Unraveling the microbiome profile on CityU campus

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Abstract

Bacterial infection is a serious public health problem worldwide because of their rapid dissemination among the communities, in particular at high population areas such as university and train station where tens of thousands people share the same facilities in a small area every day. To prevent the outbreak of infectious disease, surveillance of infectious agents in public areas is one of the common and effective methods used by the government. To raise and emphasize the concept of 'One Health' to our students as well as staff in CityU, we set out to discover the bacteria profile (microbiome) on CityU campus. In this project, participants will be invited to collect the samples at different locations at CityU and conduct scientific experiments to culture the bacteria. By using cutting-edge technology, high-throughput sequencing, the students are able to identify all the bacteria that they sampled on campus. At the end of the project, students will need to analyze and compare the bacterial profiles at different locations, and suggest potential solution to prevent the bacteria from spreading in our communities. This study will provide an opportunity to our students to unravel the microbiome in CityU. Moreover, the activity will be linked with the course BCH 2013 Microbiology in order to enhance their learning experience. In addition, the data from this project can also enhance our awareness of the importance of personal hygiene on campus.