

Metagenomic studies of the gut microbiota: the snake gut microbiota as a model organism

ABSTRACT

Microbes play a very important role in each individual. The microbial communities and its genetic blueprint greatly influence in many human diseases. Most of the microbe populations are grow in an individual's gut. Therefore, metagenomics studies on gut microbes are essential to understand the microbial diversity in gut and the knowledge on microbial composition associates with terrestrial animals will be very important for further understand nutrition, diseases and physiological state. Besides, the availability of next generation sequencing technologies gives a better understanding on gut microbiotas communities compare to the first generation sequencing. This paper, we suggested snakes as a model to study microbial metagenomics due to its various compounds can help to cure various illnesses, even kill off unwanted germs from body. Therefore, this paper mainly review on snake gut microbes, secondary metabolites produce by microbes and the benefits of molecular technologies used in metagenomics which can be useful in medical industries and treatment of infectious diseases.

Keyword: Snake gut microbiota; Metagenomic; Model organism