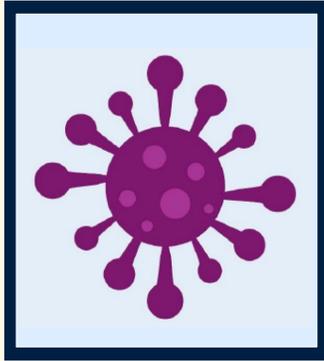




## Hepatitis E

- Hepatitis E induces liver inflammation
- Recent mutations have increased transmissibility and disease onset
- Water, meat and produce may be contaminated
- No treatment is currently available



## Balles Bleues

- Novel zoonotic virus isolated from sheep in South Asia
- Causes male infertility
- Viral spike protein targets blood-testes barrier specific glycoprotein
- Symptoms include fever and light blue testicles



## Chicken Originating Amoeba-1

- COA-1 was discovered in Sao Paula, Brazil
- This brain eating amoeba originated within the soil
- COA-1 is resistant to heat
- Currently no vaccines or treatment methods have proved beneficial



## Course Objectives

- Understand the significance of historical events and the environment's role in epidemics.
- Evaluate primary and secondary historical sources on the basis of sound evidence and methodology.
- Trace the historic development of public health from antiquity to the modern day.
- Identify social behaviors and worldviews that inhibit disease control measures and exacerbate an epidemic crisis.
- Explain the global pattern of diseases across history from earliest beginnings and the effect of global travellers in spreading diseases.

## Forecasting the Next Pandemic

**Purpose:** Provide students a platform to master course goals through iteration and collaboration. Here, students employed course concepts to forecast a plausible "next" pandemic originating from a global location.

### Learning Objectives:

- Create and design a plausible pandemic informed by historical patterns of people, microbes, environment, and geographic context.
- Cultivate a greater understanding of the complexity in preparing for and dealing with a major health crisis.
- Synthesize concepts of history, ecology and P.H. through problem-based activities.

### Concept Design

<b>Brainstorm:</b> Identify or design the agent of the next pandemic.	<b>Develop</b> an evidence based concept map. Iterate & synthesize course concepts.	<b>Create a</b> communication artifact for public comprehension.	<b>Disseminate</b> concept to classmates and faculty. A scholarly conversation.
--	---	--	---

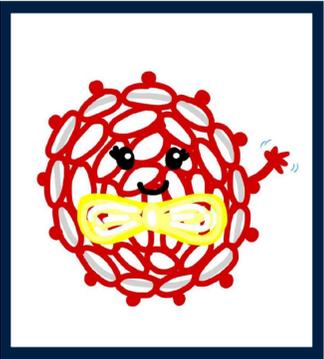
## Student Perception of Final Project

**Figure 1. Word cloud visualization of student' perceptions of the final project.** Students were prompted to provide one to three words to describe the final project. Visual representation of word frequency is depicted.



## Poxy

- Smallpox virus accidentally released into the environment from a lab in Johannesburg, South Africa
- Uniquely transmissible between and abundance of animal and plant species
- Never leaves anywhere without leaving a mark



## Koala Clap\_CHLAM-2X

- An estimated 90% of koalas have chlamydia
- CHLAM-2X is a novel variant with increased contact transmission zoonotic features
- Extension antibacterial resistance has been report



## Bald Flu: H19N12

- Baldness is a sign of this novel influenza variant
- H19N12 originated in Europe and is quickly spreading through Asia and Africa
- H19N12 kills 60% of those infected

