Khushi Borikar

Mr. Speice

Biological Chemistry

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**The Foundations and Fundamentals of Being a Biochemist**

**Research Assessment 1**

**Works Cited**

“Biochemists and Biophysicists : Occupational Outlook Handbook: : U.S. Bureau of Labor Statistics.” *Bureau of Labor Statistics*, 13 Apr. 2018, www.bls.gov/ooh/life-physical-and-social-science/biochemists-and-biophysicists.htm#tab-2. Accessed 30 Aug. 2018.

“Research Chemist: Job Description, Duties and Requirements.” *Study.com*, BBB Accredited Business,study.com/articles/Research\_Chemist\_Job\_Description\_Duties\_and\_Requirements.html. Accessed 29 Aug. 2018.

“Biochemists and Biophysicists : Occupational Outlook Handbook: : U.S. Bureau of Labor Statistics.” *Bureau of Labor Statistics*, 13 Apr. 2018, www.bls.gov/ooh/life-physical-and-social-science/biochemists-and-biophysicists.htm#tab-3. Accessed 28 Aug. 2018.

Biochemistry, as general as it is, focuses on the chemical and physical principles of living things that are found in the natural world. Typically, a biochemist conducts laboratory experiments in basic and applied research. They then are subject to record and analyze their findings in a way that allows them to develop products and processes that improve people’s lives. Because most biochemists must present their findings to various business professionals as well as secure grants and fundings, it seems clear that strong interpersonal skills is highly need in this field.

More specifically, a biochemist finds practical solutions through their findings such as developing new medicines and disease treatments. This is relevant to today’s society of biochemist professionals as they look to new solutions to improve everyday human life. In future research assessments, practical applications like such should be further investigated.

From research previously done, a biochemist is required to have a bachelor’s degree in chemistry. However, surprisingly, the need for a biology degree is not mentioned in various other research documents. Based on this, it is evident that having a strong background in chemistry is highly recommended over having a biological background. Therefore, taking advanced mathematics and chemistry subjects in high school will eventually help in college.

After completing research on the foundations of becoming a well-rounded biochemist, the thought of a biochemist work environment and schedule came about. Most biochemists typically work in laboratories and offices that require minimal amount of travel. Nevertheless, biochemists meet many different business professionals related to biological chemistry such as: bioinformaticians, biophysicists, and biotech researchers. As a result strong interpersonal skills are needed to effectively communicate with these professionals.

Usually these biochemist tend to work regular hours and full time but many must meet deadlines and time-sensitive experiments. Therefore having strong time management skills is a must in this field. In light of such experiments, biochemists must be comfortable with the use advanced technologies such as light and fluorescent microscopes. This also means that learning how to use such instruments with care will be a priority when it comes to mentor visits.

More importantly, the employment of biochemists has been predicted to increase by only three percent in the next few years. This is concerning when envisioning the future outlook for this career. However, after completing extensive research, the mean annual salary for most biochemists is near 80,000 dollars, which is considered higher than average.

The new information gained through this beginning research assessment sets the tone for future research ideas, such as biomolecules and how their involvement in nature affects cellular processes. Now that the thinking process for research in biological chemistry has been initiated, related areas in chemical sciences are worth investigating. This information will be helpful when conducting mentor interviews and visits because it allows for a clear understanding of what biochemists and other related science specialists must do on a daily basis. In the future, the plan is to follow up on this research and synthesize it with the daily vocabulary used by biochemist professionals. In addition, this research journey has arisen new questions about biological chemistry such as: what previously famous experiments have biochemist done that have been proven helpful to people? More analysis will eventually help to facilitate continuous growth in this creative learning process towards biological chemistry.

Links to Annotated Documents

The following documents are annotated through Scribble:

[Document 1](http://scrible.com/s/26IQm)

[Document 2](http://scrible.com/s/2KYSm)

[Document 3](http://scrible.com/s/4eYkC)