

Holly Jackson

September 16, 2024

Janet Rinehart-Kim

BIOL 294 CRN16971

A primary article is one that is closest to the source. In scientific literature it is the article that describes an experiment or case study. It is often told from a first-person perspective and lists a hypothesis, research, methodology of the experiment or study and a discussion segment that reviews the findings and makes interpretations. Depending on the size of the experiment or study there may be many authors or contributors.

A review article is an article that compiles many sources regarding a topic and organizes and presents the information cohesively. A review article will have many sources because it will pull from several experiments or studies. They are not often told from a first-person perspective because they are synthesizing information, not conducting the research itself. They will only interpret and analyze.

The peer review process begins when a scientist or team of researchers want to share a new finding. The authors will send a draft to a journal for review. The editor of the journal will be the first to review it, then will pass it to a team of other experts in the field of the paper's topic. These experts, also called "referees" will examine the paper looking at the subject; if the methodology used was sound and can be replicated by others; determine if there is interest regarding the paper, or if the findings are important to the field; if the findings are original and if the conclusions are logical. If the referees give the journal their stamp of approval, the editor will then decide whether they want to publish the findings. It may take months or years for an approved paper to be published. But many papers are rejected, either by the experts or by the journal editor.

The article *Base editing of hematopoietic stem cells rescues sickle cell disease in mice* is an example of a primary article. It is told from the first-person perspective describing the methodology in which the experiment was conducted. Additionally, there is a discussion section reviewing the data and making interpretations. The article *Hematopoietic Stem Cell Gene-Addition/Editing Therapy Sickle Cell Disease* is a review article. It is not told from the first-person perspective and there is no methodology of an experiment laid out. Rather there are several interpretations of many studies. There are also significantly more references since the authors are sifting data from many sources.