## **SUPPLEMENTARY DATA 1.1:**

Mothur's commands used to process sequences before their classification:

summary.seqs(fasta=PruebaMcMahon.fasta)

screen.seqs(fasta=PruebaMcMahon.fasta, group=PruebaMcMahon.groups, summary=PruebaMcMahon.summary, maxambig=0, maxlength=150, processors=8)

unique.seqs(fasta=PruebaMcMahon.good.fasta)

count.seqs(name=PruebaMcMahon.good.names, group=PruebaMcMahon.good.groups)

summary.seqs(fasta=PruebaMcMahon.good.unique.fasta, count=PruebaMcMahon.good.count\_table)

align.seqs(fasta=PruebaMcMahon.good.unique.fasta, reference=silva.bacteria.fasta)

screen.seqs(fasta=PruebaMcMahon.good.unique.align, count=PruebaMcMahon.good.count\_table, summary=PruebaMcMahon.good.unique.summary, start=13862, end=21774, maxhomop=8, minlength=149, processors=8)

filter.seqs(fasta=PruebaMcMahon.good.unique.good.align, vertical=T, trump=.)

unique.seqs(fasta=PruebaMcMahon.good.unique.good.filter.fasta, count=PruebaMcMahon.good.good.count\_table)

chimera.uchime(fasta=PruebaMcMahon.strain.fasta, count=PruebaMcMahon.strain.count\_table, dereplicate=t, processors=8)

remove.seqs (fasta = PruebaMcMahon.strain.fasta, accnos = PruebaMcMahon.strain.denovo.uchime.accnos)

sub.sample(fasta=PruebaMcMahon.strain.pick.fasta,
count=PruebaMcMahon.strain.denovo.uchime.pick.count\_table, size=10000, persample=true)

## **SUPPLEMENTARY DATA 1.2**

Mothur commands used to cluster the sequences for the species-level analysis

dist.seqs(fasta=PruebaMcMahon.strain.ready.fasta, cutoff=0.10)

cluster(column=PruebaMcMahon.strain.ready.reduced.dist, count=PruebaMcMahon.strain.ready.count\_table)

make.shared(list=PruebaMcMahon.strain.ready.list, count=PruebaMcMahon.strain.ready.count\_table, label=0.03)

rarefaction.single(shared=PruebaMcMahon.strain.ready.shared) SUPPLEMENTARY DATA 1.3:

Oligotyping commads used to classify sequences into oligotypes:

entropy-analysis OTU\_X

oligotype OTU\_X OTU\_X-ENTROPY -c 1 -M 10 -a 5

Being OTU\_X the group of related sequences to be analysed.