

Milan:

In December of 2019, I had the opportunity to travel to Milan, ~~Italy~~Italy, and shadow doctors at Ospedale Niguarda Ca' Granda, Italy's largest public hospital. Not only was this an ~~great~~ **exceptional** clinical experience, but it also ~~taught me a lot culturally~~ **demonstrated the significance of cultural competence** as this was my first ~~time intraveling abroad, a different country~~. I spent a couple weeks with doctors in specialties such as general surgery, otolaryngology, and oncology. I witnessed the differences in how they operated as a public healthcare system ~~compared in contrast~~ to the United States healthcare system. I also learned the differences in their medical education paths ~~and the lower pay grade for doctors that work in countries with public hospitals~~. The most meaningful part of this experience was the opportunity to ~~observe~~ **watch an** ~~complete~~ eight hour kidney transplant. It was an ~~amazing~~ opportunity to see how the entire surgical team worked together, starting from harvesting it from the donor patient, preparing it for the next, and then planting it into the receiving patient. Some other experiences included gastric bypass surgery, several otolaryngology surgeries, and being involved in the ~~difficult particularly challenging patient~~ **conversations of-for oncologic patients. oncology**. Throughout this experience I ~~was humbled by the opportunity had the honor~~ to wear a student white coat while ~~walking rounding through the hospital~~ as part of the healthcare team. ~~I was~~ filled with feelings of respect, honor, and duty that come with wearing a white coat.

Rosebush:

Working at Rosebush Manor, a rural assisted living facility, was my first experience ~~with direct patient care, working directly with patients~~. I learned how to administer medications and assist residents in doing ~~activities of daily living activities~~ such as transferring, bathing, and eating. I also cared for a few residents while they were in hospice ~~care~~. Some of the other skills I learned included taking vitals and how to ~~deal manage with the challenges associated with~~ **noncompliant** residents. ~~The facility~~ was located in a rural underserved community in which there were not ~~effective extensive~~ resources or ~~certified~~ staff. I witnessed many events that are prevented by sufficient funding and appropriately trained healthcare workers. ~~There For~~ ~~instanceinstance~~, was a wheelchair bound resident who we would ~~often locate find~~ outside at the top of the ~~stairs, in her wheelchair~~. Another resident who used a walker, due to obesity and ~~advanced~~ age, would frequently escape, ~~relying on her previous memories to guide her heading~~ towards her previous home. One time she made it out to the lawn and ~~suffered a fall before staff could reach her, fell face first before I could reach her, I was not properly trained on how to handle this situation and there were no lifts to help assist the resident which led to me severely pulling my back. There was only one other petite staff member there. Needless to~~ ~~saysay~~, it was an extreme difficulty getting the wounded resident back to safety without the assistance of proper equipment. ~~Along with learning the value of proper equipment, I learned the importance of using a buddy system with obese patients. Working in such an underserved facility further~~ motivated me to serve in a similar community **in the future**.

Masonic:

Commented [EF1]: For each of the titles below, be sure to be descriptive in the title in order to demonstrate to the reader what the experience may be about from the title alone.

Commented [EF2]: I think we can leave this part out as it does not necessarily add too much to your message. You might also elaborate on the difference in the medical education, etc. in order to enhance this aspect.

Commented [EF3]: Let's strive for a more powerful adjective here of which may encompass your attitude or emotion towards this experience.

Commented [EF4]: Perhaps here we can also make the connection of the pride that may come associated with potentially receiving your own white coat or if this experience allowed you to long for your own white coat one day.

Commented [EF5]: Non-compliant with what exactly? Be specific.

Commented [EF6]: This part is a little ambiguous. What do you mean by this? What events?

Commented [EF7]: You might elaborate on the potential danger this causes.

Commented [EF8]: I think we can eliminate this element to allow space for other reflection.

Commented [EF9]: I think we can change the tone of this sentence such as:

"Despite not having extensive equipment available at the time to aid in an instance like this, I certainly grew to appreciate what I did have in that moment."

