EuroSciCon

10th Edition of International Conference on

Advanced Microbiology & Education

June 14-16, 2018
London, UK

Arch Clin Microbiol 2018, Volume 9
DOI: 10.4172/1989-8436-C2-009

UNDERSTANDING ANTIBODY RESPONSES TO INFORM VACCINE DESIGN FOR CHALLENGING HUMAN VIRAL PATHOGENS

Gary McLean[1,2]

[1]London Metropolitan University, UK
[2]Imperial College London, UK

This presentation will address antibody responses to vaccine candidates in pre-clinical models and clinical studies for the human viral pathogens rhinovirus and cytomegalovirus. These pathogens are complex for differing reasons; human rhinoviruses are extremely diverse small RNA viruses with approximately 150 serotypes and cause self limiting diseases of the upper respiratory tract but can also cause acute exacerbations of airway diseases asthma and chronic obstructive pulmonary disease; whereas human cytomegalovirus is a large DNA virus that has evolved numerous immune evasion mechanisms and causes a mild mononucleosis in healthy individuals but is an important public health hazard during pregnancy, organ transplantation and immunodeficiency. No licenced vaccine exists for either pathogen but numerous pre-clinical and clinical trials of candidates have been performed. Details of specific antibody responses to these pathogens will be discussed and evaluated to assist in optimal vaccine design.

g.mclean@imperial.ac.uk