

Video Summary

Sarah Gilbert: Viral Vectored Vaccines (OxfordNDM - Nuffield Department of Medicine):

Professor Sarah Gilbert discusses her work on viral vectored vaccine development.

She explains that live attenuated vaccines use a weakened form of a virus that would normally cause a disease. Viral vectored vaccines take different viruses and make them safe to use in people, then take bits of other pathogens in order to make new vaccines against those other vaccines. For example, we could take a virus which would normally cause a cold, add in parts of the malaria parasite, and this could be used as a vaccine for malaria.

These vaccines are effective at producing a T cell response as well as antibodies; this means a greater response can be produced than protein and adjuvant-based vaccines which only produce antibodies.

The last 5-10 years of research have focused on making vaccines which are both very safe to use and have a high efficacy.