Something like this in order to allow a more positive tone for the piece.

Commented [EF10]: I think we can reflect on even more general lessons – building rapport with patients, patient care, limited resources, hard work, etc.

Working as a Certified Nurse Aid (CNA) at Masonic Pathways, a short ~~term~~ and long term healthcare facility taught me the immense power of teamwork. I learned the importance of working with other CNAs, nurses, doctors, and therapists to care for rehabilitation patients, patients with mental and physical disabilities as well as care for patients with problems such as, dementia, assisted breathing, and hospice care. Working in these units I was able to ~~learn~~ build my knowledge and skills from a multitude of diverse experiences. For instance, the dementia unit helped advance my skills in managing the challenges associated with non-compliance, dealing with noncompliant patients. Some residents lacking orientation to person or place, not knowing who they were or where they were, wandering residents, or highly aggressive residents ~~forced~~ allowed me the unique opportunity to learn various techniques when caring for dementia residents. These techniques included ~~remembering these patients are unaware of their actions,~~ reassurance, using nonverbal cues, redirecting, how to physically defend myself, and various interpersonal communication skills and mechanisms to deescalate ~~ing~~ intense episodes. I gained a new perspective on life by seeing the end of life and through observing the struggles that are faced with when approaching the end of life care. I also gained a new appreciation for what I have in life and it gave me a strong desire to help those ~~that cannot~~ who may not have the ability to help themselves. Finally, I was able to ~~create~~ enhance my networking skills with other medical professionals, with the doctors that visited Masonic, which led to me being able to work with them in several other medical settings.

Commented [EF11]: Perhaps we can say something about this reaffirming your interest in medicine.

Foot Clinic:

Working as a director of nursing home activities, scribe, and Certified Nurse Aid (CNA) for The Foot and Ankle Institute has ~~taught me~~ demonstrated a new perspective of medicine. Although I do work with patients alongside the doctor, this role mainly consists of the work that occurs before and after a patient is treated. I have gained administrative skills in medical paperwork, billing, insurance, and scribe work. I learned how to use electronic medical records by entering patients and their notes into the practices Practice Fusion program. Additionally, I work with three different doctors which has exposed me to their different personalities and how they each interact differently with patients. Furthermore, I oversee the business and scheduling aspect of the clinic, specifically for all 12 nursing homes that the clinic works with. This job is my first time being a scribe for doctors which has included taking notes about history, diagnoses, treatments, and progress. I then input all this information into the system and organize it so the doctors can use their time efficiently and effectively to treat their patients. Being involved with the business side of this practice has allowed me to have a well rounded understanding of the daily duties of a physician.

Commented [EF12]: I think we can be a little more specific with this. What does this entail exactly?

Commented [EF13]: You might reflect on how experience with medical documentation will help you in the future as a medical student and future physician.

Shadowing OR:

My first surgery shadowing experience was at the Gratiot County Hospital in Alma, Michigan in 2019. This, unfortunately, has been ~~paused~~ postponed due to the current pandemic, but I hope to ~~get back to it if the pandemic allows me to~~ resume in the near future. I shadowed primarily a podiatrist, ~~mainly~~, but also witnessed other types of surgeries in gastroenterology and ophthalmology. I observed how a surgical team worked together to enhance patient care, ~~help~~

~~the doctor perform a smooth surgery.~~ I frequently had opportunities to converse with the anesthesiologists about their role and ~~view~~ how they treated patients. While shadowing, I ~~watched-observed~~ amputations, various types of cyst removals, ligament repairs, ~~broken bone~~ ~~fracture~~ repairs, x-rays, colonoscopies, hernia repairs, cataract surgeries, ~~and among~~ more. ~~Interestingly, it was common to see my prior nursing home patients come in for surgery.~~ I loved being a part of a connection in the medical field where a patient receives multi-disciplinary medical care. Additionally, when something unexpected occurred during surgery, I watched ~~intently~~ as the doctor and team worked together to find a solution. The doctor I shadowed always had a good attitude and believed in himself to get the job done. His confidence and teaching abilities ~~left a big impact on me~~ and led us to creating a good relationship. ~~He eventually hired me to work in his clinic the following summer.~~

Commented [EF14]: How so? Be specific.

