



香港城市大學  
City University of Hong Kong

## Discovering Invisible Friends or Enemies: Developing Innovative Practical on Microbiome in Veterinary Microbiology

**Project Number:** 6000693

**Principal Investigator:** Dr. Xin DENG

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### **Abstract:**

Veterinary microbiology is a key part in training students in our newly established Veterinary Medicine program. However, traditional teaching strategies are not efficient in inspiring the innovative practice of students. In order to enhance teaching the new veterinary microbiology course BMS2804, I plan to set up a new discovery and innovation-based practical. I plan to lead the students to collect samples of different animals and foods from their homes and public markets. They will learn how to purify, identify and analyze bacterial, fungal, and viral species from the samples. After that, they will discuss, search, and present their final findings in the tutorial sections. I believe this discovery and innovation-based practical will not only train them the latest microbiology/bioinformatics skills, but also offer them a better and deeper understanding of One Health concept that is the keyword for our college. This project is expected to provide an opportunity to the students to discover the microbiome profile in animal/food, and teach them problem-solving skills to prevent transmission of infectious diseases. This project is in line with CityU's Discovery-Enriched Curriculum and will improve our understanding of hygiene when contact with various animals and eat food from markets.