

From: Conrad, Patricia (NIH/NIAID) [E]
Sent: Fri, 1 Nov 2013 08:16:50 -0400
To: Folkers, Greg (NIH/NIAID) [E]
Subject: RE: Virologica Sinica: Bats as animal reservoirs for the #SARS coronavirus: hypothesis proved after 10 years of virus hunting <http://bit.ly/1cu0V4R>

I think we need more slides like this...its too cute!

Patricia L. Conrad
Special Assistant to the Director

From: Folkers, Greg (NIH/NIAID) [E]
Sent: Friday, November 01, 2013 7:43 AM
Subject: Virologica Sinica: Bats as animal reservoirs for the #SARS coronavirus: hypothesis proved after 10 years of virus hunting <http://bit.ly/1cu0V4R>

[Virologica Sinica](#)

October 2013

Bats as animal reservoirs for the SARS coronavirus: hypothesis proved after 10 years of virus hunting

- [Manli Wang](#),
- [Zhihong Hu](#)

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Abstract

Recently, the team led by Dr. Zhengli Shi from Wuhan Institute of Virology, Chinese Academy of Sciences, and Dr. Peter Daszak from Ecohealth Alliance identified SL-CoVs in Chinese horseshoe bats that were 95% identical to human SARS-CoV and were able to use human angiotensin-converting enzyme 2 (ACE2) receptor for docking and entry. Remarkably, they isolated the first known live bat SL-CoV that replicates in human and related cells. Their findings provide clear evidence that some SL-CoVs circulating in bats are capable of infecting and replicating in human (Ge X Y, et al., 2013).

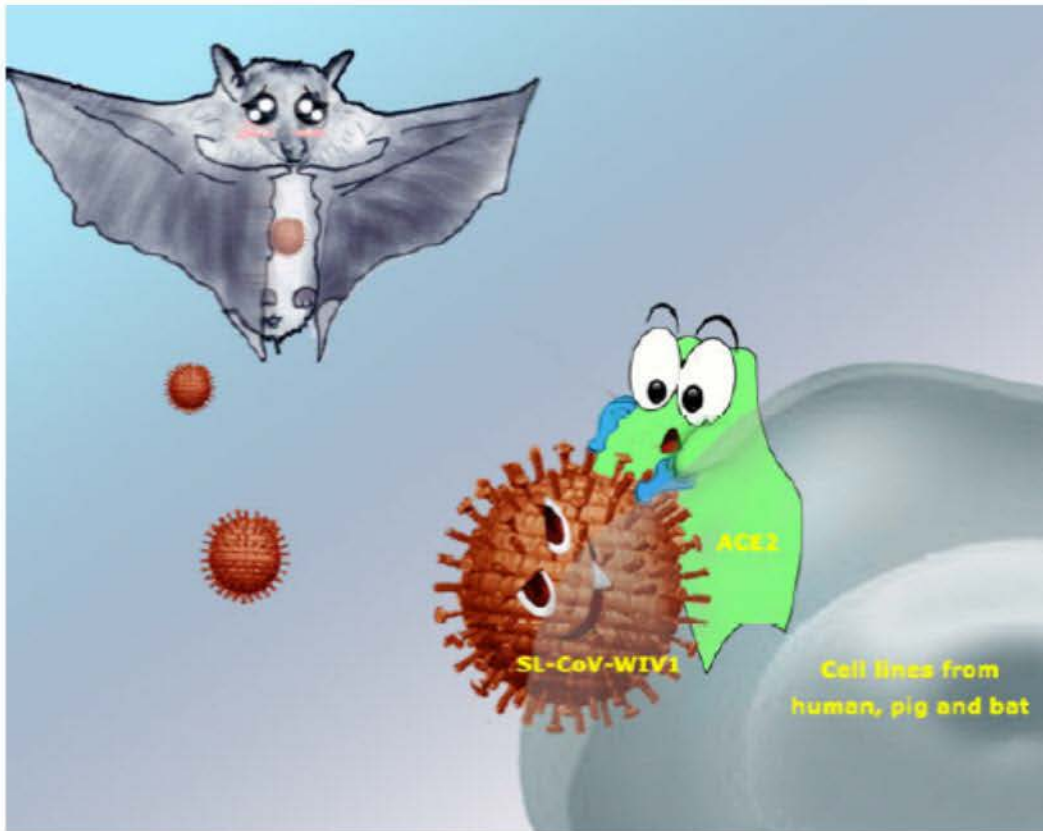


Fig. 1 Bat SL-CoV-WIV1 uses ACE2 to directly infect human cells.

A newly isolated wild-type bat SL-CoV-WIV1 is found to use ACE2 as a cellular entry receptor and replicate in human alveolar basal epithelial cells (A549), pig kidney-15 cells (PK15) and Chinese horseshoe bat kidney cells (RSKT). (Figure provided by Meng Wang, Wuhan Institute of Virology.)