Commented [EF15]: I think we can use this last sentence to really reflect on how an experience like this will help you for the future.

TKE:

I worked directly as a volunteer with the Tau Kappa Epsilon (TKE) organization on Alma College's campus to promote their work with their philanthropy, St. Jude's Children Hospital. The TKE organization holds many fundraising events throughout the year in which I ~~helped assisted~~ with the planning and execution ~~of components~~. Together we raised over \$1,000 at the annual St. Jude car wash in 2019 ~~by through~~ advertising and ~~helping clean cars~~ ~~volunteer work~~. St. Jude's is a great organization that makes a difference in the lives of so many children and their families. ~~When most people think of fundraising for such a large organization and cause, their first thought is to do so in a large city where there are more people and therefore more chances in donations. While this is very true,~~ I found that ~~upon once you raise raising~~ awareness in a rural community like Alma, people are willing to ~~chip in for a good~~ ~~donate to~~ cause like St. Jude's Children Hospital. ~~Even though the funds raised will not be nearly as close to funds raised in an urban location, it is still something going towards a worthy cause.~~

Commented [EF16]: I think we can use this last experience to reflect in general –

Why is this experience important to you? What is its relevance?

GCHH:

My first volunteer experience in college was at the Gratiot County Hope House ~~where that they~~ provides shelter and security for the homeless community. GCHH offers a safe ~~place for people to stay~~ ~~shelter, eat a meal~~ ~~meals, and support.~~ ~~have a friend or person to confide in, and receive help.~~ ~~It~~ has been an eye opening experience to see the struggles people go through in a rural community so close to where I grew up. ~~Homelessness is most visible in urban areas and is not seen as much in rural areas, leading to there being very minimal options for shelter.~~ As a volunteer, ~~I served as an ally and someone they could talk to. there was not much I could do for them other than be there as a friend, have a meal with them, or play a game with them.~~ ~~Although~~ ~~While~~ it ~~does may~~ not seem like much, it ~~often~~ meant a lot to the people I interacted with. One of the residents had lost his wife and kids in an accident, ~~causing him leading~~ to have depression and ~~leading him to have a~~ drug addiction. Being in this state ~~took over his entire livelihood~~ ~~consumed him,~~ ~~causing him to lose his job,~~ ~~leading to unemployment and homelessness.~~ ~~followed by his house and most of the rest of his belongings.~~ He was normally

Commented [EF17]: This may not be entirely true so we might delete this part.

quiet, but I ~~slowly progressively made an effort~~ tried to get got to know him, ~~and even got him to play some games.~~ After playing a game of air hockey, he looked at me and thanked me for making him laugh as he had not felt that type of joy since he lost his family. This made me very emotional and humbled to know that and glad that I could impact one person's life ~~like that to that extent.~~ I learned how small actions can make a large impact on someone's life and ~~to not to~~ judge someone based on their ~~current situation~~ circumstances in life.

Pre-med/Premed Club:

~~The hours I listed for this club are the hours I've I have~~ spent nearly 50-60 hours in participation for this club, participating in it (50-60 hours). As a member of this club, I have also volunteered for about 4-6 hours in the community. My freshman year of college I joined Alma Colleges Pre-medicine Club. This was the first year of the club and I have been a part of it since its initial founding. At the start of my junior year, I became the public relations chair. I volunteered through this club to help the Gratiot County Hope House by making mini first aid kit packages for the residents. Additionally, we have mentors between the upper and lower classman to help guide the premed students through their undergraduate years with educational path advice, nearby clinical or job opportunities, and MCAT resources. ~~It helps to know a student who has already been down the pre-medicine road who can give advice and answer any questions.~~ Because ~~Due to the fact that~~ Alma is small, it is also common to have a lot of the club members in many of your classes, so it allows us to get to know other students well and get to work with people who have the same similar goals, ~~in mind.~~ The club also has several medical school representatives that come in throughout the year to present about regarding their medical schools. I find these presentations to be very valuable because we learn what that medical school is looking for in students as well as, what they offer the school's strengths and expectations, ~~and their mission to see if we are a good fit for them.~~

