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BIOL 294

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**Writing Assignment 2 - Article Types**

A primary article is a type of scholarly paper that presents original research findings for the first time. These articles are generally published in peer-reviewed academic journals and are written by the researchers who conducted the study. According to Cornell University Library, the structure of a primary research article usually consists of an abstract, introduction, methods, results, discussion, and references. First, the abstract is a brief summary of the whole article and will normally introduce the main purpose, methods, results, and conclusions of the article. This section helps the reader decide if this is the appropriate article they are looking for. Second section is the introduction which introduces background information about that specific research question or hypothesis and why it is important and being tested. Next section includes the methods that will provide a detailed description of how the research was conducted, including the design, participants, materials, and procedures. Followed by the results that show any findings in the experiment and may be displayed as tables, graphs, and statistical analysis. Discussion or conclusion is second to last in a primary article which will include a summary about the entire research, with what methods were used and the results that the data showed; either it supported the hypothesis or not. Finally, are references, this is any reference that was used to help give information about the testing subject.

A review article is a type of scholarly paper that synthesizes and summarizes existing research on a particular topic or field. Unlike primary articles, which present original research findings, review articles provide an overview of the current state of knowledge by analyzing and combining findings from multiple primary studies, so because of this review articles will not have separate "Methods" and "Results" sections. Review articles can also be helpful if the reader wants to know information on a topic they are not familiar with.

According to the video, the first step in the scientific peer review process is to submit the article for publication for a scholarly journal. The first test is to see whether the article is a good fit for the journal or not; if the article passes this test, it gets sent to a group of experts within the same field to evaluate the article's content. After the experts or “referees” look over it by asking a series of questions they will decide whether or not the article is ready for publication in the journal and either approve or reject it. Finally, based on the decision of the experts, the editor will need to determine whether the article should be approved, revisited, or rejected. This whole process can take anywhere from a couple months to a few years and while rejection is common during this process, once the journal is finally published it is made available at universities libraries where students, professors, and other academic researchers can read the journal.

Based on the two articles provided, *Base editing of hematopoietic stem cells rescues sickle cell disease in mice* is the primary article because the article includes a summary/abstract, methods, results, discussion, and references. While the article, *Hematopoietic Stem Cell Gene-Addition/Editing Therapy Sickle Cell Disease* is the review article because the article says “Review” in the header and only summarizes previous publications as well as only containing an abstract, introduction, and references.