Virology Live Fall 2021 Vincent Racaniello Study Questions for session 23 – HIV and AIDS

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

1. How do we know that HIV-1 originated in Africa? What are thought to be the factors leading to its emergence? How do we know that SIVcpz from <i>Pan troglodytes troglodytes</i> is the ancestor of group M HIV-1?
2. What is an HIV-1 group and subtype, how did they arise, and why are they important?
3. How is HIV-1 transmitted?
4. What are the different stages of an HIV-1 infection? What events occur at each stage?
5. How does HIV-1 infection cause immunosuppression?
6. What causes death in end-stage AIDS patients?
7. Is the course of HIV-1 infection always the same? Describe typical, rapid, and nonprogressors.
8. Can an infected individual be 'cured' of HIV-1? Why or why not? What are some approaches to preventing or resolving HIV-1 infection?