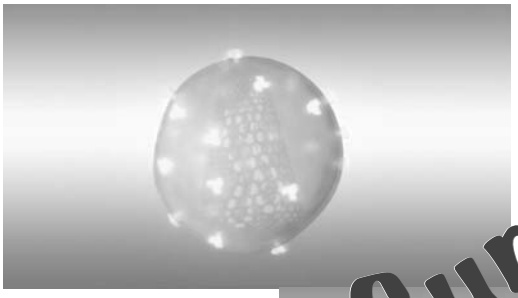
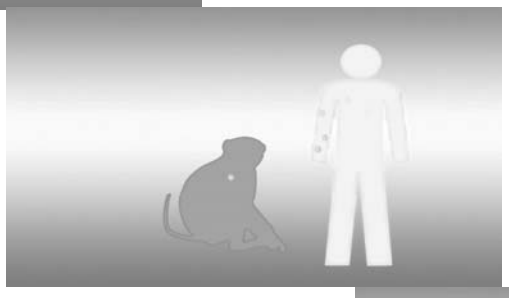
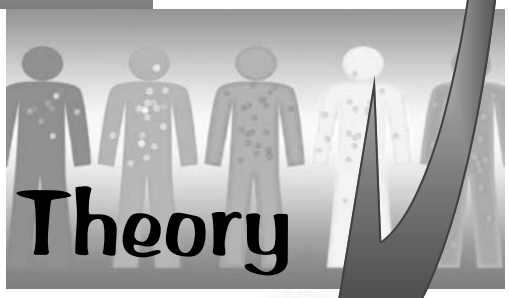
WHY US?
LEFT BEHIND AND DYING

Video Curriculum Modules







Lessons 17:

HIV – Natural Transfer Theory

LEARNING WAS NEVER LIKE THIS

Lesson 17: Natural Transfer Theory

Standards:

Health:

1.12.2

1.12.3

2.12.2

2.12.10

3.12.1

3.12.2

5.12.2

5.12.4

Science:

1.2

2.1

2.2

2.4

2.5

8.1

8.2

8.3

Skills Practiced and Gained:

1.1—1.7

Overview

Everyone agrees that the human immunodeficiency virus (HIV) is a mutation or adaption of the simian immunodeficiency virus (SIV). How the transfer occurred is up for debate. One theory is that SIV was transferred to humans by a hunter getting monkey blood in a cut while butchering a monkey or through other human contact with monkeys. This theory is called the Natural Transfer Theory.

Key Concepts

Transfer of viruses

Scientific Method

Procedure

Part I

View the video module for Natural Transfer Theory. Use the following questions to facilitate group discussion or give the questions as prompts for journal entries.

Discussion / Journal Questions

1) What new information did you gather from the video module?

2) Do you think "natural transfer" is a possible way in which HIV emerged? What factors of "natural transfer" make you think it is possible? What factors of "natural transfer" make you think it is not possible?

3) What other questions or comments do you have?

Procedure

Part II

Use the Scientific Method to examine Natural Transfer Theory. Either have students/clients discuss their examination of the Natural Transfer Theory or assign as a writing exercise.

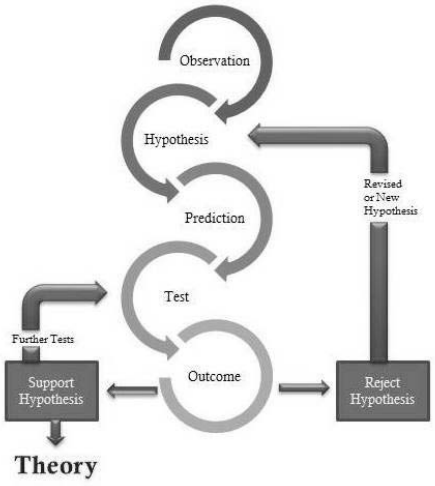
Ask your students/clients:

Do you think "natural transfer" is a theory or a hypothesis?

Questions to Consider:

- Do your students/clients think that they have enough information from the video module to answer the question above?
- Have enough successful tests been conducted to establish "natural transfer" as a theory?
- Will your students/clients have to research "natural transfer" before answering the question?
- Review all parts of the scientific method. How does the information that you have gathered fit into the process steps of the scientific method?

Reminder, the scientific method is:



Continuation Page: Natural Transfer Theory

Reminder, steps in the process of the Scientific Method:

In the Scientific Method,

- ☑ make observations of a phenomenon
- ☑ formulate conjectures about the observations
- ☑ use the conjectures to develop one or more hypotheses to explain the phenomenon
- ☑ make predictions from your hypotheses
- ☑ you should be able to test your hypotheses and predictions
- ☑ conduct an experiment to test your hypotheses and predictions
    - ☑ an experiment can be more observations (perhaps in a different setting); it can be collecting historical data; it can be a traditional laboratory experiment with treatment and control groups
- ☑ review your findings and outcomes; the results should either support or reject the hypothesis
    - ☑ if the hypothesis is supported, then it's theoretical value increases and is further tested
    - ☑ if the hypothesis is rejected, then it is revised or you abandon it and start all over again

When a hypothesis has sufficient support, meaning many successful tests must occur, only then will the hypothesis possibly be accepted as a theory.