Research Proposal

1. How can genetic genealogy revolutionize the way we solve crimes?

How can the advancements in technology be beneficial in helping solve cold cases as well as current crimes?

2. I want to look at cases that have been solved through genetic genealogy as references for my article. I also want to find my academic texts discussing the advancements in technology that have led to the progression of genetic genealogy being formed and why it is a stable and reliable source for solving numerous crimes. I also have questions regarding the actual process of using DNA in the genetic genealogy database and how is connected to other systems like NDIS and CODIS.

3. The reason why I want to go in-depth into this topic is that I have always had an interest in criminology and the field of forensics. I specifically chose cyber criminology because I thought it would give me a more depth understanding of that field as well. More recently with the emerging use of genetic genealogy in solving crimes, I have been fascinated with that process and wanted to learn more about it. I hope to gain a more in-depth understanding of the process of how genetic genealogy is used in catching criminals to solve crimes. I also am curious to see how it can be used to solve cold cases where the DNA evidence has still been preserved. These questions need to be asked because they can completely change the way we solve crimes and can also help prevent more crimes from happening if it is that much more likely that the criminal will be caught.

4. I first learned about this topic when I looked into the golden state killer case from the 1970s and the 1980s. He essentially committed a series of rapes, home invasions, and murders during this time but was never caught. Eventually, because of the progression of genetic genealogy, they were able to connect old DNA from the crime scene to link it to one of his distant relatives through an ancestry database and they finally caught him after almost 40 years. Even more recently, in the college student murders in Idaho, they were able to use genetic genealogy to arrest a suspect about a month after the murders. I know about cases that have used genetic genealogy, but I want to know more about the process for the genetic genealogist in using it to solve these crimes.

5. Some of the challenges we may face may have to do with the preservation or lack of preservation of DNA in some cases. If the police fail to properly package and collect DNA then we are unable to use genetic genealogy to solve the crime. It also may be difficult to gain financial resources to use the technology required for genetic genealogy.

6. I am generally excited about this project because I get to write about something in my field that I am genuinely interested in. I will say that although I know the general direction I want to go in, I am not completely sure how to format the research question.