



Fourteen Medical Student Voices

M1 Students React to COVID-19: Feeling Helpless, Seeking Knowledge, and Becoming Empowered

by Bruce C. Campbell, MD

Medical students, like most people in healthcare, are bombarded with questions about the novel coronavirus. Families, friends, Facebook acquaintances all want to know what to do. A group of MCW educators filled in the gaps.

On May 15, 2020 – while students were banned from attending in-person classes and ten days before George Floyd was killed in Minneapolis – medical students from all three MCW campuses joined together virtually to hear presentations on the current state of knowledge about SARS-CoV-2. The session was designed by [Mark McNally, PhD](#) (Associate Professor of Microbiology & Immunology), [Sandra Pfister, PhD](#) (Professor of Pharmacology & Toxicology), and Kern Institute faculty and staff to be interactive, innovative, interesting, and relevant. The session included clinical and basic science presentations.

- [Jayshil Patel, MD](#) (Associate Professor of Medicine – Pulmonary, Critical Care and Sleep Medicine) presented the clinical case of a “super-tired” 28-year-old healthy man who came to the hospital with breathing problems. Dr. Patel told the students about his physical examination, describing and demonstrating his bronchial breath sounds and labored breathing. He reviewed the laboratory studies showing evidence of infection and inflammation. He then went step-by-step through the thought processes needed to make a diagnosis.

- [Vera Tarakanova, PhD](#) (Associate Professor of Microbiology & Immunology) debunked several popular myths about the coronavirus. Although much remains to be discovered, this particular virus does not seem to mutate, immunity is protective, and it remains transmissible for a long time.
- [Sandra Pfister, PhD](#) (Professor of Pharmacology & Toxicology) reviewed the process of drug discovery, noting that it takes years to get effective new drugs to market. Society benefits when treatments are shown to be safe and effective before they are widely prescribed, and even off-label use of established drugs carries risk.
- Dr Patel then returned to tell the rest of the patient's story. The man, despite being young and previously healthy, worsened and, despite aggressive treatment, died on the fifth day in the hospital. Dr. Patel talked about the effect his death had on the hospital staff. He lamented how the need to keep the patient isolated affected both his family and the caregivers. Every death – especially in this situation – carries collateral damage and leads to moral distress. Dr. Patel also talked about how, as the virus has become more common, physicians can suffer from tunnel vision, thinking that every patient has COVID-19, even when they might not. Dr. Patel finished by telling the students that there have been some triumphs, as well. There is a camaraderie amongst staff. There have been some engineering innovations and the process of repetitive care has sharpened physical exam skill sets. Humanity shows through in the process of caring.

Students were given the opportunity to obtain one extra-credit point by writing a reflection on the presentation and how the pandemic has impacted their lives. Of the approximately 250 students who were assigned to watch the presentation, 174 took advantage of the opportunity. Several faculty members volunteered to review the essays and were moved by what they read. Those faculty members each recommended essays for this article.

Below are brief excerpts from several of the submitted essays that reflect the first-year medical students' concerns, challenges, and dreams. Each author has given permission to share their excerpt and their name.

British Fields – MCW–Milwaukee

I am really happy that this lecture was delivered. I have to admit that I [had been] pretty disappointed [that we] are in the middle of a pandemic ... being covered [with] no live lectures, so I was very happy that [MCW] did not miss this wonderful opportunity to deliver something different. Speaking from the heart, I was sad that the disparity that we're seeing in Milwaukee among the African American patients was not even mentioned during the talk prior to me asking [about it in the Q&A session]. I know that there was a lot to include during the hour, but I was hoping that the patient population that is constantly being overlooked would be discussed in some way.

I know a lot of people that have either had COVID and have thankfully recovered, but I also know many that have had to bury a loved one that died from COVID. [O]ne of my mentees' mom is a nurse that contracted the virus and ended up on a ventilator. Thankfully, she is recovering, but I say that to say healthcare workers are risking it all for us. However, the triumph in togetherness does come with a tragedy. I have seen many ignorant people bannin together to break laws openly and they are handed a mask by authorities. However, when a Black man takes a jog, he's murdered, and his murderers were freely walking after the incident. ... Or the countless videos of Black gatherings being physically forced to break up by officers. COVID has brought on a sense of togetherness, but it's also allowed the nasty principles that this country was built on to flourish and has put more fear in my heart about people more than the bug causing this virus.

Megan Quamme – MCW–Milwaukee

This virus has taken a huge toll on me in a very personal way. My roommate, K, went on a trip ... in March, right when all of the restrictions were JUST beginning. She just turned 26 and has not had any significant medical history. It was the first weekend of our spring break. [I was still out of town when] K returned. The next day she felt sick and was told to get tested by her workplace. The following day, March 15th, we heard the news that she was positive for SARS-CoV-2. At the time, I thought that she would be in quarantine for two weeks and then I would be able to go home, on April 1st.

