Bridgette Buchanan Biol 294 Professor Rinehart-Kim Writing Assignment #2

Primary and secondary sources are sources that are often confused with one another. According to Cornell University, a primary source is an "original scientific report of new research findings." In other words, the document that is the first hand source. An example of common primary sources are new research articles, a lab notebook, and a dissertation. In a research article, you can usually find an abstract, introduction, materials and methods, results, discussion, acknowledgements, and sources cited.

A review article, also known as a secondary source, is a source discussing the primary source. The person writing the review article was not present during the initial event that the primary source was written about. Most times the article will analyze and interpret the evidence collected from the primary article. The goal of this type of article is to summarize an article to make it easier for readers to understand without having to interpret the research data on their own. It consolidates the information into a much shorter version that is more friendly to people who are not studying the subject.

A peer reviewed article is an article that has been written by an expert and reviewed by experts in the same field. The first step to getting your article peer reviewed is submitting your article to a journal. Once the article is submitted, it will be sent to experts in the same field for assessment. The reviewers will then judge the validity, significance, and originality of the article submitted. This process ensures that there is someone who checks if the findings of one person are correct.

Comparing the *Huntington's Disease: Mechanisms of Pathogenesis and Therapeutic Strategies* and *Permanent Inactivation of Huntington's Disease Mutation by Personalized Allele-Specific CRISPR/Cas9* provides a good example of a primary article and a review article. The Permanent inactivation article is the primary article while the Mechanisms of Pathogenesis article is the review article. I believe that the primary article is the Permanent Inactivation because of the way it is formatted with the abstract, introduction, results, and discussion. This article states, "For a proof-of-principle experiment, we specifically examined the potential for discrimination of disease and normal chromosomes based on variants present in the most frequent diplotype in European HD population, namely hap.01/hap.08, accounting for approximately 9% of HD individuals. This sentence provides first hand evidence that they collected themselves which makes it a primary article. In the beginning of the Mechanisms of Pathogenesis article, they state, "Here, we review some of the currently known functions of the wild-type huntingtin protein and discuss the deleterious effects that arise from the expansion of the CAG repeats, which are translated into an abnormally long polyglutamine tract." They start right off the bat saying that they are going to review evidence which is why they are a review article because they are interpreting the data from another article.