

My research paper was written in HDE 117 during summer session I of 2020. The assignment aimed to improve my ability to gather sources, improve my command of writing, and also improve on my ability to create something new from existing information. For this assignment, I included well over 20 references, most of which were primary sources, and redrew all the illustrations. Prior to this assignment, I had never written anything that compared to such magnitude, and had never attempted to write science in a way that required me to both analyze scientific papers and use them in support of a thesis. Even more, the assignment required me to have a strong command of my topic since I was to take information and take it a step further rather than simply restate information.

From the start, I knew I wanted to write my paper on allostasis. I was briefly introduced to this topic during my first quarter here at Davis. However, I did not know where to start nor “what” about allostasis I wanted to write about. And so, I was met with my first challenge: Finding an area of focus general enough to supply me with enough information to write an effective paper but narrow enough to give me a clear direction. Typing “Allostasis” into the search bar yielded hundreds of results discussing several areas within the topic. I was overwhelmed and like any other student struggling, I went to my professor for assistance.

Through email correspondence with my professor, I was equipped with the tools to help me narrow down the scope of the topic. I first needed to familiarize myself with allostasis since I had close to zero knowledge on the subject. Instead of sifting through countless sources, I looked to Wikipedia. Wikipedia was a great start in my effort to build a strong foundation on the subject. I was exposed to many sub areas such as neurodegeneration and allostatic load. Another feature

Wikipedia had that I utilized to get started on my research process was its collection of references. After exploring many key areas of allostasis through Wikipedia's provided references, I chose to focus on allostatic pathophysiology and its societal patterns. This gave me a direction in which I was to take my paper but also areas that would help me refine my searches.

Narrowing down my topic was not the end of my problems. I had to find a way to find appropriate sources and also determine which of the sources to use. There are so many papers out there and to sift through all of them would be impractical. The real challenge here was to narrow down on the ones of potential interest that would really contribute to my paper. Google scholar proved to be my best friend throughout my research process. With its advanced search feature, I was able to narrow down my research due its ability to find articles published within specific years and find specific phrases embedded within the sources. For example, when I was finding articles regarding the pathophysiology of Allostasis, I entered specific phrases like "glucocorticoids and reduced white matter regions" and google scholar would yield a list of relevant sources. Google scholar's ability to search through virtually all scientific journals made it a strong tool in my research process.

With a list of sources and an increased knowledge of the topic, I was able to create an outline of my paper. I then needed to determine which of the sources I wanted to reference. Another weed-out process was needed to ensure I had the references that would contribute best to my paper. So, I developed my own organization method: A chart with three columns separated by main idea, source description, and URLs. I labeled the first column of my chart with the main idea to be discussed in each section. The following columns contained all the potential sources

that could be used. Of course, I did a deeper read on all the sources I had so far and provided the appropriate descriptions to distinguish the sources from each other. This organizational table was an excellent way for me to visualize my paper and all the potential sources I was to use.

Nearing the end of my research process, I shifted from focusing on neurodegeneration as an effect of the allostatic response to focusing on the patterns observed between social classes. With a firm foundation on the subject, I was able to pay a new perspective of mortality through discussing differential social class patterns on the basis of allostatic measurements. At the end, my thesis of my paper was solidified and its purpose was threefold: First, to introduce the reader to allostasis (a process not many people are familiar with and is often confused with homeostasis). Second, to discuss its implications on a person's overall longevity in terms of fitness. Finally, discuss its relevance and quantitative discrepancies among individuals of differing social classes.

Throughout this whole process, I developed a profound appreciation for scientific writing. At first, analyzing existing knowledge and creating an original thesis felt like a puzzle since I had no direction nor frame of reference. However, as I kept researching and working on my outline, everything seemed to slowly fall into the right place. At the end, I felt satisfied on how well these pieces fit together. Looking back now, I can see how the process of research and creating an original thesis can be a long, exhaustive and frustrating process. But at the same time, I can see how such a process can be rewarding. Not only was I able to improve my ability to analyze and write as an academic scholar, I was able to enrich my understanding of science and how it builds

on other scholars' work. At least for me, I had always thought science was an independent process, but now I realize just how collaborative science can be.