

Duke File (IDF) Number

IDF #:T-004851

Meet the Inventors

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Department

Molecular Genetics and Microbiology

Mining microbial genomes for biologically active compounds

Most microbes of importance to human and environmental health are not amenable to experimentation. As a result, we do not know what molecules these microbes use to manipulate their environment- many of which are likely to be of high commercial value because of their application in medicine and biotechnology. We developed a method termed Mutational Enrichment Analysis post Phenotypic Selection (MEAPS) to mine any microbial genome for genes required for activities of interest. We envision that this experimental/bioinformatic platform will reveal many commercially important biologicals from microbial communities associated with humans, livestock and industrial settings.