The following week, K went to the hospital for shortness of breath. A few days later, she had to call 911 on herself to be taken to the ER. Her saturation was 80% when she arrived at the ER. She was given oxygen and some asthma treatments and was sent home with an albuterol inhaler. She said she could barely walk 10 feet down the hall to use the restroom for a few weeks. She went to her PCP 3 times for follow-up chest x-rays after her symptoms would not go away. She was treated for bacterial pneumonia. On April 20th, she finally had her first fever-free day. On May 4th, she officially tested negative for SARS-CoV-2. What started as a week-long [spring break] trip turned into a 7 week quarantine. My roommate was alone. If her situation had gotten worse, she could have ended up on a ventilator or even died, alone in the hospital.

I dealt with a lot of guilt during that time, and still am. I wonder if I am the one who gave it to her and just didn't have any symptoms? I wonder if there was more I could do to support her? I wonder at how I was so lucky to avoid getting infected, and being ill at the same time as her. I wonder how her health will be affected for the rest of her life. Her PCP told her she will likely always have exercise-induced asthma.

... I feel that I have a responsibility to tell my story, but it often falls on deaf ears. The only people who want to hear it are those who listen. I find myself in a struggle between trying to be a leader of my community and

to be outspoken about evidence and my story and protecting my own mental health and well-being.

Benjamin Hodapp – MCW–Green Bay

The greatest personal challenge I have felt during this pandemic has been the lack of agency in being able to affect positive change for those at risk. I chose to enter medicine for this specific reason. As students, my colleagues and I are in the unique situation of being in a helping profession with little-to-no agency when it comes to serving the public in any tangible way. I have done my best to define ways I can assist those less fortunate, but it feels woefully inadequate. Now that we approach entering the clinic on June 1st, I am concerned for the safety of my 'soon-to-be' patients. Will I be the one who possibly transmits the virus to them? The strain of the dichotomy to be involved in the health care response while protecting my patients (after all, I am only a student with little to offer) has been a challenge as we approach the clinic commencement.

The main take-away from the three lecturers was simply: while we know a great deal about this virus and its components, we know very little about treatment, disease progression, and how it will proceed in the coming months. Caution is our number one friend in this time of crisis and it was heartwarming to hear rational, incredibly well-educated people that I sincerely respect speak about how we should be approaching future steps with care.

Sarah Steffen – MCW–Central Wisconsin

As a medical student, and therefore someone who has committed herself to the idea and importance of scientific evidence and evidence-based practices, and to keep people safe from harm, COVID has brought to reality, perhaps at one of its most nightmarish levels, the idea that a

significant portion of our society dismisses science, education, and the universal human need to have empathy and take care of one another. ...

...I come from a small, rural, and definitely more conservative town in the state of Wisconsin, my social media, in particular Facebook, has been flooded with conspiracy theories and misinformation from people who often post about “not wanting to blindly follow others, and wanting to think for themselves.” But following scientifically proven information is not following blindly. ... But how do you get others to realize there is a difference between scientific evidence and an opinion? How do you get them to care? ...

For me today, the biggest takeaways from this session quite simply revolved around the themes of scientific information and compassion. Scientific information that was from credible sources and experts of multiple fields, and the compassion that went side by side with presenting that information for how we can work towards a better future to take care of one another.

Erica Engstrand – MCW–Milwaukee

... Whether it be a pandemic, medical school rejections, or life in general, I know that anxiety is something that will always be present in my life. You’d think that because screens have replaced so many of the faces I looked forward to seeing every day, it’d be worse. But because of this pandemic, I’ve never felt so supported by my friends and family. While living at home with my family right now isn’t ideal, I am so grateful for the fact that at least there’s no screen between us anymore.

I rest easier now. I have enjoyed mornings talking to my dad [who is a general surgeon] about our shared love for anatomy lab. He’s told stories about his own time in medical school and how he met my mom [an anesthesiologist] there. We reminisced about loved ones gone too soon and debated the future of health care. ... Later we made pancakes.

Connor Ford – MCW–Milwaukee

I love sports. I rarely find time to watch them in medical school. ... [but] the stars aligned when spring break fell during the same week of March Madness, the NCAA Men's basketball tournament. ... The week prior to spring break ... everything was shutting down. ... The NCAA tournament, US Soccer games that I had been looking forward to for months, the Bucks soon to be in the playoffs, start of MLB, all of it gone.

