

## Interview with Dr. Brian Goldman

Ryan Daniel and Grace Lee



Dr. Brian Goldman

**D**r. Brian Goldman is a veteran emergency room physician at Mount Sinai Hospital in Toronto and the host of two popular CBC radio shows, *White Coat, Black Art*, and *The Dose*. He is a successful author of three published books, *The Night Shift: Real Life in the ER*, *The Secret Language of Doctors*, and *The Power of Kindness*. He has been involved in multiple high-profile speaking engagements including a 2011 TED Talk on medical errors and the culture of medicine. Dr. Goldman is a highly

respected healthcare advocate and voice for Canadians from coast-to-coast, and the UTMJ was thrilled to hear about his unique insights regarding the COVID-19 pandemic.

**UTMJ:** How do you feel about your role as a prominent healthcare informer, especially during times of a public crisis such as COVID-19?

**BG:** The first thing I should say is that it's a privilege to have a platform to talk to Canadians through my *White Coat, Black Art* [podcast] and, since February, with our new podcast *The Dose*. They work in a complementary way. *White Coat, Black Art* tells stories about the patient experience inside the culture of modern medicine. *The Dose* gives information that people can use and is generated by questions that come from our listeners, through social media and emails. *The Dose* is “news you can use” and *White Coat, Black Art* involves stories. Not surprisingly, both shows have pivoted to COVID-19 now because that's what the public wants to know about.

It's an awesome responsibility, but not unique or different compared to our overall mandate within the CBC. We have Journalism Standards of Practice (JSP for short), which are rules and guidelines that are very much like a “code of ethics” that guide us. We want to present information that is balanced, and as far as we know, that is accurate. We're not broadcasting information that's hearsay, or [that is based in] rumours. If we have a sense that there is a vested interest in the information - that it is controlled by commercial or political interests - then we're certainly not going to present it, not without proof. That doesn't mean we won't discuss a topic such as the current demonstrations in downtown Toronto against the use of masks. We will discuss the anti-vaxxer movement, but in its con-

text as a political statement as opposed to a factual [statement]. We did the same thing with the vaccine hesitancy movement. There's a misconception that people have about [being] a public broadcaster: that you're obliged to present both sides as if they're equal. We came to the conclusion a long time ago that the science is well in favour of using vaccines, and that the anti-vax movement is based in fear, not in fact. So, we don't feel obliged to present both sides equally.

**UTMJ:** As both a public health advocate and a physician, how do those two roles play off each another? Do you feel a greater responsibility to the public because of your role as a physician during these times?

**BG:** Let's start with hosting a radio show or podcast. There's no question that from the first moment I wrote newspaper and magazine articles in the early 1980s (for *The Globe and Mail*, *The Toronto Star* and *Maclean's Magazine*) to today, [when I am] hosting two radio programs, I have known that the media likes having experts. The information that experts present is considered more trustworthy, and the media knows that readers care about what physicians have to write and say on radio, television and social media. I've never had any difficulty getting my message “out there”.

COVID-19 has certainly reinforced the need to be accurate based on the latest science, and to adapt with new information, so that's certainly an imperative. But, there's nothing new about COVID-19; I've always felt that awesome sense of responsibility to be as accurate as I can. This is because I want to give good information to the public, but also because people are going to come after you very, very quickly if you're expressing a point of view that's based in vested interests or if you frame information in a way that's obviously political or is a cheap shot.

The only thing that's different now with COVID-19 is that we have the public's attention like never before. When we're talking about dyslipidemia, high blood pressure or obesity, we might have people's attention, but these conditions are not going to “kill you tomorrow”. They might increase your risk of dying prematurely over the next 10, 15 or 20 years, which for most people is almost never. But with COVID-19, what you do or don't do could affect your life, or your loved one's life if they live in long-term care, are over 75, or have other risk factors. So that immediate sense of danger, and the immediate engagement is something that's very different.

Now, does it affect the way I practice? Not because of COVID-19. There's no question that having a relatively

high profile in Canada makes me cognizant when I practice in the Emergency Department. A lot of people know who I am, and if they don't know who I am by looking at me, they certainly recognize my voice after a while. And that happens every shift. Clearly, I'm not going to be the guy who doesn't wash his hands. [COVID-19] probably has me on my best behaviour.

**UTMJ:** Has this greater responsibility as a public health advocate added further stress in addition to the stress that physicians already face during the pandemic?

