

# **Challenges and Opportunities in Development of Innovative Vaccines for the 21<sup>st</sup> Century**

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Recent outbreaks of H1N1 influenza, Dengue, Chikungunya, SARS, MERS and Ebola are constant reminders of the threat of emerging infectious diseases to human life and the world economy. Vaccines can serve as an important defense against these threats, but development of innovative vaccines is complex, time consuming and expensive. This has led to consolidation of innovative vaccine players within the global pharmaceutical industry. In parallel, increasing demand for basic childhood vaccines, driven by supranational organizations such as UNICEF, PAHO and GAVI, has spurred growth of the vaccine industry within emerging economies. These trends are leading to partnerships between innovative multinational companies and developing country vaccine manufacturers, with the

promise of greater output of innovative vaccines at affordable prices. These opportunities and associated challenges will be discussed in this presentation.