

Centenario de la Gripe Española de 1918. La peor pandemia en la historia contemporánea mundial: lecciones para el futuro

Centenary of the 1918 Spanish Influenza, the Worst Pandemic in the Recent History of the World: Lessons for the future

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ABSTRACT

Reverse genetic analysis of the newly discovered bat influenza A viruses: A journey full of surprises

Martin Schwemmler

Our previous understanding of influenza A viruses was recently challenged with the identification of two novel genome sequences of influenza A-like viruses found in bat specimens by next-generation sequencing. Serological surveys indicate that these bat-derived influenza viruses circulate in various Central and South American bat species. However, no infectious virus could be isolated from bats, impeding further characterization. Interestingly, analysis of the viral surface glycoproteins revealed that the entry machinery of these viruses differs markedly from all known conventional influenza A viruses and may only support entry into bat cells. This talk will summarize our recent progress obtained with recombinant bat influenza A-like viruses, especially the identification of the cellular entry receptor and the observation that the host tropism of these viruses might be larger than initially anticipated.