**BG:** COVID-19 has added stress, but not because I'm a broadcaster. It's spending the entire shift wearing PPE. Being in and out of PPE every time I go into a room to see a patient. To put things in perspective, we're not inundated with patients who have COVID-19 in the Emergency Department. We weren't during the first wave at Sinai Health. We saw patients with COVID-19, but there were parts of the Peel Region, Brampton and Richmond Hill where they saw a large number of patients with COVID-19. So, we were more fortunate - but we still had precautions. You never know when the next patient might have COVID-19, and there's such a broad set of risk factors and symptoms, that you have to assume that a lot more patients have COVID-19 than appears. That means there's an increased vigilance - and that's stressful. There's an increased need for PPE - that's stressful. There's a fear that a patient who does have COVID-19 will deteriorate, and you'll have to do a protected code blue procedure - which again, is stressful.

So, I don't think it's the broadcasting. I think it's the COVID-19 aspect that's added to the stress level for all of us.

**UTMJ:** Is there anything about the field of medicine that wasn't on your radar prior to the pandemic, that's come to the forefront for you?

**BG:** Although it certainly has always been on the radar, something that has become much more urgent with the advent of COVID-19 is [our society's] disparities in income, and opportunities. We've always known about these; we've done lots of stories on White Coat, Black Art about whether marginalized populations (such as Indigenous and racialized communities) get equal access to medical care. And our stories show that they don't.

But for it to be upfront - that people who are homeless, who come from racialized backgrounds, who are Indigenous, who are older, who have disabilities, and who have dementia, are more likely to get COVID-19, be in the hospital with COVID-19 or die from COVID-19 - certainly added a layer of urgency to these stories that wasn't there before. And I'm glad we're paying attention to them. These are certainly stories that we've covered on White Coat, Black Art, and we will continue to do so.

I think another story that has become really important is the politicization of medical advice. To see masks or

vaccines, for instance, become a statement of which party you vote for - as has particularly happened in the United States and to an increasingly disturbing extent in Canada - was an eye-opener. We knew it with diseases like measles, but it's different because a significant percentage of the Canadian population is vaccinated against it. COVID-19 though, is a novel coronavirus to which nobody is immune to (unless they contracted COVID-19 itself which is still a disputable way of becoming immune). The main way that we're going to combat this in the long run is to have a vaccine that is safe and effective. And the idea that in the United States, for instance, approaching 50% of the population is skeptical about whether they would get the shot is incredibly disturbing. So that's something that has more urgency because of COVID-19.

**UTMJ:** What's the one issue that concerns you the most about COVID-19 and its effects on neglected patient populations?

**BG:** There are several, but I think the one most disturbing effect of COVID-19 is its impact on long-term care homes and frail seniors. As you know, approaching 70 to 80% of the people who have died of COVID-19 in this country have died either in long-term care or were elderly patients. I think it's a black mark on our record as a Western nation with publicly funded health care - we have to be able to do better.

When we look at some of the reasons for this, it's crumbling infrastructure [and] multi-bed and multi-resident rooms in long-term care. It's treating personal support workers as if they hold a disposable occupation, when in fact they are some of the most important people [in our society]. The idea that personal support workers are supposed to get by on an income of \$15/hour is absurd. They do incredibly important work, and unless and until we fix the problem of looking after some of the most vulnerable people who get COVID-19, it will be a black mark on our reputation for providing decent health care. Up until very recently, the new uptick in COVID-19 involved younger people. But we are starting to see more outbreaks in long-term care facilities, and with that, more frail seniors who are dying of COVID-19 - just as we did in the winter and spring.

**UTMJ:** In one of your recent podcasts on The Dose, you talked about the severe isolation, and depression that residents in long-term care homes experience. How do we strike a balance between safety and compassion with long-term care homes?

