Michael Hust, J Vaccines Vaccin 2014, 5:5
http://dx.doi.org/10.4172/2157-7560.S1.020

OMICS Group Conferences
Accelerating Scientific Discovery

4th International Conference on
Vaccines & Vaccination
September 24-26, 2014 Valencia Convention Centre, Spain

A vaccine pipeline: Using phage display for identification of immunogenic proteins and generation of human antibodies for diagnostics and therapy

Michael Hust
Technische Universität Braunschweig, Germany

The identification of new immunogenic proteins of pathogens is a prerequisite for development of vaccines and diagnostic assays. We are using phage display to identify novel antigens from bacterial genome libraries. We also developed an antibody generation pipeline. The combination of both phage display based technologies led to a "vaccine development pipeline". Here, the technology will be described and examples for the identification of immunogenic proteins of *Mycoplasma* species and *Salmonella* Typhimurium as well as examples from our antibody generation and engineering pipeline for pathogens and toxins (botulinum toxins, Venezuelan equine encephalitis virus) will be given.

Biography

Michael Hust studied biology at the Carl von Ossietzky Universität in Oldenburg, Germany, from 1993-1999. He got his PhD at the Leibniz Universität in Hannover, Germany, in 2002. Since end of 2002, he is working as group leader at the Technische Universität Braunschweig, Germany, in the Department of Biotechnology. In 2011 he finished his professorial dissertation (Habilitation, venia legendi for Biotechnology) and was appointed as Privatdozent (PD). He has published more than 70 articles (including book chapters and reviews) on antibody engineering and phage display. He cofounded the mAb-Factory GmbH in 2007 and the Yumab GmbH in 2012. He is working on the development of human and human-like antibodies for diagnostics and therapy. Another field of work is the identification of immunogenic proteins of pathogens using phage display.

m.hust@tu-bs.de