

## **COV/EDI/20/04 - A novel platform technology for industrial-scale production of an immune targeted Covid-19 vaccine**

Effective vaccines are essential tools for combating infectious diseases. To elicit an antibody response the vaccine components must be taken-up by antigen presenting cells (APCs). We propose that modification of protein components from the SARS-CoV-2 virus, by adding a specific sugar, will enhance their uptake by APCs and improve vaccine efficacy. We will perform this modification in a bacterium, *Streptomyces lividans*, which can be used for industrial-scale fermentation to rapidly produce the large quantities of vaccine components required for a nation-wide vaccination campaign.