**BG:** Back in the first wave of COVID when we were telling people to stay home, businesses were being shuttered and long-term care homes were on lockdown, essential family caregivers were designated as visitors. They were earmarked to stay home, [and told] "you're not allowed to visit". There was a huge misconception here - which we did stories about on White Coat, Black Art - surround-

ing the notion that essential family caregivers could be labelled as “mere visitors”. [For example,] my late father fed my mother (when she had dementia and was staying in a long-term care facility in North Toronto) twice a day until he could do it no longer. Then my sister came in and I came in on the weekends. When it took 15 minutes to spoon-feed my mom, it was easy. But then it was 20 minutes, 30 minutes, 45 minutes and eventually it was an hour and a half [to spoon-feed]. I can tell you there is no staff that is going to spend an hour and a half, or even 45 minutes, spoon-feeding anybody's loved one in a long-term care facility (unless you hire them privately). There just isn't enough staff to do that. So, when long-term care facilities designated intimate family members, partners, adult children or even close friends who just wanted to volunteer as “mere visitors”, it completely dismissed and trivialized what they do. [These family members and friends] are, in many respects, just like personal support workers. They are the backbone of care provided in long-term care facilities and anybody who's got a loved one there long enough knows exactly what I'm talking about. So, the good news is that the system has finally recognized that essential family caregivers must have access.

The other thing you're talking about is the lack of stimulation, including the lack of other visitors, such as grandchildren, who say “hello”, spend time with and cheer up their grandparents. There is no question that residents of long-term care facilities have missed this stimulation and their moods have gone down - what we don't know yet, is by how much. And this is coming from geriatricians, like Dr. Samir Sinha and Dr. Nathan Stall. We have to do better and find that balance. If you believe that you cannot train a visitor to wear PPE, wash their hands properly, screen themselves for symptoms, and have their temperature taken at the door - if the system is that strapped for cash, and infrastructure - I'd be very surprised. I just don't believe that's true.

I can understand that during the first wave, [there was] this sense of shock. There was a sense that “we have a lot of problems to solve with the novel coronavirus, so we're going to put [visitation] a little lower on the list of priorities”. But we know a lot about the virus now. The idea of forbidding long-term care residents from having adequate stimulation and time spent with loved ones is, I think, absurd and tragic. We need to find a better balance this time, frankly.

**UTMJ:** One of your books explores the power of kindness in yourself and in those all over the world. How do you think that being kind and empathetic can help the medical community, as well as the community at large, get through this pandemic?

**BG:** I think that kindness and empathy can help in many different ways.

First of all, we are hardwired to be kind; it's in our brain architecture. We have “dual-purpose” neurons that are simultaneously capable of performing an action and

lighting up when we observe somebody else performing this action. They allow us to experience a disgusting taste in our mouth and to look at somebody else who has the same disgusted look, which triggers the same set of neurons to light up. Neuroscientists believe that this is the seat of empathy.

[Empathy] begins in infancy, when parents bond to their children. Children, through a process called behavioural synchrony, begin to mimic one another's facial expressions, hand movements and eventually, vocalizations, words and songs. This is the beginning of attachment. Without attachment, you wouldn't have parents looking after their kids. Without attachment, you wouldn't have parents looking after other kids in a community.

In our more primitive nature, there is an instinctive capacity to recognize others as belonging to another group - which psychologists referred to as an outgroup. So, we have ingroups and outgroups; ingroups are “my people” and outgroups are “somebody else's people”, and potentially “my enemy”. Within the nervous system, we can look at somebody's facial expressions, their tone of voice or their turn of phrase, and begin to ascribe nasty things to [the outgroup]. If I decide that somebody belongs to my ingroup, then I will give him/her the benefit of the doubt; they're kind, charitable and ethical. So, we have these duelling capacities inside us to be empathic or kind and, on the other hand, to recognize enemies [so we can] either run away from them or gear up to fight. How do we make that decision? It turns out this “us versus them” thinking is part of our primitive brain architecture. We have giant frontal lobes and executive function that allow us to say, “That makes no sense. I'm just being prejudicial”.

So, what does that have to do with COVID-19? COVID-19 is a massive stressor. There are lots of people who are stressed out by the imminent risk of dying, of losing their business, losing their social contacts or having food insecurity. The more stress we feel, the more likely we are to suspend our executive functioning and lapse into that primitive “us and them” behaviour. That's what you're seeing in the United States today, with a lot of these demonstrations in favour of Donald Trump - and I am going to get political here! I don't think he's a force for good during the pandemic. We could argue about the destruction to the economy and how much damage it's doing to people, which I think is considerable. But I think that a polarizing debate saying, “The economy or your life - choose” is a false dichotomy. I think that an enlightened approach says that the economy will do better when we take better care of people living in society, do a better job of surveying society for COVID-19 and protecting these people against it.