I know that sports don't really matter much in the grand scheme of things. ... But in the high stress interval of exam week ... I was incredibly bummed out by how much I was looking forward to watching ten men try to throw a leather ball through a basket. It all seems so miniscule now.

[[Just about everyone around me has had it worse. I wish I could take on some of others' burdens. ... To think that I was upset about sports being cancelled ... I feel guilty to even admit it.

I think the biggest takeaway I've had from this experience is that there are so many good people out there – selfless people doing so much for the benefit of all of us. ... I've read so many stories of giving, of sacrifice, of communities coming together, and those stories give me hope that we will persevere and we will eventually defeat this virus.

Anna Janke – MCW–Milwaukee

So many pieces of information I had previously taken as facts were flipped on their heads, as our panelists separated fact from fiction. ... I had not realized that the transfer of information from virology/medical experts to popular press is a bit like the game 'telephone,' where facts and terms may get lost in translation. For example, COVID-19 is a disease, rather than an infection; the infection is called SARS-CoV-2. Furthermore, some information spread by the media and laypeople on social media is downright false. Before this presentation, I had no idea

that is it unlikely we will see a new strain of SARS-CoV-2, as it mutates slowly compared to influenza due to the proofreading ability of its replicase complex. ... I was quite shocked to learn that “social distancing” and “six feet apart” will not, in fact, completely prevent the spread of SARS-CoV-2, as infected aerosols can stay in the air and travel for hours.

As my first year of medical school comes to an end, I am left with a lot more ... concerns than I started, in all honesty. Partly from the pressures of medical school and partly due to holing up at home in the midst of an unprecedented pandemic, I struggle to find meaning in the monotony of my days. However, I do not have to look hard to find those for whom I care and those who care for me, whether it be my friends, fiancé, family, or faculty at MCW.

Annie Tuman – MCW–Milwaukee

As a medical student during this pandemic I have felt pretty lost regarding knowing what my purpose or role is. Being almost one-quarter of a doctor has put me in limbo of knowing just enough to understand when news outlets/Facebook friends are probably spreading false information, but not knowing enough to be clinically useful or helpful. Lately, I've been landing at the conclusion that the most helpful thing I can do right now is to lead by example and practice correct social distancing. However, there has seemed to be a national attitude divergence away from “flatten the curve” and a shift toward an extreme dichotomy of either “self-isolate until there's a vaccine” or “a virus can't stop me from living my life.” I've heard valid arguments and personal stories in favor of both camps, and I have been left wondering if there really is a correct way to social distance—and if there is, what it should look like.

... I have been disappointed that a lot of my friends have not been wearing masks because they think they've already been exposed, it doesn't look cool, or any other number of reasons. I plan on using Dr.

McNally's point that a mask looks a whole lot less cool than a ventilator. I think it's important to add that we all have a right to do and go where we want, but we do not have a right to put other people's lives in danger. If people want to go out in public, it is their duty to at least wear a mask.

Dima Jaber – MCW–Central Wisconsin

In the beginning I felt like we were all in this together, but then people decided they were just sick of the new rules and started to protest. I am mostly disappointed in those people, some of which are friends, family, and classmates and feel that this experience has placed a lot of strain on my relationships and vision of the future.

I have always believed that people are entitled to their own opinions and beliefs, however I have a hard time seeing the viewpoint of those who are spreading false facts about COVID-19 and being reckless around others.

... I am sad to say that the nurse who recently went viral for proudly stating she was a nurse while at a bar is one that I used to work with, and while I did not know her very well, I thought I wouldn't see this type of behavior from her or anyone I knew. This is especially considering my friends in healthcare who are working nonstop to help patients while knowing they are risking their own lives and those of them who have gotten sick. ... This type of behavior will bring COVID-19 to the most vulnerable populations of Milwaukee County who are already feeling the wrath of this pandemic.

... We all know someone who has been affected by loss during this pandemic and is hurting. I would really hate for all this loss to have been for nothing.

Amanda Wright – MCW–Central Wisconsin

We often learn about countless disease processes in medical school that we could never contract or develop firsthand. Maybe it has been eradicated from the country in which we reside. Maybe it no longer applies to our own age group as we survived the critical time one becomes infected. Maybe we were fortunate enough to receive a vaccine, or perhaps our own functioning immune spotted an infection and prevented its host from ever gaining knowledge that they may have ever become infected. ... However, I didn't realize what true fear of contracting a disease could be until the 2020 COVID-19 pandemic.

