Record Nr. UNINA9910437857903321 Swine Influenza [[electronic resource] /] / edited by Jürgen A. Richt, **Titolo** Richard J. Webby Pubbl/distr/stampa Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, . 2013 **ISBN** 3-642-36871-9 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (306 p.) Collana Current Topics in Microbiology and Immunology, , 0070-217X;; 370 Disciplina 616.9101 Virology Soggetti **Immunology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes index. Nota di contenuto Preface -- Overview of influenza viruses -- History of swine influenza -- Genetics, evolution and the zoonotic capacity of European swine influenza virus.- History of swine influenza virus -- Clinicopathological features of swine influenza.- Diagnostics and surveillance for swine influenza.- Contemporary epidemiology of North American lineage triple reassortant influenza A viruses in pigs -- History and epidemiology of swine influenza in Europe.- Swine influenza viruses: an Asian perspective -- Swine influenza virus vaccines - to change, or not to change: that's the question.- Swine influenza virus infections in man -- Interspecies transmission of influenza A viruses between swine and poultry -- The 2009 pandemic influenza virus: Where did it come from, where is it now, and where is it going? - Pandemic influenza A H1N1 in swine and other animals -- Therapeutics against influenza -- Subject index. . Sommario/riassunto The central role which swine have played in the ecology of influenza is set out in this book in 15 chapters within a comprehensive international framework. The result is a 'One Health' perspective on the role of swine influenza viruses (SIVs) at the animal-humanenvironmental interface. The epidemiology of swine influenza worldwide is now of exceptional importance with the pig potentially

acting as a "mixing vessel" where both avian and human influenza viruses can undergo genetic reassortment resulting in the creation of

novel viruses that can cross species barriers. The genetic features of SIVs with either limited or efficient spread to and between humans are largely unknown, but the host range barrier between human and swine highlights the fact that adaptation of a virus in one mammalian host does not necessarily mean that it is well adapted to replication in another. However, in 2012 zoonotic transmission of SIV (both H3N2 and H1N2 subtypes) containing the matrix gene from the 2009 pandemic H1N1 virus was reported. These strains appeared to be able to spread more easily from pigs to people than other influenza viruses of swine. Therefore, this multifaceted book has assumed greater significance. Clearly, the dynamic nature and the national and international complexity of SIVs pose challenges for the swine industry as a recurring respiratory disease in swine, and also for public health as a continuing source of zoonotic infection.