Virology Live Fall 2021 Vincent Racaniello Study Questions for session 22 – Emerging viruses

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

exams.
1. What are the factors that lead to emergence of new viral infections, and what steps are involved?
2. What are: stable, evolving, dead-end, and resistant host-virus relationships? Provide an example of each.
3. Explain what circumstances lead to poliovirus, Hendra, nipah, and Sin nombre virus emergence.
4. What is the origin of Ebolavirus? Why is it a dead-end infection? How did it spread out of Africa during the most recent outbreak? How was the African outbreak contained?
5. What is known about the origins of the spillovers of SARS, MERS, and SARS2 coronavirus, and what important questions remain to be answered? How are these outbreaks similar and how do they differ?