... I am terrified to begin my clinical experience in just over two weeks. Under most circumstances, the typical med student worries of even knowing which questions to ask or how to perform certain elements of the physical exam or note taking, but these processes pale in comparison to the thoughts that have been occupying my mind in light of this pandemic time. Instead of practicing how to properly stitch a suture, I am sewing my own reusable cloth mask to protect from the spread of this virus. Instead of rehearsing the nuances of the physical exam skills, I am rehearsing how I plan to come home at the end of the day from clinic by changing my clothes in my garage and running immediately to the shower all while avoid the potential crossing of paths with my family or even my dog. The fear of not being able to protect myself anymore from the virus looms over me, especially after doing my absolute best to not come in contact with the virus by not leaving my house for the last two months.

Chase LaRue – MCW–Milwaukee

I actually enjoy personal time and thrive in being able to recharge by myself. But that doesn't make up for the inability to go outside freely, go to the store without a mask, or the overall tense feeling that fell over everyone. ...

Nothing really sank in until my friends that are nurses, doctors, and other healthcare professionals started flying across the country to sign short contracts in New York City. I then realized that the emotional trauma suffered by our front line is something that is going to last forever. This isn't going to be something fondly looked back on in textbooks. It's going to be as tear-filled and painful as war, famine, and economic crisis.

And so, I need to preface my next comment carefully... I'm thankful for the opportunity to develop perspective and mindset. I hope that as people step away from this, they take the personal and public challenges and develop a sense of ... community. ... How did they respond? How did you respond? Will there be a reflection to make sure that the damages and destruction by nature aren't done so in vain?

David Wittmann – MCW–Milwaukee

I cannot imagine how I would respond to a patient in clinic demanding immediate, and potentially experimental, treatment that has not at least been approved for clinical trials. As was stated in the lecture, any drug without some sort of benefit will only have negative side effects. It is amazing to me that given this information, some individuals still push for various agents ... I am hopeful that a vaccine can be developed as soon as possible, but we must all realize that this process is lengthy, and it would be better to wait for a proper vaccine to be produced than simply take a "trial-and-error" approach with potentially harmful agents.

In times that seem like we are constantly pinned against ourselves, I have never witnessed camaraderie as has occurred since the virus spread throughout the country. The solidarity between the public and healthcare workers, first responders, and essential workers gives me hope that once this is over, we will be more united than we were previously and we will learn to work together to fight future issues.

Abbie Scheidt – MCW–Milwaukee

In my last semester of undergrad last spring, I took an infectious diseases course where we talked about what would be the next pandemic. We talked about a new avian flu, smallpox, a multi-drug resistant gonorrhea, and Ebola. We even talked about SARS/MERS but concluded as a class that the most likely future pandemic would be a flu strain, likely H5N1 or other strains of avian flu. As I write this, I am looking back at my notes from that class session and I laugh a little to myself. My small class of 20 students and our professor, less than a year ago, sat around a classroom brainstorming the viruses that would wreak havoc on the world, not knowing what was to come and how wrong we were. All around the globe, scientists and doctors were having similar conversations. They all knew the world was due for a new pandemic, and soon. In my notes from that class, I have written that “90% of epidemiologists expect there will be a disruptive, deadly, global cataclysmic pandemic sometime in the next two generations.” It wasn’t a matter of if, but when. So, if the scientific community knew that a pandemic was coming, why was the world so unprepared? Why didn’t we all stop and listen to them?

... It hasn’t been easy watching from the sidelines as several of my own family members fell ill to SARS-CoV-2, including my cousin who is only a few years older than me. Seeing him require brief hospitalization from coronavirus at such a young age shocked me.

...With no end in sight, no one can say how our world and medical community will recover and grow from all this destruction. I can only hope that the world we build after the dust has settled is a better one.

Greta Berger – MCW–Milwaukee

I feel frustration, as I see the contrast between facts we know to be true, from evidence based research and public health officials, against the spread of information based entirely in suspicion and angst. I can’t

understand the audacity some have to decide they know better than the recommendations from public health professionals. And, I also feel sad. It isn't often during medical school you allow yourself the time necessary to process the events occurring around you. As Dr. Patel described the tragedy of watching a patient fight this virus, alone, and watch another patient die, alone, without their loved ones, my eyes filled with tears.

This last month has become more and more isolating as the studies have continued – feeling disengaged with the material, and far from my classmates. It has started to feel unimportant, studying so much, as the world around me is so loud, with fear and opinions and pain. I want to spend more time on Facetime with my mom and dad, and connect with my friends who are overwhelmed, and go for walks to process this moment.

There has ... been an overwhelming sense of togetherness. Among my family and friends – we are all reaching out often. I have been exchanging emails and phone calls with my grandma weekly. And I feel so connected to this profession, full of heart, amidst the chaos and fear. It is a scary time to be entering the field, but I know I will be in good hands surrounded by inspiring, compassionate colleagues.