Meningitis and Septicaemia 2019 November 5-6, 2019, British Museum, London.

Update on findings from the pneumococcal challenge model **Dr Andrea Collins**, LSHTM

Pneumococcal carriage is the pre-requisite to pneumococcal disease, and pneumococcus is the commonest cause of pneumonia. Approximately 1 in 10 of us will have it in our noses right now. So....

Is carriage good or bad for you?

Can controlled exposure help us to test vaccines selecting the best ones to take forward to expensive later stage clinical studies?

Can controlled exposure to pneumococcus help us to understand transmission dynamics more?

The Experimental Human Pneumococcal Challenge model (EHPC) was set up in 2009 in Liverpool; we have now exposed our 1600th participant and started our 30th study and attracted over £7M in funding in the last 5 yrs alone. We have investigated normal healthy volunteers, at risk groups such as asthma, elderly, COPD and smokers), and various different pneumococcal serotypes including a GMO. Our current research investigates PCV-13's lack of 'coverage' of serotype 3 and also direct pneumococcal shedding in asymptomatic adult carriers which was previously not thought to be important in transmission and therefore herd protection.