



Title: "Bacterial fingerprint analyzed by next generation sequencing"

So-Yeon Lee¹, Seung-Gyun Woo¹, Go-Woon Choi², You-Jin Hong², Yong-Bin Eom^{1,2,*}

¹Departments of Medical Science, College of Medical Sciences, SoonChunHyangUniversity, Asan, Chungnam, 336-745Korea

²Department of Biomedical Laboratory Science, College of Medical Sciences, Soonchunhyang University, Asan, Chungnam, 336-745 Korea.

Human skin microbiome based on the 16S rRNA encoding gene can revealbacterial species diversity between individuals. A bacterial fingerprint obtained from surfaces including computer keyboards can be trace forensic evidence.

Next generation sequencing was used to analyze bacterial community on objects and fingertips to match the object to the individual. Higher similarity of bacterial community between public computer keyboards and laboratory member's fingertipswere evident than between other locations including doorknobs. The findings could aid forensic identification. The 16S rRNA gene sequence was submitted to EMBL SRA with accession number PRJEB8760.

Biography

Yong-Bin Eom^{*} has completed hisDoctor at the age of 32 years from Yonsei University. Reschr.Asan Inst. Life Scis., 1997-98;Forensic DNA analyst Nat. Forensic Svc., 1998-2009.Prof. Korea Nazarene University, 2009-13.He is the director of Dept. of Biomedical Laboratory Science, Soonchunhyang University. He has published more than 30 papers in reputed journals and has been serving as an ISO/TC212 bd. mem. Korean Agy.Tech. and Stds. and editorial board member of Biomed. Sci. Lett. and Korean J. Clin. Lab. Sci.

omnibin@sch.ac.kr