Dr. Kimberly Dill-McFarland

Emily Evans, freshman

Listening to and learning from Dr. Dill-McFarland today opened my eyes to what a bioinformatician does and how that work applies to our understanding of DNA. Hearing her story of at first wanting to be a doctor, then going to grad school and becoming a professor, to finally realizing she wanted to work in science, was so interesting. Her work is mostly done on computer as a consultant; she analyzes data and genes using a program she learned by herself. Some of her current studies include working on a tuberculosis study in a community in Uganda, and she is analyzing genomes and looking at why these people are not experiencing symptoms. Another study she is doing is on asthma and hopefully creating more personalized medicine for people with asthma because it is different for everyone. A study that she will work on soon is on COVID, and they are collecting samples from 1,200 people’s lungs. Dr. Dill-McFarland’s work is based on looking at people’s genomes and what they are actively expressing. She then receives data of sample genes and can look at the nucleotide bases to see what could be causing an issue. From our learning, we have been looking at DNA structure and what makes up DNA, and it was really interesting to see how deep she can dive into that with her work. In bioinformatics, she can pick apart DNA and look closely at what nucleotides are expressing to hopefully find a solution, and this was really interesting to me because it showed what we had been learning in an active study towards a greater issue.