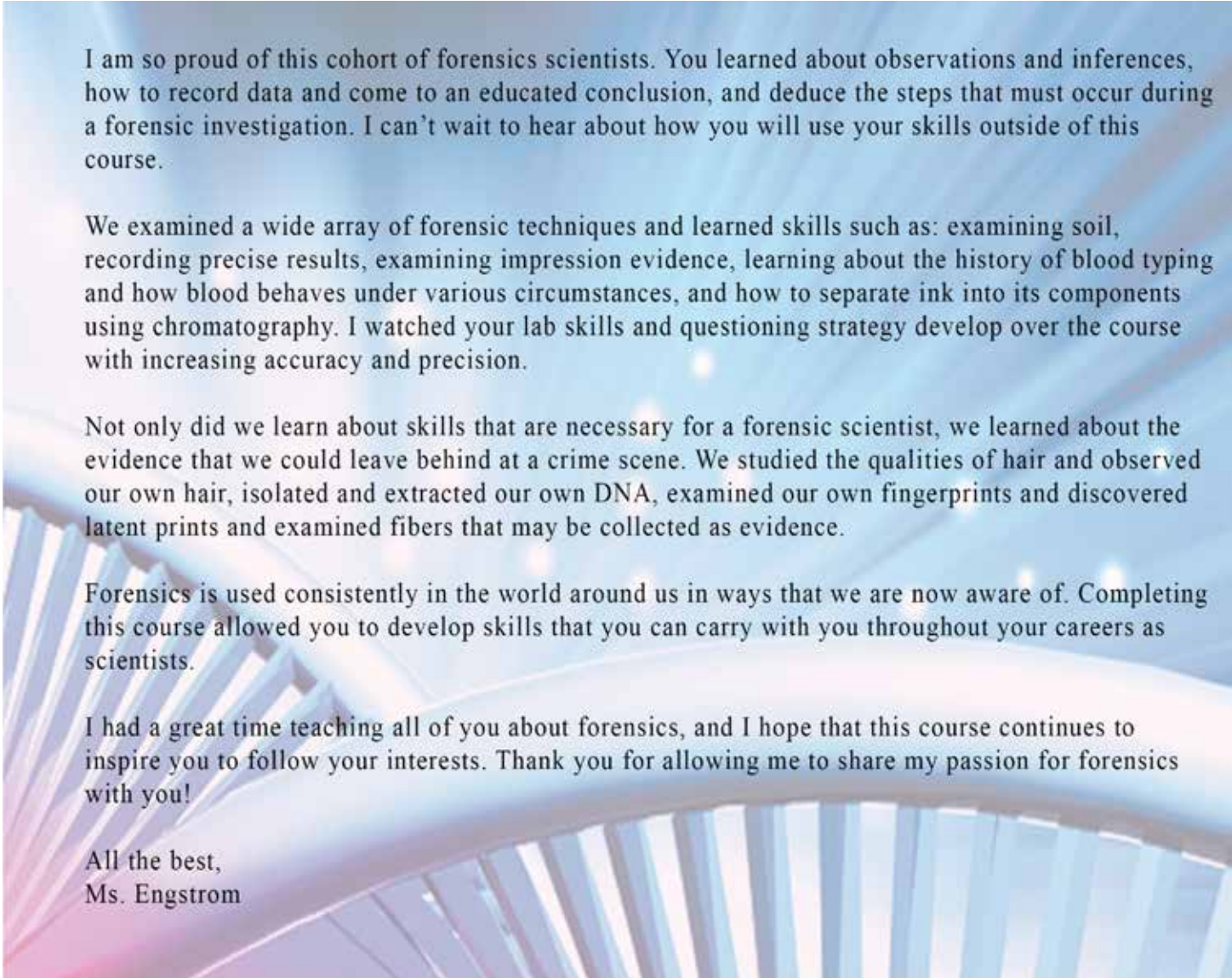




the stars
challenge

Forensics
Fall 2019





I am so proud of this cohort of forensics scientists. You learned about observations and inferences, how to record data and come to an educated conclusion, and deduce the steps that must occur during a forensic investigation. I can't wait to hear about how you will use your skills outside of this course.

