

Virology – Biology 3310/4310 Spring 2017
Prof. V. Racaniello
Study Questions for Lecture 21 – Evolution

1. What are the four main drivers of virus evolution?
2. What is a quasispecies and why is it so important in virology?
3. How could an antiviral drug be based on the concept of the error threshold?
4. How does reassortment lead to evolution of influenza viruses? What is the selective pressure for emergence of a reassortant influenza virus?
5. There is an epidemic of rats in NYC. The Mayor asks your opinion on whether she should release a virus into the rat population to control the animals. Is this a good idea? Why or why not?
6. Is viral virulence positively or negatively selected?
7. How do we know that viruses might have been around millions of years ago?