

## **HKU Discovers SARS Coronavirus-like Virus in Chinese Horseshoe Bats**

HKU researchers have recently identified a close relative of the human SARS Coronavirus in Chinese horseshoe bat (*Rhinolophus sinicus*), a bat that feeds on insects, in Hong Kong. This is the first time that a virus so close to the human/civet SARS coronavirus can be found in uncaged wild animals which signifies that reservoirs of SARS coronavirus like virus are existent in nature and provides the evidence for the possibility of the re-emergence of SARS.

From the genome sequence analysis, the bat SARS coronavirus is close to human/civet SARS coronavirus but it will take quite some time or another animal host for the evolutionary changes to make it close enough to the human SARS virus. However one cannot exclude the possibility that recombination events with other coronavirus can rapidly allow its jumping to human to occur within a very short period of time.

HKU researchers will continue the study in order to understand how inter-species jumping may occur through the study of the affinity of cellular receptor for different spike proteins from human, civet and bat SARS coronavirus.

Even though the pathogenicity of this novel bat SARS coronavirus is not yet determined, the public should take precautions in handling bats and bats should never be allowed to come into contact with farm and market animals. This is a lesson that people should have learnt from Hendra and Nipah virus.