**UTMJ:** At the End-of-Life Public Forum in 2014, you talked about care at the end of life from your perspective and its importance in light of our aging population. With that in mind, how has COVID-19 impacted care at the end of life and how has the medical profession adapted?

**BG:** Well, there's no question that end-of-life care has been adversely affected by COVID-19. [This occurred] particularly during the first wave, when hospitals absented visitors and family members from being with their loved ones at the end of life. When a patient was deemed to be within hours of dying, family members were generally allowed at the bedside. But this didn't necessarily include the whole family; maybe one caregiver or family member would be allowed, and they would have to switch. There were different policies in different places and frankly, some hospitals defied the rules or interpreted the rules in different ways. I certainly know there were some concerns about access to medical aid in dying, which was a lot more difficult during the first wave of the pandemic. Medicine adapts and I think we're seeing adaptations in end-of-life care.

The biggest thing that we are adapting to, which is more in society than in medicine, is how to handle deaths and funerals. We've lost so many people in Canada to COVID-19 and to other causes not related to COVID-19, that [this period] has left a whole cohort of Canadians grieving silently and alone. They are unable to congregate with their extended families and friends to remember people they love and have to resort to using online platforms like Zoom to communicate. We don't know the impact of that on the psyche and mood of Canadians and it's something that I think we need to look at carefully. We need to be aware of just how difficult it is to try to grieve during the time of COVID-19. There is something cathartic about a funeral, about a remembrance in a public forum and a graveside service.

Personally, I remember that when my father died (almost exactly seven years ago today, in 2013), I was astonished by the show of love and affection, and the sheer number of people who came to his funeral in North Toronto. That's something that cannot happen today. We need those symbols. The living needs those symbols to be able to acknowledge a death and [they need] the opportunity to extend or receive sympathy - it's part of the healing process. I don't know what it feels like for people going through [the grieving process] right now. Personally, I know that one of my wife's cousins lost her husband suddenly, in September - not to COVID but to other causes - and they live in Winnipeg. As a result, aside from good friends, there was a large extended family that was not able to be there, to hold her hand or hug her and say, "we're with you". I know what it is like from that standpoint, and it is something that's very disturbing.

**UTMJ:** During one of your podcast episodes on White Coat, Black Art, you interviewed community paramedic Matthew Cruchet, regarding the Virtual Triage Assessment Centre (VTAC). This is a program designed to meet the healthcare needs of people in rural Renfrew County using community paramedics. With regards to returning to normal after the pandemic, Cruchet stated that, "Normal with respect to healthcare would be a step backwards". With that in mind, what are some of the positive changes in healthcare that have been implemented due to the

COVID-19 pandemic, and do you envision these changes continuing post-pandemic?

**BG:** There are certainly some positive developments, and I'm glad you noticed that show. I think we are slowly evolving to this notion that healthcare is best for patients when they are served by a team, and not by one person. During [COVID-19], with the sheer necessity to reduce the number of people who come to the hospital to receive care, the idea that patients can receive care at home became a necessity. The [VTAC] program was wildly successful in a population, Renfrew County of the Ottawa Valley, where a lot of people don't have access to a family doctor, or they have a family doctor who has a panel of 5000 patients and can't possibly take care of all of them. These people often don't live in multi-generational families and often live by themselves after a partner has passed away. While they do have adult children looking in on them, all too often they have no means of transportation, they don't drive a car, there is no taxi service, or there's a taxi service but there is no public transit. In these situations, dialing 911 would be their only option. This [VTAC] program shows dramatically that if you align a system where a single phone call puts you in touch with a trained medical receptionist who can triage the situation, arrange a consult with a family doctor virtually or by phone, and then dispatch a paramedic for immediate care if necessary, the system works - and is cost effective if you want to do it. The program also has allied health professionals at their fingertips, including registered dietitians, nurse practitioners, social workers, physiotherapists, etc. Cruchet and Renfrew Paramedic Chief Mike Nolan have made the point that programs like VTAC should be a standard everywhere. It is in some countries, but it isn't here.

