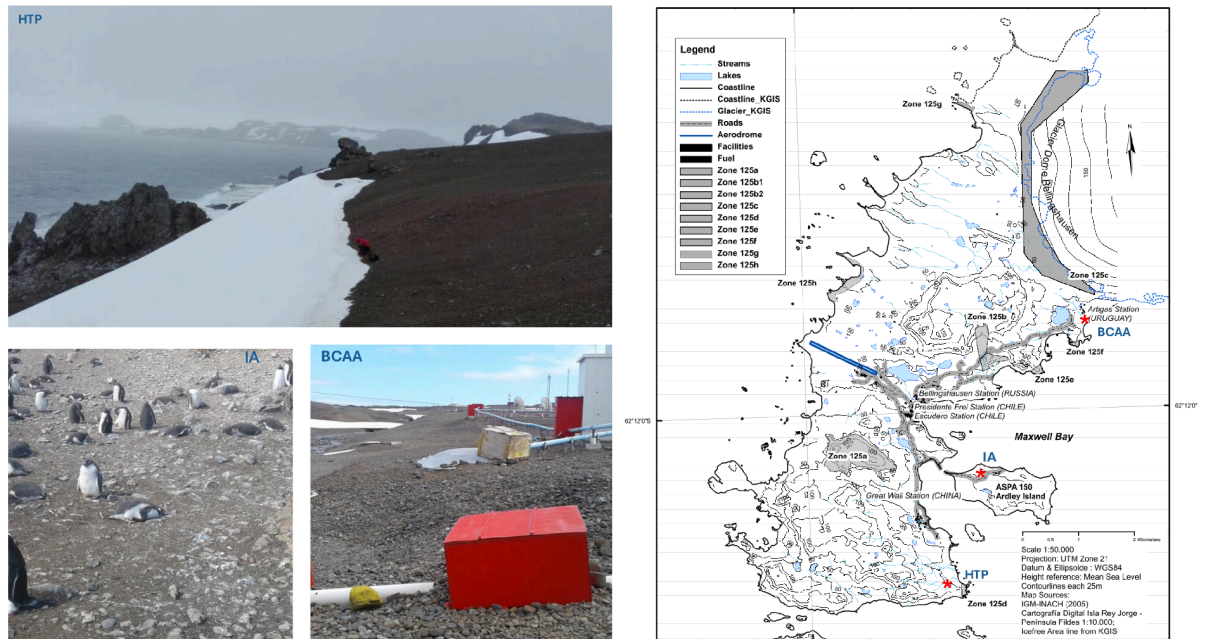
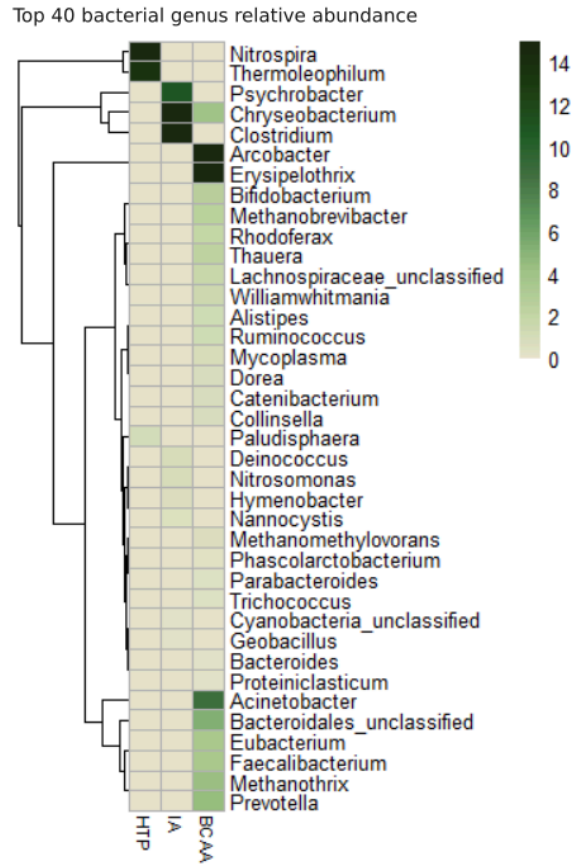


