**Virology – Biology 4310 Spring 2021**

**Prof. V. Racaniello**

**Study Questions for Lecture 23 – HIV and AIDS**

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 *Pan troglodytes troglodytes* 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?