

**Virology Live Fall 2021**

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**Study questions for session 6 – Synthesis of RNA from RNA**

*These questions are intended to summarize key points from this session and prepare you for the exams.*

1. What is the general architecture of RdRp, and how does it support the addition of NTPs to a growing RNA chain?
2. Why must (-) strand viral RNA be coated with protein in the virus particle? Why not (+) strand viral genomes? Are there exceptions for the latter?
3. All RNA viruses encode their own RNA replication system. True or False? Why?
4. Know the flow of information for (+), (-), and ds RNA genomes. Which genomes are accompanied by an RdRp in the virus particle? How are proteins encoded in viral RNA genomes?
5. For viruses with (-) sense RNA genomes, the (+) strands and mRNA are the same. True or False? Why or why not?
6. What is the primer for poliovirus replication? The primer for synthesis of influenza mRNAs? Is all viral RNA synthesis primer-dependent?
7. How is poly(A) added to mRNAs of RNA viruses?
8. How is diversity introduced into RNA virus genomes?