Commented [EF18]: Why is this experience important for the future?

Honors Chemistry Club:

The hours listed for this activity is primarily for club participation (50-60 hours). I have additionally also accomplished about 8-12 hours of volunteer work through this club. I was initiated into the Honors Chemistry club after being a member of the Chemistry Club for two years for success in my chemistry coursework. Through this experience I was elected to a position, titled Science Blow-Out Mini, my sophomore year. Holding this position, I was partly in charge of planning and directing a youth science fair called "Science Blow-Out," an event ~~that the~~ club holds at the college for nearby elementary students. I was tasked with planning the activities for the fair, scheduling members to present chemistry shows, and working with Alma College ~~for to arrange~~ the venue, date, and approval of activities. Also, the club has weekly meetings where small chemistry lessons are taught or trivial chemistry questions are asked to ~~continue encourage active learning in to actively learn~~ chemistry. ~~Last semester was the first semester that I had not taken a chemistry course.~~ Even though the chemistry lessons are small during meetings, it is nice to stay actively involved with learning chemistry.

Commented [EF19]: Be sure to talk about what you learned and reflect on the experience as a whole. You might also choose to discuss its relevancy for a career in medicine.

Fitness Club:

I was one of three people that started the Alma College Fitness club in 2019 and became president of the club in 2020. I was involved in the creation of the club's bylaws, goals, and activity planning. I worked directly with the club's advisor to set meetings, develop workouts, diet plans, and schedule gym time for the club. I was ~~also also going to be~~ responsible for meeting with youth groups in surrounding areas to present proper nutrition and exercise information. Obesity is significantly higher in rural areas, so I made it a goal to inform the local youth about being healthy on a budget and with limited resources in a rural area. I partially ~~take took~~ on this role thanks to my mother. My parents always encouraged organic, rather than processed, food growing up ~~and. A fun fact about me is that~~ I did not try fast food until the age of 20. ~~Anyways, when I was in elementary school my mother would dress up in a large carrot costume and bring vegetables in for the class to try while she informed them of the benefits of eating healthy.~~ Being raised with a eating-healthier lifestyle, I want children to be well informed of their nutrition options to help enhance their overall well-being. Unfortunately, with the current pandemic, ~~starting in 2020~~, we had to put a hold on lifting and presenting to the youth since these activities involve ~~being in~~ large groups, but we plan to start back up when conditions allow.

Commented [EF20]: I think we can eliminate this since it may take away from the central message and purpose of this activity entry.

IGEM:

At the start of my junior year, I joined Alma College's International Genetically Engineered Machine (iGEM) team. This is the second year that they have competed in the annual Giant Jamboree, which was deemed the largest synthetic biology innovation event in the world. This year we took the gold medal for our soil clean-up project. There are chemicals that pollute the Pine River, as well as the groundwater and soils ~~around surrounding~~ it. Federal and state agencies have been trying to clean up the area for years, but it costs millions of dollars and ~~tons~~ an immense amount of time to do so effectively. We are looking to help make this project more efficient and cost friendly. We are developing a bacterium that will be able to ~~determine indicate~~ the severity of toxicity in soil and water by glowing red. This biosensor could save the Environmental Protection Agency hundreds of ~~thousands of dollars or even millions~~ a significant amount of money annually. We are also planning to develop a new way to break down DDT, dichlorodiphenyltrichloroethane. I have helped in the wet lab with creating new specific DNA sequences via a plasmid to enter into our bacterium for it to glow red and function correctly. I hold this experience to a high regard ~~love what the club is doing~~, and it means a lot to me that we are helping the environment around the school, especially since Alma is ~~not too~~ far from my hometown. I ~~cannot wait to see~~ eager to see how this project turns out over the next year to see what we can accomplish as a team.

