Genetics

George Spellman

Writing Assignment 1

    Primary articles are those that describe original research. The objective of these articles is to add new information to an existing body of knowledge on a given subject. The body of these articles are organized into a few sections that are usually summarized by and abstract at the beginning, The sections include an introduction that explains the research question and objective, methods that describes the methods of collecting data and experimental design, results that include all of the collected data as well as graphs and charts that organize them, a conclusion or discussion section that analyzes the data and interprets the results, and a section of references used for the experiment.

    A review article, in contrast to a primary article, does not present new original research but instead provides a summary of knowledge on a particular subject. Review articles draw connections between research studies and often ask further questions pertaining to areas of the body of knowledge that may me still missing. Review articles can also make conclusions or inferences based on the knowledge shared between multiple studies and illustrate how the ideas were gathered and formed over time in reference to a particular subject.

    Scientific articles must go through a rigorous peer review process that involves multiple phases.  Firstly, scientists complete a study and create an article based on their research and the experiment carried out, A scientific journal is chosen, and the article is submitted to it for publication. The article is then distributed to other scientists that work in the same discipline for peer review. Those scientists provide feedback and criticism on the article and decide whether or not the article is suitable for publication. The authors of the article make changes and adjustments and eventually resubmit the article again. Once the article meets the standards of those reviewing it, it can then be accepted for publication.

    Of the two article provided, the article titled “MicroRNA in diagnosis and therapy monitoring of early-stage triple negative breast cancer” is the primary article. This article is based on a new experiment that was conducted and has all the necessary components including abstract, methods, results, conclusions and reference sections. This is supported by the sentence “After an exploratory genome-wide study on 21 cases and 21 controls using microarrays, the identified signatures were verified independently in two laboratories on the same and a new cohort by RT-qPCR”  illustrating that this was a new study being carried out with different methods in order to obtain new information. The second article titled “Circulating micrornas in Medicine” is a review article. It compares information on multiple studies and makes conclusions based on their results. This is supported by the sentence stating, “This review discusses the latest trends in the uses of miRNAs for diagnosing and treating various diseases, viral and non-viral.” which identifies it as a review article verbatim.