CDC Ebola Response Oral History Project

The Reminiscences of

Samuel T. Boland

David J. Sencer CDC Museum

Centers for Disease Control and Prevention

2018

Samuel T. Boland

Interviewed by Samuel Robson
June 18th, 2018
Atlanta, Georgia
Interview 1 of 2

CDC Ebola Response Oral History Project

Q: This is Sam Robson on the phone with Sam Boland. Today's date is June 18th, 2018. I'm in the audio recording studio at CDC's [United States Centers for Disease Control and Prevention] Roybal Campus in Atlanta, Georgia, and Sam is calling from southern England. I'm interviewing Sam today as part of the CDC Ebola Response Oral History Project for the David J. Sencer CDC Museum. Sam, thanks for joining me today on the phone. Could you please start out by pronouncing your full name and tell me a bit about what you're doing with yourself these days?

Boland: Sure thing. My name is Sam Boland and I'm currently a PhD candidate at the London School of Hygiene & Tropical Medicine, which is of course in London, England. I am a couple years into my PhD, and I currently study the role that the British military and the Sierra Leonean military played in responding to the Ebola outbreak in Sierra Leone, based off of my own experiences having worked there for some time during the Ebola outbreak, and also based off of retrospective accounts from a number of different Ebola responders.

Q: That is so neat, and I'm so happy to be talking with you. What is the PhD in exactly?

Boland: The PhD is in public health and policy, and it's kind of a funny space to be doing such a PhD. It sits at a rather curious intersection of international relations, political science, management theory, public health, and there isn't really a right or wrong way to frame the PhD conceptually. I found that what made most sense for me is public health because my background is having done—I have a previous degree in public policy, and my interest has always been to work in public health, so it seemed like a natural fit for the focus of my research.

Q: Thank you. If you were to tell someone in just a few sentences what your role was in responding to the Ebola epidemic in Sierra Leone or elsewhere—I don't know if you were anywhere else in West Africa—what would you say?

Boland: The short answer is that more or less, I was a jack-of-all-trades at the district level Ebola response for Port Loko and Kambia districts in Sierra Leone. I was ostensibly working in both of those districts to help capacitate and oversee surveillance activities, disease surveillance activities, by Sierra Leonean Ebola surveillance offices. But because of the complexity of their work and the necessity to link their work with all other aspects and elements of the response, I ended up predominantly working within the Ebola response centers—they were called DERCs, District Ebola Response Centers—across quite a large swath of different operational needs, and was really there to help coordinate everything day-to-day.

Q: We're going to back up a bit and do maybe twenty minutes or so talking about your background to get some historical context for understanding your time with Ebola and your work now on your PhD. Where and when were you born?

Boland: I'm kind of a baby when it comes to people who have done this kind of thing. [laughter] I was born in Boston, Massachusetts, in October 1992, and that was to two English parents. I was the first American in my family. Before then, my family is all, pretty much all from England.

Q: Where were you raised?

Boland: I was raised in a suburb of Boston in a town called Wellesley, and I was there when I was first born. For a short period of time when I was a toddler, my family was in Scotland, in a suburb of Glasgow, but then they moved back to Wellesley again, which is where I remained through high school.

Q: I don't know too much about Wellesley. Can you describe it?

Boland: Wellesley is a very privileged place to have been raised. It's quite a wealthy town, and I was able to go through the public school system there, though it would be unfair to say that it is a public school system much in the way that others might reference having gone through public schools. They are an incredible educational institution. The town is—this sounds a little bit pejorative. The town is kind of a white picket fence town

without the white picket fences. It was a very relaxed upbringing where people don't lock their homes or lock their cars. It's a short jaunt into Boston if you want to go into the city, and in many ways it conformed to the sort of idyllic notion of a suburban upbringing back in the fifties or sixties. There were some great opportunities therein, the ability to—and the freedom even as someone very, very young to walk myself quite a ways to school or to go off with friends and to not have anyone concerned about where I was going. Of course, it represented what I would say was a lack of healthy diversity, which was something that I always felt—because of really my parents—that I needed to overcome later in life. But I know a lot of my colleagues and even friends growing up never really were able to understand the diversity the world has to offer because of that kind of upbringing. In a sense, I feel extraordinarily lucky for having been there. I also very much enjoy being able to do work and to live in a city at the moment, for example, where a lot of the things Wellesley does not have to offer are offered in my day-to-day.

Q: You said the cause of you recognizing the lack of diversity that was apparent in Wellesley, you can really trace it to your parents. Can you talk more about that?

