

# Reflection

[Science](#), [Biology](#)



Biology Reflection Essay Biology Essay 24 May One common observation in life is growth and development, which is a key trait that distinguishes living things from non-living things. This course has been instrumental in understanding the dynamics of growth and development particularly the topic of 'Biochemistry and Cell Biology.' I have learned that the overall growth is a result of the cellular process of mitosis, which leads to the division and proliferation of living cells. One interesting fact that I learned was that approximately 70% of normal cells are in the interphase stage of cell division that entails the multiplication of genetic material in readiness for cell division (Snedden, 2008).

The mechanism of the cell cycle also provided an in-depth perspective on the occurrence of cancer (Morgan, 2007). Cancers of various body parts including the skin and breast are among the leading causes of death. This course has broadened my understanding of the disease and brought the realization that the introduction of certain changes to the genetic makeup of cells causes them to proliferate abnormally thereby leading to cancer. I have also understood that cancer seems to progress faster because cancerous cells divide faster than normal cells. Additionally, approximately 90% of cancerous cells are preparing for division at any given time.

While researching topics related to cancer, I learned that environmental and genetic factors predisposed individuals to cancers. The environmental aspect included exposure to carcinogenic substances, which interfered with the genetic makeup of cells and led to the formation of abnormal cancerous cells. On the other hand, the genetic aspect meant that certain individuals possessed certain inherent genetic traits that increased their susceptibility to

cancer. We cannot control our inherent genetic makeup, but we can limit exposure to carcinogenic substances. The course has taught me to protect myself from cancer by avoiding substances such as skin lightening products, unnecessary exposure to ultra violet rays, among many other substances. Various oncology societies advocate for early treatment of cancers, which can only be possible if the disease is detected early enough before it advances. As a result, individuals are required to have regular screening for various forms of cancers. For example, women of certain ages need to have annual breast cancer screening. I advocate for such practices because they improve the treatment of cancer. In addition, they prevent the metastasis of the cancerous cells into other parts of the body such as the bones.

The science article that I selected is “ Cancer treatment and survivorship statistics, 2012.” The article provides the methods of cancer treatment, which include surgery, radiation, and chemotherapy. The article also highlights the side effects of the therapies and their associated survival rates. The methods of treatment depend on the type of cancer, age of patient and stage of the disease (Siegel et al., 2012). From the article, it is evident that all cancer treatment methods aim at eradicating the cancerous cells to ensure survival of the patient. These findings are in line with the lessons from this course that the surest way of combating cancer is to get rid of all abnormally dividing cells.

#### References

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