Unfortunately, all too often we have great experiments that are pilot projects that end up going nowhere. That's not to say that community paramedicine isn't making inroads - it is in other parts of Ontario, Nova Scotia, Alberta, and elsewhere. So that's one silver lining. Another silver lining is the growth of virtual health care. Does every medical complaint require an in-person visit? No, of course not. And certainly, there are people who depend on telemedicine who know that's not true. I think the provinces have been very slow to establish decent fee codes to enshrine virtual visits in the fee schedule. British Columbia was the first [province] in the country to do so and we did a show about that five or six years ago. We've [Dr. Goldman's podcasts] been on top of those developments and that is certainly something that COVID-19 has accelerated. In the future, having more point of care testing is something that is very exciting. Having disposable electrodes that can provide an ultrasound image that is connected to your smartphone, point of care blood testing or having a cardiologist be able to auscultate your heart and take your vitals without being there are all possibilities in the future. Right now, the technology we use is often 10 years out of date, it's clunky and not very user-friendly. I suspect that new medical technologies will continue to

evolve, become disposable, get cheaper and provide a wealth of information that will bridge the gap between a physical examination that occurs in person and a physical examination that can occur virtually. However, it's going to take a while for it to occur. Will COVID-19 spur that on? I hope so. But I'm not necessarily sure about that and certainly during this season on *White Coat, Black Art*, we will look at other innovations that are silver linings of the pandemic.

I've talked about technological advances, but how about just eradicating some of the differences in opportunity and privilege in our society and seeing what impact that can have on the general health of Canadians? I suspect the impact will be far greater than the slickest piece of medical technology at a patient's fingertips.

**UTMJ:** For many people, the pandemic has prompted deep self-reflection. Is there anything that you have learned about yourself during the pandemic?

**BG:** I've learned a lot of things during the pandemic. For one, I am not immune to stress. There have been days when I've had trouble sleeping and functioning. In the months prior to the pandemic, I got back to something that I've done most of my adult life, which is running. I run 8-10 km at least three times a week, so not a trivial amount of running. What I've discovered is that if I don't run for a certain number of days, I really start to get stressed out. I become anxious, I become more irritable, and I have to run to induce a sense of calm and well-being. Even more than that, I have to run to feel as normal as possible. What I am saying is that, very often, I don't feel normal because of the pandemic. And so that transformation [running routinely] has become very necessary for me.

Another aspect is that I'm old enough to be closer to retirement than to the beginning of my career, so the pandemic has gotten me to think a lot more about what it would look like to not practice medicine. It has also made me grateful that I have a job - actually two jobs, working at the CBC and in the hospital. I can't imagine how stressful it would be to have my job hanging in the balance by a government grant or to have a career in an industry that seems on the "endangered" list, like cinemas or managing a duty-free shop in an airport. Think about all the industries that have been decimated during the pandemic. We're maybe halfway through it now - or are we a third of the way through it? I don't know. My daughter got her first job, after graduating from university with a Bachelor's in Business Administration, working for a company that makes and supplies air filtration systems. All I'm thinking is, "thank goodness that you've got a job that's growing and not shrinking due to the pandemic!". So overall, I would say the pandemic has forced me to think about the things I'm grateful for because it is so easy to lapse into complaining and moaning. Ultimately, I have no reason to do so. I think it's really important that we maintain an attitude of gratitude. And, to remind ourselves that whatever we're going through right now, things could be worse. Just

look around and listen, and you'll find somebody whose story is worse.

**UTMJ:** Since the start of the pandemic, is there one clinical anecdote that stands out to you?

**BG:** Yes, this is a personal one. Early in the pandemic, we'd [emergency medicine physicians] been doing a lot of training in protected code blues with stringent forms of protection, including wearing N-95 masks, face shields, two sets of gloves, and special gowns. We'd practiced the donning and doffing procedures routinely because it's during the doffing procedure when, if you do it incorrectly during an intubation, you can expose yourself to a high dose of COVID-19. I remember practicing during SARS in 2003. That was about 17 years ago - and 17 years is a long time. I'm a lot older now and unfortunately, I'm old enough to be in more of a high-risk group so that if I got COVID-19, I might have a more serious prognosis. I remember coming to the hospital to do a night shift during the first wave. I was getting a handover from a colleague about half my age, who had just been working from 9PM to 4AM. And he offered to spend the night doing my intubations so that I wouldn't have to do an intubation and risk getting COVID-19. In our medical culture, your first impulse when you hear that is to think, "Oh, he thinks I can't do intubations?" or "Does he think I'm fragile?". However, it was quickly followed by a sense of gratitude. Here's a guy who wanted to take [a shift] off my list. I could have answered him back and said, "But, you're a young father" or "There are young people who have gotten a bad case of COVID-19 and who have died of COVID-19 too" or "Wouldn't it be better if I got COVID-19 instead of you, since I've lived a long good life and been able to benefit from the privilege of being a physician for over 30 years?". So, there was an internal debate there. But suffice it to say, that I was touched by his willingness to take one for me. His name is Paul Kobic. And he's an amazing guy. He's one of the kindest, most empathic physicians I've ever met, and I'm proud to call him a colleague.

