



IT'S MAGIC MONDAY: JULY 6, 2020!

This month we honor a Woman of Mercy who exemplifies that a Mercy Girl is smart, inquisitive, hard-working, and respectful. As Melek Erdinc Sunay '02 works to develop vaccines at the US Food and Drug Administration, she reflects on how it all began in Ms. Rose Clugh's honors chemistry class at Mercy.

Name: Melek Erdinc Sunay '02

Post Mercy Education:

- B.S., Cell Biology and Molecular Genetics, University of Maryland College Park, 2006
- Ph.D., Pathobiology, Johns Hopkins School of Medicine, 2015

Personal and Professional Achievements:

During my time as a student at the University of Maryland, I was in the Cell Biology and Molecular Genetics honors program, where I participated in laboratory research designing and optimizing ways to see bacteria being "eaten" by immune cells in *Drosophila melanogaster* (also known as the fruit fly) with mutations in immune response genes. Since immune response genes are very similar in flies and people, our results gave us important clues about the genes that are important for controlling bacterial infections in people. I received a Howard Hughes Medical Institute Undergraduate Research Fellowship for my research and I graduated with High Honors in my program.

After graduation from college, I became a Senior Research Technician at Johns Hopkins where our lab studied ways to alter the body's immune response to make heart transplants last longer. In 2008, I was accepted in the Ph.D. program in Pathobiology at Johns Hopkins School of Medicine where I studied vaccines to treat breast cancer. In 2015, I went to the United States Army Medical Research Institute of Infectious Disease for my post-doctoral fellowship. There, I had the amazing opportunity to work with a team of scientists on studies to support the development of the very first licensed vaccine to prevent disease caused by Ebola virus. This vaccine has been monumental in controlling the ongoing Ebola outbreak in the Democratic Republic of the Congo.

Recently, I began a position in the Pharmacology/Toxicology Branch of the Center for Biologics Evaluation and Research at the US Food and Drug Administration (FDA).

I have a wonderful and super supportive family- my husband, Cagatay, and two children, Nehir and Erhan. We enjoy sailing and our farm animals.

Please share your favorite Mercy memory.

I have so many fond memories of my time at Mercy. My favorite Mercy memories were being in the Footlighters' productions. While all were memorable, my favorite was *Radio TBS* because my wig fell off in the middle of a scene by accident and I was on stage in just my wig cap! I had to maintain my composure through the whole scene looking bald until I could go backstage and fix my hair.

Were there any Mercy faculty members who especially impacted your life? Why?

Ms. Rose Clugh really impacted my life by pushing me to work hard in chemistry class. She set high standards and helped us realize our potential to reach those standards. The discipline that I learned in her class really prepared me for my undergraduate science classes. After graduation, she sent me a card with beautiful words of encouragement that I will cherish always.

Through our Honors coursework in Ms. Clugh's class and others like it, as class president, and as a member of the Footlighters, I learned to effectively, eloquently, and most importantly, respectfully communicate my thoughts and opinions. This has been a vital asset in my career where the ability to effectively communicate your scientific idea is just as important as the idea itself.

Were there any classes you took at Mercy that stand out to you?

Sr. Carol Wheeler's philosophy class really stands out as a special class for me because, while challenging, it helped my writing skills immensely.