

応用生命工学・微生物学研究室 特別セミナー
Lab of Microbiology, Dept of Biotechnology Special Seminar

Tuesday October 9, 2018, 2 PM – 3 PM
Food Sci Bldg #102 / フードサイエンス棟 102講義室

“Using Transposon Mutagenesis to Activate Cryptic Biosynthetic Gene Cluster in *Burkholderia* spp.”



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“Microbial natural products have been a significant source of drugs and drug leads in the past century. Yet, our arsenal of known natural products merely represents the tip of the iceberg, as most biosynthetic operons that can be observed bioinformatically are not expressed under normal laboratory conditions. How are these so-called ‘cryptic’ gene clusters regulated and how can they be activated? To answer these questions, we have launched a transposon mutagenesis-based approach. By screening random transposon mutants, we can connect unsuspected genes to the production of cryptic metabolites and at the same time structurally characterize the resulting small molecules. In this talk I will summarize the insights we have gained by applying transposon mutagenesis to study cryptic biosynthetic gene clusters.”

Please contact Shinichi Nishimura / 西村 慎一 (anshin@mail.ecc.u-tokyo-ac.jp; ex. 25162) with any questions.