Boland: Yeah. My parents are from England. My dad grew up in a number of different places including South Africa, but I think more than anything else, they both had a sense of what is probably most appropriately called adventure when they were young. When they moved to America and they were raising four children—I'm the second of four—they took the opportunities that they could to travel back to England in order to see family, but also to use that as a jumping off point to bring us to see parts of the world that

most people where I grew up never had the opportunity to see. We spent time traveling in Egypt and Botswana and Zimbabwe, going off to Turkey and a number of other places that really incentivized a sense of curiosity about the outside world and an acknowledgement of the opportunities and also the challenges that people elsewhere in the world faced on a day-to-day basis. It was very important to them, I think, recognizing how little of that existed in Wellesley, to impart that kind of education to us as parents. It was always central to me that I had to, in order to feel fulfilled about myself as a citizen of Wellesley or anywhere else, I had to in some ways consider myself a citizen of the world and kind of get out there.

Q: Was there something in your travels that really brought home the lack of opportunities or basic necessities of other people in other parts of the world?

Boland: I think what might have been important for me was the opportunity to go back with my dad as quite a young person. He was there during Apartheid from I think the age of five to thirteen, thereabouts, and being able to go back to a country and have him and my mother as well show me around places they knew and to see the school he went to, the house he lived in, to meet some people he remembers from when he was living there as a child. To see that directly alongside a lot of the socioeconomic devastation that exist in the area brought home the reality of the circumstances and the interconnectedness of the challenges therein in a way that traveling elsewhere maybe may not have because it might have been easier to compartmentalize the lives and experiences of others. But to see a place that my father had lived immediately adjacent to a completely expansive

urban slum, was I think quite an important recognition that these two worlds, and very much my world and my family's world, do collide in a very real way with the way people elsewhere do live, and I think that's maybe something I carried with me. In addition to that, my parents are both medical doctors, and so just more generally, I think there was also this interest in helping other people as really central to what it means to be a responsible citizen.

Q: I know you must have been interested in travel yourself and adventure as a kid. What other interests did you have growing up?

Boland: The main interest I had growing up really was I loved to tinker. I liked to build things, I liked to construct things. My parents were very, in today's world, probably over lenient with my childhood use of power tools and the ability to run off to the town dump that was around the corner by myself to collect supplies to build go-carts and arcade machines. I built a boat at the age of eight, that kind of thing. My parents are very supportive of having this sort of curiosity for construction and engineering, to the point at which there was a time in my life when I thought that maybe I would want to move forward and actually be an engineer based on my love and interest of doing this. That really took up quite a lot of my time outside of school, though of course, other interests did include more traditional things like reading and playing soccer and hanging out with friends. When I was a little older, I spent too much time playing video games, as a lot of people do. By and large, I would say I was a pretty normal kid, with the possible exception of taking up the whole garage at our home with big construction projects that

really had no oversight whatsoever, and I was kind of left to my own devices with the power drill kind of thing.

Q: What did you do after high school, after secondary school?

Boland: Unusually for someone in America, I decided to take a gap year, and there will be some things to dig into with this history. I decided in the process of applying for school, to tie this back to my discussion about the town of Wellesley, is that there was very much an expectation that you do go to college, that you do go to university. Out of 250 or so graduating students, I ended up being one of only two people who did not go straight to university. The reason for that is not particularly creative or insightful. It was because I had not been accepted to any college or school that I felt excited about, and I felt very confused about what it was I wanted to do professionally. I came to the conclusion through conversations with friends that the more uncomfortable an experience I could have taking a year off, the more it would provide me an opportunity to grow and learn about myself and challenge myself. So I ended up spending about ten months in South Sudan at the age of eighteen and then nineteen, working on a very small maternal health project run by an NGO [nongovernmental organization] out of Massachusetts General Hospital in Boston. It's a slightly atypical way to spend a gap year, but it was a wholly fulfilling and informative experience. I enjoyed it very much. I'm sure you'll have questions about it, but the long and the short of it is that it taught me a lot about what to prioritize in my life, and also that I was comfortable and capable of working in environments that a lot of people would not be interested or capable of working, and it

left me with a great sense of confidence in continuing to do work that I found very fulfilling.

Q: Were there any specific moments that really taught that to you or showed that to you, that you were able to work in environments where other people would have a lot of difficulty?

Boland: In South Sudan?

Q: In South Sudan, yeah. Any particularly stressful moments or tense moments or trying moments?

Boland: They came up with some frequency, unfortunately. I have to preface it by saying my time in South Sudan was really the most peaceful window that the country has seen. I feel lucky to have been there not at a time that was more violent or stressful. But what ended up happening with the organization I was working for was the country director of the program left early for a number of personal reasons, and also because of the stress of working in this kind of environment. Due to the structure of the organization, I was actually left as the only in-country staff member, permanent in-country staff member for this NGO, which rotated doctors through on a four to six to eight-week basis. What that meant was very shortly, only a few months after leaving a town like Wellesley, I was the only person who was permanently holding down the fort, so to speak, in this town, in Juba, the capital of South Sudan, which is where I was normally based. That was

somewhat daunting, though I found myself actually taking great joy from it because the environment really lends itself to camaraderie. I was able to find a number of really exceptional friends, funnily enough or oddly enough through my interest in playing ultimate frisbee. We would go down to the United Nations compound in Juba and play frisbee, and I made a number of friends there.