We examined a wide array of forensic techniques and learned skills such as: examining soil, recording precise results, examining impression evidence, learning about the history of blood typing and how blood behaves under various circumstances, and how to separate ink into its components using chromatography. I watched your lab skills and questioning strategy develop over the course with increasing accuracy and precision.

Not only did we learn about skills that are necessary for a forensic scientist, we learned about the evidence that we could leave behind at a crime scene. We studied the qualities of hair and observed our own hair, isolated and extracted our own DNA, examined our own fingerprints and discovered latent prints and examined fibers that may be collected as evidence.

Forensics is used consistently in the world around us in ways that we are now aware of. Completing this course allowed you to develop skills that you can carry with you throughout your careers as scientists.

I had a great time teaching all of you about forensics, and I hope that this course continues to inspire you to follow your interests. Thank you for allowing me to share my passion for forensics with you!

All the best,
Ms. Engstrom



We observed handwriting samples for similarities and differences.



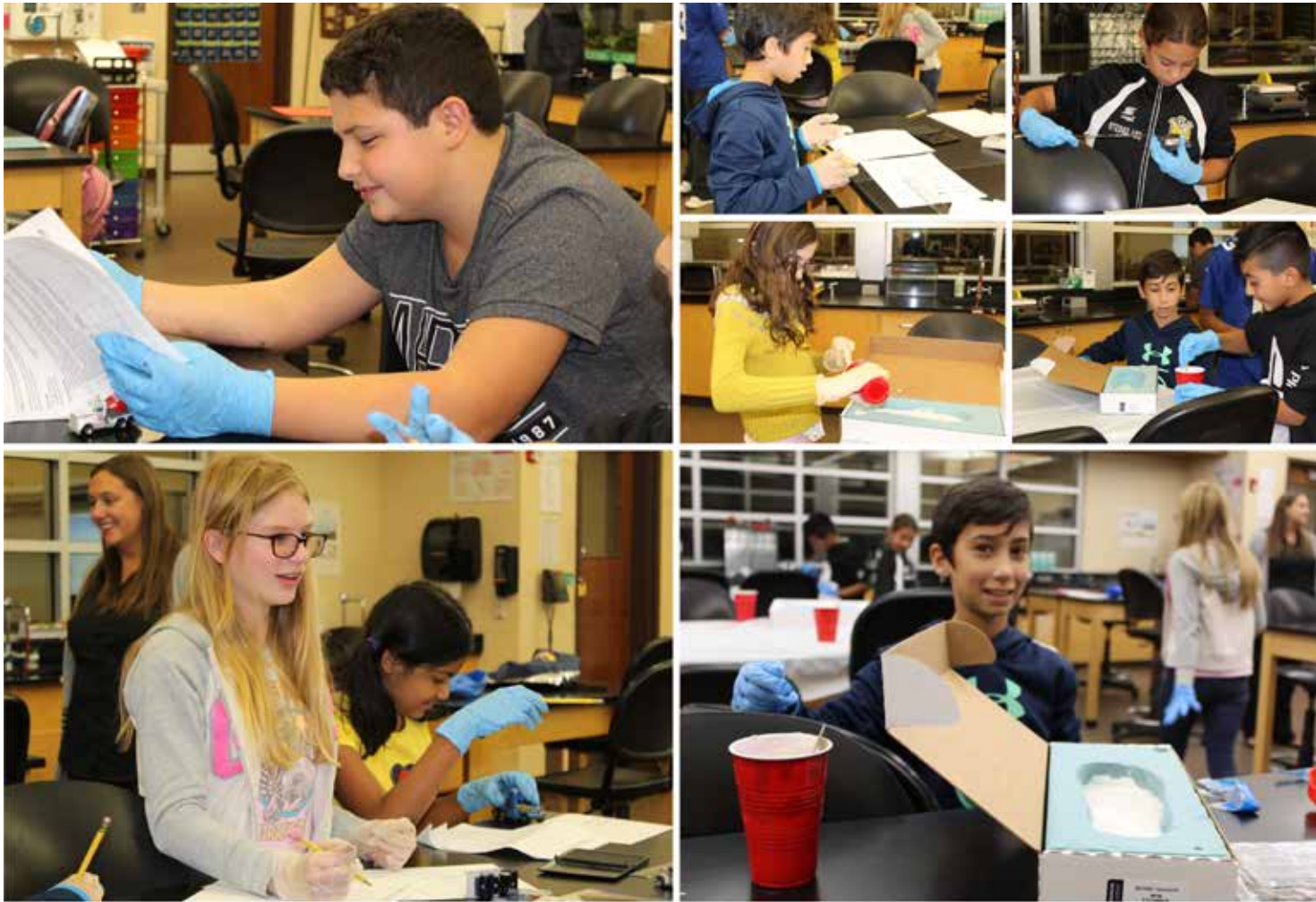


