

Benjamin Redan

Weinberg Library Award

After consulting with my mentor on which topic to research, I settled on writing about the health-modulating aspects of legumes. An increasing amount of research is being performed on this humble plant, and I thought it would be an interesting and dynamic topic to investigate. This was my first major research topic in the scientific realm, so I thought that I would probably have to tackle this project differently compared to one that involves topics more in the line of the humanities. I knew that this would demand extremely detailed first-hand accounts, in addition to reports of scientists scrutinizing the accomplished research. I then decided that this would be best undertaken by searching mainly for information from communications found in scholarly journals rather than from books.

Upon a suggestion from my mentor, I used databases such as PubMed and ProQuest to get an overview of the information available and how to further refine my search plan. I used a few keywords relevant to my research project such as “beans,” “legumes,” and “disease,” but there were an enormous amount of results, so I was forced to narrow down my search considerably. Since the Weinberg Memorial Library subscribes to the respected American Chemical Society (ACS) group of journals, which are easily accessible via the Weinberg Library’s website, I thought to examine them carefully. After looking at the list of ACS journals, it seemed that their *Agricultural and Food Chemistry* likely contain much of the needed information. Searching using the aforementioned terms, confined strictly to this journal, still yielded numerous results, but definitely not to the degree when searching hundreds of journals simultaneously through a large database.

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It's obvious now, but in retrospect it seemed novel when I realized that I could save time if I found an article high number of citations. This way, I could look at the references used in the article and search specifically for them. I took this route and found a few current review articles; I then made note of which journals these particular articles were citing. This process allowed me to locate specific articles and a few other journals previously unknown to me. Still, I had to learn to quickly review an article by asking myself a few questions such as: Is it within the scope of my project? Is it outdated? Is it descriptive enough? If I did not get affirmative responses to these questions, the article would be tossed aside and I would move to the next selection.

The pertinent articles began to accumulate, and I knew I must stay organized because I would have to consult my collected papers sometime in the future. I decided that since I was reading virtually all of the articles electronically, I would simply create a file on my computer that would hold all of my downloaded PDFs of the articles. Along with my own digital collection, I had a continually growing list of source citations along with a summary of the article and maybe a significant quote I thought I could incorporate in the final paper.

This whole process has proved to be very beneficial to many aspects of my life. I plan on publishing the laboratory research I have done, and many publishers require the author to have done a thorough literature search so that the readers of the article know exactly what previous relevant experimentation has taken place in order to prevent redundancies. Also, during my internship at Sanofi Pasteur, I essentially had to utilize all of the information-seeking tasks I had developed during the length of my class. I applied them by searching scientific literature to discover if there was already information on the particular method we had in mind to use. Even though I was searching for articles that did not coincide with the topic I learned in my class, the

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major skills I learned were completely transferrable and resulted in a satisfying, fruitful search.

Overall, I learned that although there has always been much information available, the normally arduous and tedious process of searching for information can be made drastically easier if the technology is used properly.