Twitter Thread by Billy Bostickson ■■&■ ■

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@BillyBostickson

@EricTopol @NBA @StephenKissler @yhgrad 1. Reversion of molecularly engineered, partially attenuated, very virulent infectious bursal disease virus during infection of commercial chickens
https://t.co/wOg1Ekl3Xp
2. Reversion to Virulence of Attenuated Canine Distemper Virus In Vivo and In

@fapsid @EricTopol @NBA @StephenKissler @yhgrad 3. pathogenic reversion of simian immunodeficiency virus SIVmac239Deltanef increases viral replication
https://t.co/jHmujgDVAC

@fapsid @EricTopol @NBA @StephenKissler @yhgrad 4. Genetic suppression in
reovirus: Ramig et al. 1977
papovavirus: Shortle et al. 1979
picornavirus: King et al. 1980
vaccinia virus: McFadden et al. 1980
influenza virus: Tolpin et al. 1981
herpesvirus: Hall and Almey 1982
adenovirus: Kruijer et al. 1983
https://t.co/4zARJZWBzk

@fapsid @EricTopol @NBA @StephenKissler @yhgrad 5. reversion to virulence of live attenuated vaccines
1. Evolutionary reversion of live viral vaccines: Can genetic engineering subdue it?
https://t.co/9lY6ji88Gr
2. Mechanisms Causing Reversion to Virulence in an Attenuated SARS-CoV
https://t.co/ogvKaqiQj8

@fapsid @EricTopol @NBA @StephenKissler @yhgrad 6. reversion to virulence of live attenuated vaccines
3. The double-edged sword: How evolution can make or break a live-attenuated virus vaccine
https://t.co/jRJNTAR6tn
4. Selection Versus Mutation: Reducing the Risk of Vaccine Reversion
https://t.co/dkVs3wTkve

@fapsid @EricTopol @NBA @StephenKissler @yhgrad 7. NSP16 mutant reverts in immune-compromised model and SARS-CoV dNSP16 can revert to virulence
Menachery, Yount & Baric 2018
Combination attenuation offers strategy for live-attenuated coronavirus vaccines
https://t.co/q2oQQzc1SG

Combination attenuation offers strategy for live-attenuated coronavirus vaccines

Vineet D. Menachery[1,2], Lisa E. Gralinski[2], Hugh D. Mitchell[4], Kenneth H. Dinnon III[2], Sarah R. Leist[2], Boyd L. Yount Jr.[2], Eileen T. McAnarney[1,2], Rachel L. Graham[2], Katrina M. Waters[4], Ralph S. Baric[2,3].

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