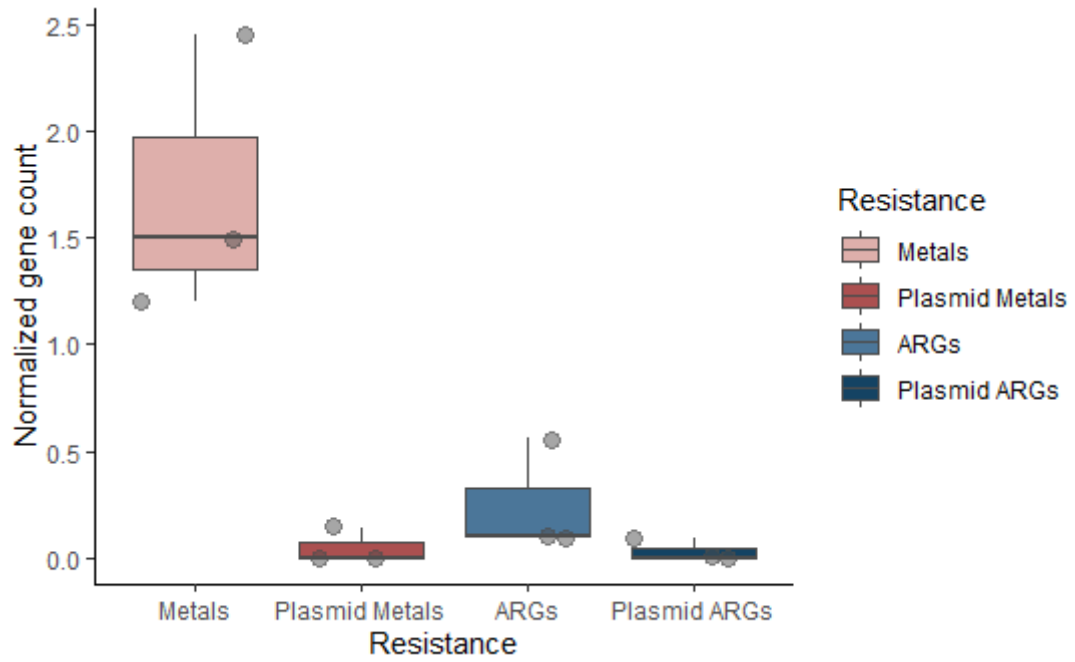
## Supplementary Material



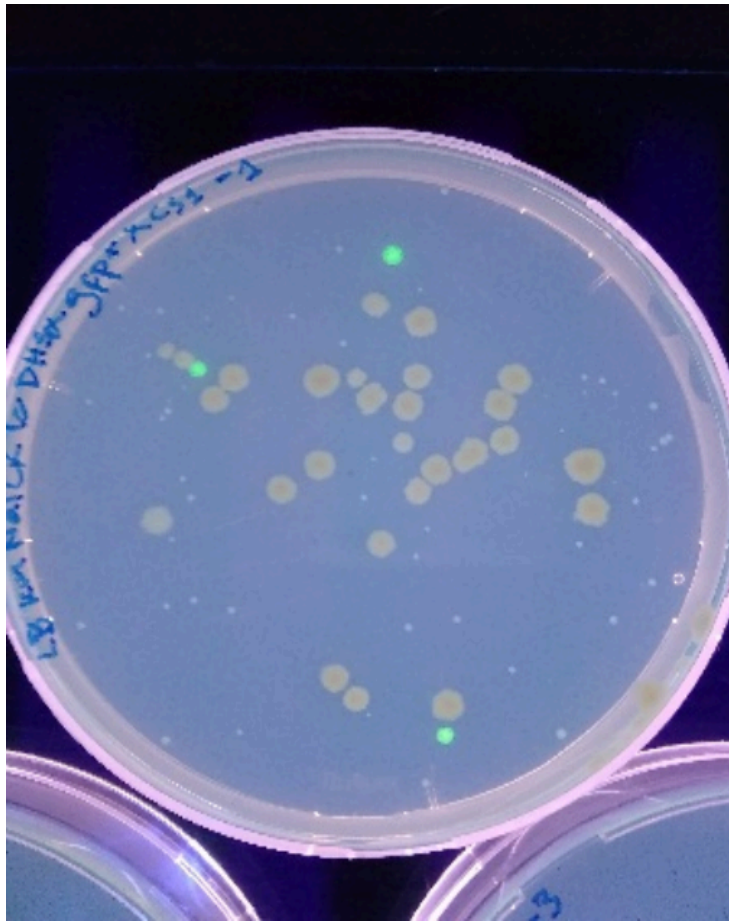
**Supplementary Figure 1.** Map of Fildes Peninsula with sampling sites, images show each site at the moment of sampling. Red asterisks in the map indicate the location of sampling points.



**Supplementary Figure 2.** Heatmap of relative abundance of different genus in the three metagenomes sequenced. Community profile was done with Metaphlan4 and the 40 most abundant genera are shown.



**Supplementary Figure 3.** Normalized gene count of Metal resistance genes and Antimicrobial resistance genes for in total assemblies and plasmidic contigs. Gene count was normalized using 16S rRND count for each metagenomic assembly



**Supplementary Figure 4.** Transconjugants colonies obtained from one of the exogenous plasmids capture assays with BCAA sample. Three colonies with fluorescent phenotype are observed, culture media was supplemented with Km Nal Chm and Tc.