

**Virology – Biology W3310/4310 Spring 2016**

**Prof. V. Racaniello**

**Study Questions for Lecture 13 – Intrinsic and innate defenses**

1. Distinguish between intrinsic and innate defenses. What are some components of intrinsic defenses, and how do they inhibit viral replication?
2. How does the innate defense system recognize that a cell is infected with a virus? What happens when an infection is sensed?
3. Name five primary players in innate defense.
4. What are the effectors of the interferon-induced antiviral state? How do they inhibit viral replication?
5. Why do most viral infections cause 'flu-like symptoms'?
6. What is the inflammatory response (redness, heat, swelling, pain)? What causes it, and why is it beneficial?
7. Why do cytopathic viruses usually stimulate potent immune responses? Why do non-cytopathic viruses typically do not? What are the outcomes of these two different responses?
8. Explain the statement 'all viruses must encode at least one regulator of intrinsic/innate defenses'.