Commented [EF21]: You might link this research and research in general to medicine as well.

Bird Research:

My first research experience at Alma College was avian related. Growing up, my dad and I were always interested in birds. Once I saw an opportunity to study birds in college, I could not turn it down. I worked directly with the biology professor in charge of avian research where we

captured birds in the field, banded them, collected their size and sex, and then released the birds. I really enjoyed being able to work outside and ~~be participate~~ hands on with the birds we captured. This progressed into a Spring ~~Term term and as well as an~~ independent study spent solely on expanding my knowledge of birds, ~~as well as in addition to~~ collecting and analyzing data. ~~_with the same professor.~~ Through these experiences I am able to identify, name, and sex birds by seeing them or hearing their call. I gained knowledge on migration patterns, bird habitats, and the threats associated with bird habitats. The independent study is just getting started this semester ~~and we.~~ ~~We~~ plan to go ~~through synthesize~~ data collected from ~~a few~~ surrounding areas to compare the sexual size dimorphism of wing length in 28 local bird species to literature values of these sizes. We are also interested in viewing the overhang of small males and large females to see if there is a defining size gap between males and females in certain local species. ~~So far far,~~ I have learned how to conduct a Welch T Test which is used to collect numerical statistics from two samples that are different in number of participants. ~~We~~ plan to publish a scientific paper containing our findings.

Commented [EF22]: What other qualities or attributes have you acquired from this experience?

ABC:

I received an internship opportunity at Advanced Battery Concepts (ABC) in the research and development department. ABC focuses on recyclable battery research and the development of lead acid batteries. I worked in a lab alongside senior research scientists and experienced how their job required them to also work alongside production line workers, engineers, and executives. I learned a variety of lab techniques such as the specific gravity of acid, moisture content, free lead, optical microscope imaging, report creation, and tool innovation. I am most proud of my work with the Scanning Electron Microscope (SEM) because ~~of its complexity and limited training offered for this. only one person in the lab know how to do it and they chose to train me.~~ I learned how to prepare samples, use the microscope to take pictures, analyze the results, and write a report. I also got to successfully work with a team to reach a common goal. I am proud they invited me to continue my internship in the Summer of 2021.

Commented [EF23]: How will this experience help you either in medical school or in a career in medicine?

Urgent Care:

My first shadowing opportunity was ~~under a with a~~ Physician's Assistant (PA) at the Mission Urgent Care in Mount Pleasant, Michigan. I was able to ~~see observe~~ the job responsibilities of a PA, understand the basics of family medicine, and learn about the illness trends they ~~analyze~~ ~~manage from~~ year to year. It was interesting to learn the annual common flu-like symptoms that patients ~~showsuffer from~~. I started to ~~know connect~~ a patient's diagnosis when they came into the office based on their symptoms. During this experience, I also ~~watched witnessed~~ diabetes check-ups, physicals, and drug tests. I also viewed various other types of ~~health states consults or referrals~~ where the ~~PA physician's assistant~~ would recommend the patient ~~to see~~ a specialist because it was ~~not something the out of the realm of an~~ urgent care. ~~could treat or specialize in such as mouth cancer from smoking, strange persistent rashes, and broken bones. A physician assistant is trained to serve under a doctor, but is still trained in some similar aspects of medicine, so I had experiences similar to as if I was shadowing a physician. One bonus advantage~~ of this experience was viewing a physician and physician ~~assistants assistants'~~

| relationship as part of the medical team as well as ~~and~~ how they worked together as a team to provide the best care possible.

