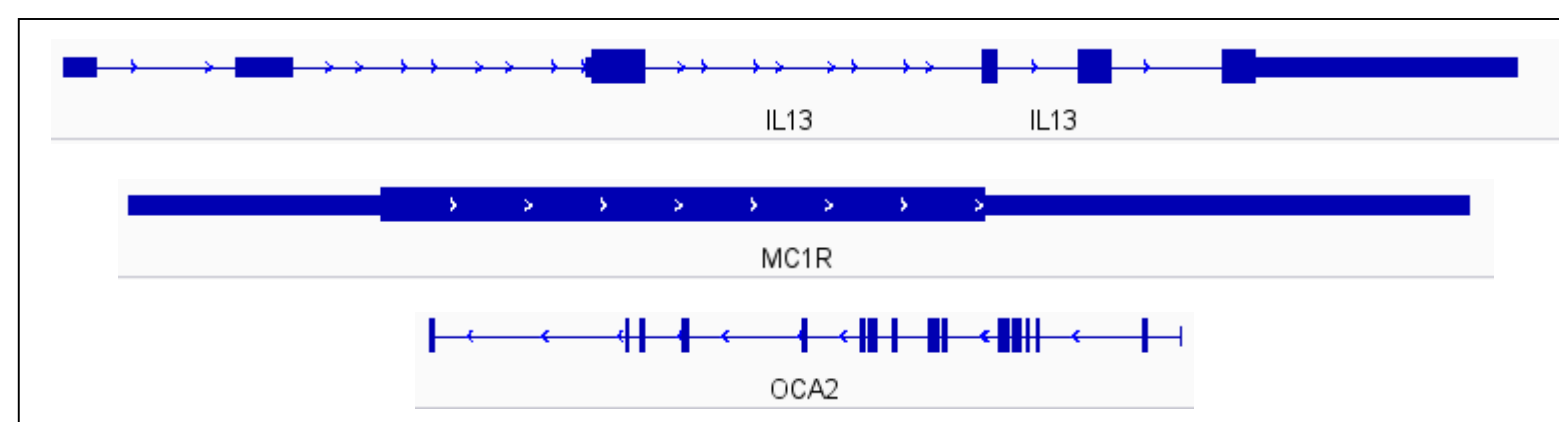


My Genetic Code and What It Says About Me

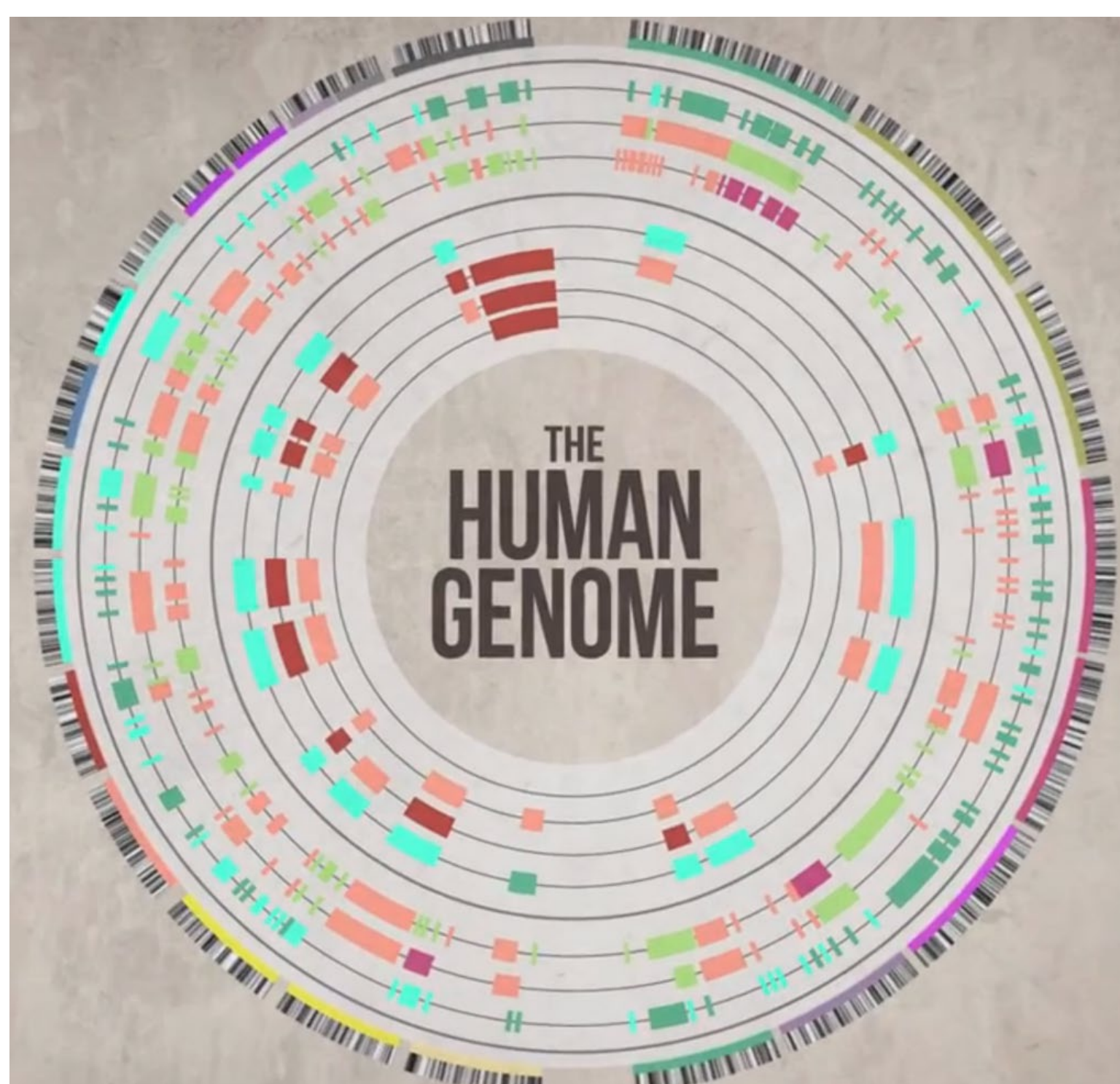
Josiah Lane, UAH College of Science

Overview

- We all have our own unique genetic code and as a microbiology major this is very interesting to me
- This project was about understanding my own genetic code
- A genetic test kit was ordered from Nebula Genetics for both the .4X and 30X tests
- A program was created that allowed for searching through genetic code for specific segments of code that correspond to physical characteristics
- To complete this project, a focus was put on learning Bash and Ubuntu to make a Bash script that could search for genes in Josiah's genetic code
- Bash was chosen because of the ability to use tools such as Samtools to interact with the genetic code files



Several genes relating to asthma, eye color, and hair color



Acknowledgements

Thanks to Ms. Judy Cooper for being the mentor on this project.
Thanks to Dr. Tatyana Sysoeva for advice on this project.
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Results

The program did not yield the hoped-for results, but by using other software, such as IGV, it was possible for the genetic code to be properly looked at in the way initially imagined

Explanation

This project was a small and personal one, but it really shows how far science has come that an undergrad student can spend a summer making a basic program to examine genetic code and use software available for free online to properly examine the human genome

Conclusions

The main takeaway from my experience was me learning more about myself through this project.
This has mostly taken the form of me rediscovering the enjoyment that can come from coding, as well as from looking into genetics