**BIOL 483 - Infection, Immunity, and Evolution of Disease**

**Spring 2022**

**Homework 1**

**Directions:** Watch PBS video on The History of Vaccination (~5 min) and answer the questions below.

[http](file:///C:\Users\jamievoyles\Documents\Work\UNR\Teaching%20\IIED\2020_IIED\2020_IIED_Unit%201\http)[://www.pbs.org/wgbh/nova/body/history-of-vaccination.html](http://www.pbs.org/wgbh/nova/body/history-of-vaccination.html)

Upload your file to Web Campus by 1:30 pm on January 20th.

**Questions:**

When did the practice of inoculating people against disease first begin?

* The practice of inoculating people against disease first began as early as 1000 AD. The Chinese were using an early form of inoculation, called variolation, which used a weakened form of dried smallpox that aided in curing smallpox.

Who was Lady Mary Montagu and what is she known for?

* Lady Mary Montagu was an English mother, and having just survived smallpox, wanted to protect her children. She learned techniques from an old woman on how to inoculate her own son, giving him immunity to the disease.

Who was Edward Jenner and what is he known for? How was his inoculation experiment different from what Lady Mary Montagu did?

* Edward Jenner was an English doctor that proved that infection of a mild, non-fatal disease, cowpox, protected against smallpox. Jenner’s experiment involved using cowpox, “a very mild disease in humans”, rather than smallpox, that Lady Mary Montagu used, which cross reacted in actually preventing smallpox.

Where does the term “vaccination” come from?

* Vaccination comes from the Latin word, *vacca*, meaning cow.

Is there a part of this video that is new information and/or surprising to you? Please explain in a few brief (but complete) sentences.

* I found it surprising that the idea of vaccinations dated way back to 1000 AD. In addition, I found it interesting that people would inhale dried, powered smallpox scabs. I’m amazed at people practicing medicine that early on even though they did not know the actual science behind it.