodes and sequences\_nodesnoteliminated are identical in C:\Users\fmelo\Desktop\Backup\_Federico\Maastricht\_data\Dynamics\_in\_Microbiome\Data\MAGMA\_data\6m\_9m\_togheter
11. There is an issue: in the code, the 6m and 9m were calculated
    1. WITHOUT eliminating the 2 observations (at month 6m) that would have been excluded due to sharing few taxas with the rest
    2. THE LOO and the ISN were calculated on the 81 and 74 obs in the two timepoints, NOT restricting the attention on the shared 69.
    3. Now I will calculate the 4
       1. AS BEFORE [ NO ELIMINATION, on the 81 and 74 individuals ]
       2. ELIMINATING The 2 individuals
       3. MERGED, after ELIMINATING
       4. MERGED, with no elimination