Course Research Project Preparation: Due 2/21/25

- 1. Names of Individual or Group Members (1 point)
 - a. Brandon Gambrall
 - b. Kate Zheng
- 2. Emerging area you plan to focus on (1 point)
 - a. Outbreak Preparedness, Detection, & Response from the CDC surrounding STIs and tools given for local departments like SPACE 2.0 and other data driven programs.
- 3. Tentative title of the research project (1 point)
 - Outbreak Preparedness, Detection, & Response Tools for STI Health Programs
- 4. Population(s) you plan on targeting for your research project (2 points)
 - a. Low Income, Elderly, and Populations that rely on Local Health Departments for care and treatment of STIs.
- 5. Tentative abstract (3 points)

Sexually transmitted infections (STIs) continue to pose significant public health challenges, particularly among vulnerable populations such as low-income individuals, the elderly, and those who rely on local health departments for care. The Centers for Disease Control and Prevention (CDC) has developed several data-driven tools, including SPACE 2.0, to improve outbreak preparedness, detection, and response at the local level. This research project will examine the effectiveness of these tools in improving STI surveillance, resource allocation, and intervention strategies. By analyzing how local health departments utilize SPACE 2.0 and similar programs, this research project aims to identify strengths, gaps, and potential areas for improvement in outbreak response efforts. Additionally, it will explore how data-driven approaches can be optimized to better serve at-risk populations, ultimately reducing STI transmission rates and improving public health outcomes.

- 6. Citations of three relevant peer-reviewed papers (e.g. journals, conference proceedings)
- 7. to your chosen topic. (2 points)
 - a. An Interactive Modeling Tool for Projecting the Health and Direct Medical Cost Impact of Changes in the Sexually Transmitted Diseases Prevention Program Budgets - PMC
 - Navigating an outbreak: geospatial methods for STI outbreak investigations -PMC
 - c. <u>Creating a Sexually Transmitted Infection Disease Intervention Workforce for the</u>
 21st Century PMC