phage therapy

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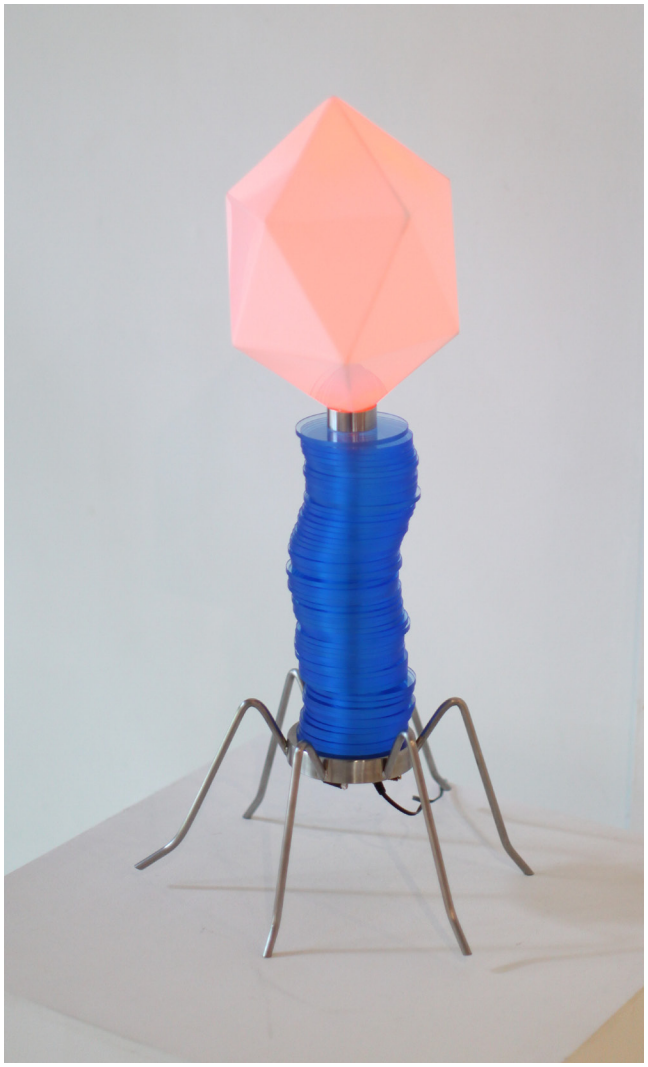
The emergence of antibiotic resistance has become a global concern. This problem does not only affect human population but also animals. In animal production, zoonotic pathogens pose a serious threat to human. Infections caused by bacteria can no longer be treated effectively by using antibiotics. The process of discovering new antibiotics is long and tedious. In the past four decades, only two classes of antibiotics were produced. Other alternative strategies, preferably biological approaches, are urgently sought after. Bacteriophages are ubiquitous and have the natural ability to kill specific bacteria. This unique feature that they have can be regarded as an antidote to antibiotic resistance. In phage therapy, bacteriophages that target specific bacteria are selected, isolated and characterized. Phages can be easily propagated in large quantity and the application process is simple. It is safe for oral consumption and topical applications. The elimination process is normally rapid and efficient when applied under optimised conditions. It can be used to overcome bacterial infections in human, animals and plants. In addition, it can also be used for bacteria decontamination in the environment, surfaces and food. In the case when resistance occurs, unlike the antibiotics, new phages can be easily and rapidly obtained from the environment to overcome it. The potential of phage therapy is unlimited and is awaiting for the key to unlock the science behind them.



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