

Genome mining

In the postgenomic era it has become increasingly obvious that the biosynthetic potential of microorganisms has been greatly underexplored. The majority of genes potentially coding for the biosynthesis of biologically active compounds remain silent under laboratory conditions. We have developed new methods to specifically activate such cryptic biosynthesis gene clusters, which led to the discovery of novel natural products including new potent antibiotics. Using genetic and analytical tools, we also explore the hidden biosynthetic potential of yet neglected bacteria.