Post Enrichment Report - International Feline Retrovirus Research Symposium

I traveled to Bristol, United Kingdom in October to attend the International Feline Retrovirus Symposium (IFRRS) and to present a scientific poster on the work I have been conducting in Dr. Sue VandeWoude’s lab. The honors enrichment grant helped to pay for my travel to this conference and this was an important opportunity for me to learn from fellow virus researchers and to get the experience of attending a scientific conference. I was able to network with researchers and this was a great opportunity for me to listen to presentations from researchers who have made a great impact on the field of feline retroviruses.

I attended many presentations from researchers presenting case studies, recent findings, and literature reviews. One presentation that I attended was presented by Dr. Hofmann-Lehmann, a very influential researcher in this field. Her talk titled, “Feline Leukemia Virus Infection: New Advances in Diagnosis” was extremely informational for me since my project is based on feline leukemia virus (FeLV). Dr. Hofmann-Lehmann spoke about the importance of classification of FeLV infection outcomes. There are many disease outcomes in FeLV infections and some of them can be very important for the transmission of the virus. Cats that are latently infected have shown evidence of reactivation of the virus, and it is these cats that can subclinically transmit FeLV to other cats, thus representing an important route of transmission. Additionally, Dr. Hofmann-Lehmann also illustrated the importance of understanding what factors can lead a cat to have increased chances of contracting FeLV. It is important to understand a cat’s lifestyle prior to testing or vaccination to limit the spread of FeLV in the future. This presentation was extremely relevant to my project in that it helped me validate the diagnostic techniques I had used during the data collection phase of my project.

Another presentation that I attended was presented by Dorothee Bienzle and was titled, “Programmed Death Molecules in Chronic Viral Infection”. This presentation overviewed the immune response during a chronic infection, for example a retrovirus infection. Antigen specific T-cells are very important for eliminating cells that are infected with viruses. However, in chronic viral infections these cells are not activated and thus infected cells are not killed. Bienzle specifically discussed PD molecules which are found on the surface of T-cells and when over expressed, these receptors can lead to T-cell exhaustion and lack of T-cell availability to eliminate virally infected cells. There is clinical research being performed to evaluate the efficacy of blocking PD molecule interactions as a therapeutic solution in animals with cancer or chronic viral infections. This presentation was very interesting and helped me to understand the molecular steps that are required to not only establish a chronic viral infection but potential ways to cure an animal of a chronic infection. I gained a better understanding of FeLV and its establishment of a chronic infection during this presentation.

I also learned a lot during the presentation of my own scientific research poster at this conference. Being able to present and discuss my research findings with researchers from around the
world helped me to realize not only the importance of my work but also how to communicate with individuals on a higher level. I was able to talk to people who had a deep understanding of FeLV and that provided me with the opportunity to ask them questions about my project and to receive critiques on my presentation techniques and research findings. I ultimately learned a lot about myself as both an individual and as a researcher at this conference.