But there were a number of other, more solemn experiences. I remember a sense of real tragedy going, for example, to the Juba military hospital. We had been working in the Juba teaching hospital, which is the country's main civilian tertiary center in the adult emergency ward. The day-to-day needs of that facility were profound, and the resources, or lack thereof, were similarly profound to the sense that I think we had one bottle of antipsychotics for what represented the entire country's needs. We did not have rubber gloves, we mostly didn't have running water, we frequently didn't have electricity. As an eighteen or nineteen-year-old, it would not be uncommon for me to walk into the ward to find my colleague, for one reason or another, and come across someone who was dying who really didn't need to. The Juba military hospital that I was describing was a place where I went and realized that it could get even worse than that, where there was only one barrel of rainwater for all medical cases at the hospital and it was filthy. The ceilings were quite literally falling onto the floor. There was a man I remember who had lost a leg from stepping on a landmine and had a catheter that had not been replaced for something like ten weeks. I think what I suppose I remember as secondary to that is recognizing how painful that experience was but managing to understand it in the context I was in and using that really to further energize my interest in doing something about it. On that visit,

for example, to the military hospital, a number of my colleagues had to walk away because it was too disturbing to them. I don't know what that says about me. I hope that doesn't mean I'm a bit of a sociopath. [laughter] What I came to find from that, also some instances when my life was potentially in danger, and feeling that I had a good handle on how to respond to the environment around me, I did find that I could get to the end of the day and sit down with a beer and relax in a way that a lot of the people around me really could not, and it meant that I could be there full-time for quite a long time in a way that other colleagues couldn't.

Q: Not to spend all of our time in South Sudan, but when you talk about the times when your life was in danger, what was happening there?

Boland: The country is not safe, and there are unfortunately a couple of stories. They're nothing that compares with a number of my colleagues and friends who were in the country a year or two later, when the civil war opened back up. There were a number of carjackings that were very uncomfortably close in South Sudan. I had a needle stick incident in the teaching hospital that was really unavoidable and that was fairly concerning. There was another instance when I was with a couple of colleagues in a very rural area on a road, that even having spent a lot of additional time in developing environments, it was truly rural and this road was truly not a road. We lost three tires at the same time. That was actually probably the most potentially concerning I suppose, because we were in an area that—we were advised that we should not be in this area after about two o'clock in the afternoon, and it was already four, and that was due to being

delayed previously, as happens quite a lot in this kind of environment. As we were trying to get quickly back to town, we lost three tires on our vehicle. There was a large bandit presence. At this time, the civil war had calmed down, but there was a large bandit presence that made it very insecure for us to be there, and we also then discovered that the satellite phone had run out of batteries so we couldn't call for help. We essentially had to stay and shelter with a nearby town despite a number of other people out in the bush looking for us, knowing that we had resources that they would find valuable. We were able to successfully shelter for the night and were able to safely arrange for an escort to get us out the following day. But it was a rather—I can't say it was the most comfortable night of my life, but I knew we had the support of the people around us because we were doing community programming and working to capacitate traditional birth attendants in the area. Actually, this town had had one of the traditional birth attendants trained by us fairly recently, so they actually knew us. Not me personally, but they knew of the organization and could recognize that we were part of that same project. So we were able to rely on community support in a way that made it safe for us to get out.

There are other circumstances and events. I almost stepped on a landmine once, which was highly uncomfortable. I was in a town that the following day was sacked by a group raiding cattle. Things like this came up with some frequency.

Q: Can you briefly describe—I know you were the only full-time staff in country for a while. What were your job duties exactly?

Boland: Because I was the only person in the country, I really bounced around doing quite a bit. The broad answer is that I was responsible for creating an environment such that doctors coming from the US and UK [United Kingdom], who may not have been in this kind of environment before, could safely and easily arrive preregistered with the Ministry of Health and click into an established structure at the Juba Teaching Hospital adult emergency center. In addition to that, I was helping coordinate trainings for these traditional birth attendants around a number of locations in the country, which was separate from the medical doctors that were coming from the global North. That included anything from flying out to a rural part of the country to help facilitate midwifery training to quite literally having to siphon gasoline from a barrel into the generator to keep power going at home so that people could connect to the internet and send emails back to their family and friends at home. It really ran the gamut between being a base manager, which would mean keeping the household going, paying the bills, making sure that the necessary security was in place; to being the finance officer, making sure funds were sent in the right place, funds were sent to the right people, and we had necessary funds in-country to continue our operations; to a kind of program manager of sorts, needing to liaise with the Ministry of Health to make sure we could register doctors coming in and make sure that we had their blessing to do trainings throughout the country; to someone seeking donor funding from local partners by going to NGO coordination meetings and being able to communicate and advertise what we were doing to see if we could get the support of anyone else there. It really did cross all spaces, with the exception of, I would say, clinical medicine, for which I have no real training.

