**Supplementary data 7:**

Plot of the coefficient of variation (CV) of an OTU with its occurrence in a sample (i.e.

relative abundance >0.05%). The linear model is the blue line and the prediction intervalle (0.5) above and under the linear model is in grey. High CV OTUs are those above the prediction intervalle and Low CV OTUs are those below. Each OTU is colored depending on its module membership.