**UTMJ:** You have engaged in such diverse forms of health promotion throughout your career - from being the author of three books, to having two very successful radio podcasts and many prominent speaking engagements, including a TED Talk! What advice do you have for medical students wanting to get involved in health promotion? What have you learned along the way?

**BG:** For me, I didn't call it health promotion - I just called it writing. There are certainly people who want to use writing exclusively for health promotion and I'm not saying that there isn't an alignment of those goals. But, when I write a book about empathy or kindness or what it's like to work in the emergency department, it may or may not be with the goal of health promotion. It's certainly to inform, enlighten, and entertain to some extent. Because

if you're not writing books for the public that entertain them, then you should be looking for a different media, unless you want to write textbooks. And even textbooks, I think have to grab you at some level. So, first of all, write about what you like. And, don't turn down opportunities to write or appear on podcasts just because they're not what you might think of as "top drawer" opportunities. I cut my teeth, if I can use that expression, or I got my 10,000 hours in the "Malcolm Gladwell" sense, writing for all kinds of freelance publications that were aimed at healthcare providers. I wrote for the Canadian Medical Association Journal, I wrote for MD Magazine and many other media outlets. And slowly but surely, I honed my craft. Then I took a shot and aimed towards some of the mass media outlets like magazines, newspapers, and ultimately public broadcasting.

If you're going to do that, you have to take it as seriously as you take your medical studies. That means taking courses, accepting feedback, accepting criticism, and being devoted to self-improvement. The first documentary I ever did on the CBC was for a show in the late 1980s, called Sunday Morning. It was a radio show and I went through nine versions of that documentary (it was only 27 minutes long!) until it was suitable to get on the air. Through that process, I'm grateful to the people who spent a lot of time helping me make my work better. If someone offers you help, take it. Don't be too proud to think you don't need it - or that if you do need it, there's something wrong with you. We are all lifelong learners.

I would also say that one thing today that didn't exist when I was getting started, is all the fellowships [for example, the Munk Fellowship in Global Health] where you can get postgraduate training to help you get a leg up on health promotion and writing. I would also say gain expertise in what you want to write about, so you can write about what you know. The more you do that, the more you will become a trusted voice in the world of media. Be respectful of the job, be grateful for the job, but also know the limits of the stories that you want to tell. It's tempting to find intimate stories, but make sure that you get permission from the people whose stories you want to tell.

Professional ethics is certainly something that you have to abide by if you're going to wear both hats [physician and writer].

**UTMJ:** Finally, what general advice do you have for healthcare professionals in training (such as medical students, pharmacy students, nursing students, and others) in light of this pandemic?

**BG:** My general advice to young healthcare professionals today is to work hard, but do not let the work define you entirely. Leave yourself time to have a life outside of healthcare - to love, to be loved, and to do things that you love to do. Make sure that you keep that light on and don't sacrifice it all for your medical training. You'll find that life goes by very quickly if you do that, and you don't want to be somebody who looks back with regret at the things you didn't do. I would also say that as somebody who strived to be the best, believe me, 10 years out, nobody's going to care where you grew up or graduated from medical school. So, think about that.

And be human. Recognize that to be human is to try - but to try is to make mistakes. I think that medicine, in particular, has been very slow to embrace the concept that making mistakes is not a crime against humanity - that it's part of being human. Instead of looking for scapegoats or looking for people to blame and admonish, it'd be better if we taught others not to be ashamed of themselves for making mistakes, and to find constructive ways of dealing with mistakes. All too often when somebody makes a mistake, we identify, isolate, and separate them - instead of making them part of the solution by having them teach us how not to make the same mistake in the future. These are observations that I've made over a lifetime in medicine. I did a TED Talk about that and continue to receive emails and notes from people saying [the TED Talk] has changed their career. They realized they weren't alone in making mistakes. That is probably the last thing I want to say: if you do make a mistake, you're not alone, you're part of a huge community.