



Dentist for a Day

Hope Miers College Park Scholars – Science & Global Change Program Chemistry

hmiers@terpmail.umd.edu College Park Scholars Academic Showcase, May 6, 2022

Introduction:

Every six months you realize its time to go for your semi-annual cleaning at your dentist's office. I've been in the patient's seat for many years, but what would it be like to be the dentist instead?

Activities:

I shadowed and occasionally got to assist Dr. Niesen throughout two weeks and was able to observe many different dental procedures on various patients, including:





A patient room, including a dental chair, air filtration device, and 2 sets of instruments.

Site Information:

Paul R. Niesen, DDS

7 Russell Ave, Gaithersburg, MD 20877

Dr. Niesen and his staff aim to deliver high quality care to informed patients in a compassionate environment with the highest standards of excellence.

Patient Care:

During my time shadowing, I got to see many different types of patients; some loved the dentists and had no problem getting teeth pulled while others were terrified and required laughing gas for a simple cleaning. I learned a lot about how important it is to cater to your patient to make it the best possible experience for them.

- The making and delivery of a dental crown
- Extraction of a tooth
- Hygiene cleanings
- Limited Oral Examinations (Emergencies like a broken tooth, crown that fell off, etc.)



Dr. Niesen and his dental assistant, Kaylee, working on a patient.

Dentists do what?:

The craziest thing I learned while shadowing a dentist would be that there's a ton of art involved. After crafting and firing an implant or bridge (aka fake teeth), Dr. Niesen painted the teeth with special glazes to make them look more realistic. For instance, teeth tend to be more yellow at the gumline and a bit transparent at the ends. Painting allows us to give the patient a perfect smile!

Technology in Dentistry?:

Unlike what many people believe, being a dentist does not just entail cleaning teeth all day! A common procedure Dr. Niesen did at his practice was the making and delivery of crowns. Crowns are essentially a cap for your tooth that is required after a dentist drills out a section of your tooth (usually in case of a cavity). This "cap" is made using 3D imaging and an in-office milling machine and oven. The whole process is incredibly unique to the patient in order to give them the best possible outcome..

Future Work:

I hope to attend dental school after getting my degree here at UMD and after that become a practicing dentist myself!

A picture of me in my scrubs.



Acknowledgments:



Thank you to Dr. Niesen, his amazing staff, and wonderful patients for allowing me to shadow in the dental office. Additionally, a big thank you to my CPSG professors, Dr. Holtz & Dr. Merck.

