



Learning Remote Research Skills during the Age of COVID-19

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Conducting research is a fantastic opportunity for any student interested in learning more about the scientific process or expanding their knowledge in the biomedical sciences. As a rising sophomore majoring in Cell Biology and Neuroscience with a minor in Health and Society in the Rutgers University Honors College, I knew I wanted to expand on my passion for science and public health. The Rutgers Youth Enjoy Science program provided the perfect opportunity for me to engage in meaningful cancer research while receiving personalized mentorship and career development that helped solidify my interests in the healthcare field.

This summer I had the privilege of working with Dr. Sharon Manne at the Rutgers Cancer Institute of New Jersey on a project concerning the correlates and predictors of childhood sun safety in regards to the occurrence of melanoma. Conducting research during the age of COVID-19 is an experience many scientists are learning to deal with, and is an experience that helped me understand the true basis of scientific research. Working remotely allowed me to gain an understanding of the foundation of any research endeavor - good background knowledge and an organized methodology.

Every good research project starts with one simple first step - a literature review. This summer I conducted a systematic literature review, gathering scientific evidence and analyzing current literature in the field to help solidify the validity of the research question at hand. This important first step in any project was a great introduction into the world of research, allowing me to learn proper research methodology, vocabulary, how to format scientific writing, and uncover credible sources - all of which, while done virtually, was integral to determining the success of any future research we hoped to conduct on childhood melanoma occurrence.

Learning how to use digital resources and work remotely to put together a literature review allowed me to set the roadmap for the rest of the project, helping to find scientific evidence that could support the research question and to determine proper methodology.

Remote research also presented the unique opportunity to be able to collaborate with other doctors and scientists in the lab that would not be possible with such speed and ease otherwise. Our group used collaborative digital documents in which real-time work could be seen and constructive comments and edits could be made. These not only allowed me to communicate with my research mentor, but also learn from and receive suggestions from other colleagues in the field that were more available virtually than had we been in person. The remote setting of the research also allowed for more frequent team meetings during which everyone was able to come together and coordinate and receive feedback on their work.

The communication and teamwork skills I gained while conducting remote research are things I will take into my academic career, as well as any future research I do this summer and beyond. Learning how to use the vast database of digital resources available to create the foundation for our project provided me with a thorough understanding of what it means to conduct research and formulate an informed hypothesis. While many believe remote research is the consequence of the COVID-19 pandemic, I would argue that it has always been an integral part of the research method. Learning these skills early on in my research career has made me appreciate all the work that happens before one can even enter the lab.

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