

Title: PRRS Virology Literature Review – NPB #13-245
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SCIENTIFIC ABSTRACT

Prevention and control of PRRS require an in-depth understanding of the biology of virus. During the past two decades, much has been learned about the disease and the virus, and our knowledge on the molecular and cellular aspects of PRRS Virology has been advanced. This review summarizes the current knowledge and understanding of the structure and function of PRRSV proteins, cellular receptors for PRRSV and entry into cells, viral modulation of cellular processes and host immune responses, development and application of infectious clones, and evolutionary diversification of PRRSV. Some important perspectives, key knowledge gaps, and future directions toward PRRSV research are suggested. This review is timely and necessary to fill the research gaps and to develop strategies for better control of the disease caused by this virus.

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