

Gene drive technology is a revolutionary tool that has incredible potential in many areas of our society. This technology enables researchers to release organisms into nature that can genetically engineer one another, spreading a desirable trait throughout a population, completely suppressing an undesirable trait within a population, or destroying an invasive population completely. Despite the immense benefits this technology may provide, there are many who believe this technology is dangerous and should not be used outside of the laboratory. This study aims to determine the safety of this technology as well as examine whether the benefits of this technology outweigh the potential costs of its use. To effectively answer this question, I will perform a multiple case study examining experiments using this technology on mosquito populations. I plan to collect data from at least 5-7 different experiments and using this information to determine the safety and potential problems of this technology.