We took a look at impression evidence of car tire tracks. This allowed us to match up known tire tracks to unknown marks.



All tire tracks are unique, and can be matched up to the manufacturer of the tire.





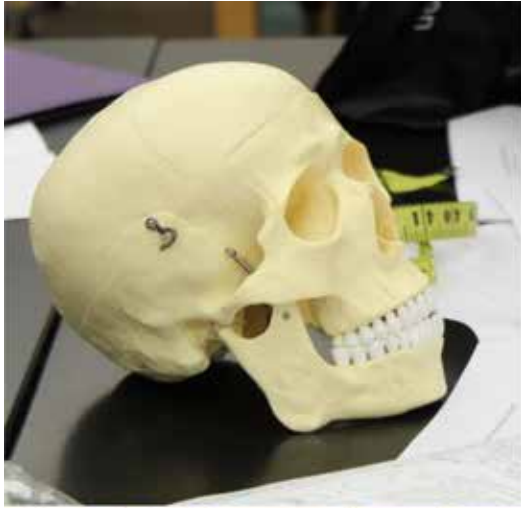
We continued to look at impression evidence by making our own shoe imprints.



We had to wait until the next week to look at our shoe impressions, when the plaster was hardened.



Lets take a look at forensic odontology! We bit wax molds to look at our teeth impressions.



We used our background in forensic odontology to identify the remains by looking at teeth. We also took measurements of bones to determine height of the unknown individual.



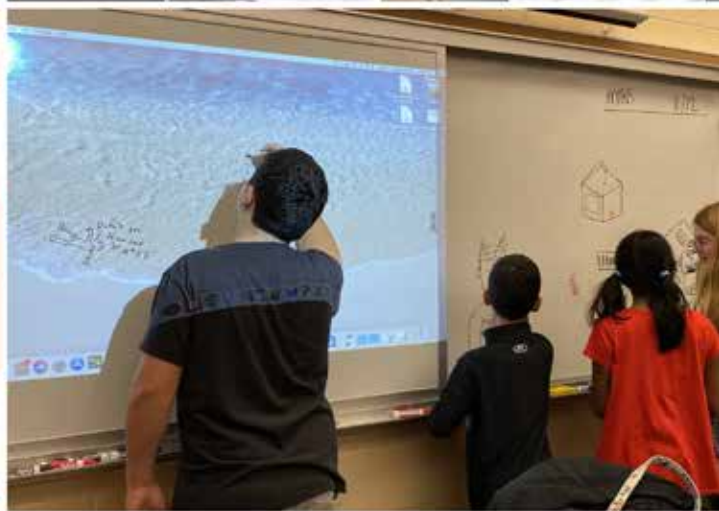
Do these bones match the description of the unknown individual?



We practiced using the microscope so we can study small samples!



The microscope allowed for us to magnify our own hairs, hairs of other animals, and fibers.



We performed a burn test for the fibers. After that, we loaded and performed gel electrophoresis.



Extracting our DNA was so much fun! We used supplies you can buy at home to extract DNA from our cheek cells.



We used magnetic powder to detect our latent fingerprints.



We solved a mystery case that showed everything we learned in Forensics!



