Ebola was first discovered in 1976 and is a member of the filoviridae family of viruses. There are multiple strains of Ebola and infection can lead to hemorrhagic fever and death. In March 2014, a historic Ebola outbreak occurred in three Western African countries, Guinea, Liberia, and Sierra Leone. Over 28,000 cases were reported and led to more than 11,000 deaths, more than ten times the amount of cases compared to all past outbreaks combined. On August 8th 2014, the World Health Organization declared a Public Health Emergency of International Concern (PHEIC). Merck Sharp & Dohme (MSD) partnering with NewLink Genetics entered into an exclusive worldwide licensing agreement to research, develop, manufacture, and distribute an investigational Ebola vaccine candidate based on recombinant Vesicular Stomatitis Virus (rVSV) technology. Working with multiple partners, Merck Sharp & Dohme have brought forward an efficacious vaccine candidate from Phase I trials in October 2014, to Phase III consistency studies by August 2015. This presentation will provide background into Merck Sharp & Dohme’s strategy to bring the vaccine to licensure, product development activities to scale-up the process from clinical to commercial, and the challenges faced during product development.