HHMI 2010 Lecture 1: Dengue Fever…. Eva Harris, PhD

Objectives – General Goal(s): Students should recognize the ‘boots on the ground’ reality of investigating infectious disease

-What does it take to be an epidemiologist?

-How has the internet and social networking changed this profession and or public health?

Questions:

1. What is Dr. Harris’ educational background?

(is she a doctor of epidemiology, microbiology, virology?)

1. Why is the world becoming more concerned about Dengue Fever? 3 general reasons…

1.

2.

3.

1. What are three major reasons for the rapid spread of the 4 Dengue serotypes?

1.

2.

3.

1. Dr. Harris emphasizes the need for community objectives as well as science objectives.

a. What is the science objective of her cohort study?

b. In what ways does her research provide a community service to the people?

1. Why isn’t Dengue a problem in the US?
2. What was the ‘epiphany’ the researchers had about how to get the people to end the mosquito life cycle?
3. *Compare and Contrast* the ‘Top Down’ vs. ‘Bottom Up’ approaches to mosquito control in terms of process, motivation and effectiveness.
4. What were some of the positive outcomes of the grass roots fight against mosquitoes?
5. Compare the work of Eva Harris to the Machupo researchers. Have advances in modern science and technology changed approaches to public health and to epidemiology?