



ABSTRACT

*“Use of bacterial poison antidote genes as tools:
from DNA engineering to synthetic biology”*

Raf Roelands & Philippe Gabant

EUROGENTEC S.A.

Seraing

BELGIUM

Since the '90s, bacterial poison/antidote genes have been used as tools in molecular biology.

Today, the *ccdA*, *ccdB* gene loci of the F plasmid are present in vectors for protein expression and DNA cloning.

These genes are either used for selection of recombinant molecules (Gateway vectors, TOPO vectors, Zero Background vectors) and for the maintenance of expression vectors in *E.coli*.

Nowadays most of the scientists use those genes as tools for their daily research works. Most of the time scientists use those genes ignoring their origin and properties. This lack of information could limit the efficiency of their DNA cloning and protein expression experiments.

The aim of this scientific meeting is to present the natural origins antidote poison genes, their properties and open a discussion on their current and future applications.