



JIFSAN Internship

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Internship Site

My internship took place at the the FDA Center for Food Safety and Applied Nutrition, located in College Park. In the CFSAN building there are many divisions of the FDA, including the Division of Microbiology. This division, which includes my lab, is focused on gaining a better understanding of how food borne pathogens survive and spread throughout outbreaks.



Issues

The main issue my research focused on was investigating the growth and behavior associated with the Listeria monocytogenes. L. monocytogenes is one of the deadliest pathogens with a 25% mortality rate. Understanding its growth and behavior is important to understand how it spreads and survives during an outbreak. Since the FDA can not test all foods on the shelf, they must work backwards when an outbreak begins. Having a strong foundation on how these pathogens spread and survive help the outbreak team trace back the source of the outbreak better.

Activities

My main task was a Listeria survival study that looked at how Listeria grows and behaves of strawberries and blueberries. For this project I artificially contaminated the strawberries and blueberries and stored them in either cold or frozen storage. Every day I would sample the levels of Listeria still surviving on the fruit to determine how long the bacteria can live on different foods. Many things have changed since the COVID outbreak began, but I have been able to keep working remotely. Although I can not pull samples and do hands on lab work, I have transitioned to doing more bioinformatics and data processing.

Impact

CFSAN and the research done in the Division of Microbiology is crucial for preventing future outbreaks. It is important to understand how these pathogens spread and survive to make sure our nations food supply is safe.



Future Work

I have been working at the FDA since May 2019 and signed to stay another year until May 2021. Moving forward, we will be wrapping up the berry project and focusing on more data analysis, PCR, and genome sequencing.

Acknowledgements

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