[break]

Q: Sam, what happens then, after that gap year?

Boland: When I finish in—for a while in South Sudan, I reapplied to colleges, and I was able to get into a university I was more excited about, which was the University of Chicago. I ended up traveling for that summer. I took the opportunity being abroad to stay abroad as much as I could and was able to see various different families and friends, including friends I had met in South Sudan, and travel with them for some time before kind of in a whirlwind trip flying back to Boston and quickly chucking a bunch of stuff into a car and driving out to Chicago, where I stayed—I would say for four years. I was there for four years, but in fact my ten months in Sierra Leone, as well as some other work that I've done in Kenya, was while I was at the University of Chicago in college before I received my bachelor's degree.

Q: What year was it that you entered the University of Chicago?

Boland: I started the University of Chicago in 2012 in September.

Q: Did you go in with a major in mind?

Boland: I went in with what I thought I would major in. The University of Chicago is fairly flexible, so I didn't know at the time for sure what I would end up doing. But I knew my interests remained in public health as reinforced by my experiences in South Sudan, and the closest I could really do therein at the University of Chicago was public policy, and they have a very good public policy track, so that was what I started directing myself towards and ultimately what I did end up majoring in.

Q: Can you tell me about the first, I guess it would be, year and a half or so that you're there?

Boland: Sure. What I don't feel proud of but what was I think at least partly true for myself was that the very first experience of going to college was actually quite difficult for me, and not in any academic sense. What I found challenging was that I had just returned from this year in South Sudan, I was a little bit older than other people, but age aside, I had had some experiences that were very unusual and very, very difficult to communicate with people. In that sense, it was somewhat isolating, I would say is probably the most correct word to use. Not that people necessarily wouldn't want to hear some of the stories I had to say or hear about what my focus and my thoughts were on the subject, but that there was not much ability for people to make that a conversation. I found that a little bit tricky, but one of the great things about the University of Chicago is ultimately I was able to find some people who had actually had some similar experiences and I was able to make some really close friends there.

The first couple of years at the University of Chicago, there was not too much to know. I kind of plugged away. The University of Chicago has really substantial core academic programs, so there was a lot of mandatory classes I had to go through, and I stuck into those as best I could. I ended up in Kenya for the summer between my first and second year, and that was with the same organization that I had been working with in South Sudan. I was actually expecting to go back to South Sudan to continue supporting the program there, but they had, in the time I had left, ended their program in South Sudan because the environment was too difficult and too unsafe and they weren't able to do the work they needed to do. They had shifted their resources and programing to Kenya, so I was in Kenya for a few months and was able to continue traveling then.

My second year at school, I again plugged away academically. There's not really too much to go over. Kind of a standard student. I was involved in a light touch way with various student organizations, including I suppose most substantially an organization called Peer Health Exchange. I had the opportunity to go around a number of schools in South Chicago, teaching sexual education and health education to ninth-grade students who otherwise wouldn't receive any, and that was very fulfilling.

The Sierra Leone story really begins about halfway through my second year at school, and that was because I happened by chance to meet the director of the King's College London global health center [Centre for Global Health and Health Partnerships], and I asked him whether he had any opportunities for someone to intern at one of his projects over the coming summer. I was looking to maybe do some work away from East Africa, I

was looking to work for another organization. Not because I didn't love what I did before and I didn't love the area I was working in, but really just to kind of broaden my experiences in the field of public health. He said, "Yes, we have this program in Sierra Leone, in Freetown," and this is currently December 2013, January 2014. That conversation continued, and eventually I received a small grant to be able to support myself in Freetown. When I got to the end of my second year of school, I did a little bit of traveling and then hopped on a plane to Sierra Leone.

At that time, the news of the Ebola outbreak had only really just started because the outbreak had started in the spring—I suppose actually technically it was December of 2013, but it had only been recognized in the spring of 2014, and this is now the early summer. But at this point, there are no cases in Freetown, and it's unclear what the scope and scale of this outbreak is going to be. I remember calling the country director of the King's Sierra Leone Partnership, KSLP, in Freetown and saying, "Hey, I just saw some news about this thing called Ebola. I don't really know anything about it, but I did want to make sure that you are still asking me to come, that you don't think that for your purposes it would be better for me to stay away; I don't want to get in the way if some big emergency happened," and so on and so forth. They said, "No, no, it's currently contained to this place called Kenema, and we don't necessarily anticipate that it's going to come to Freetown. We could really do with your help, so why don't you still come?" So I did, and I showed up in Freetown, and the day after I arrived was the first case of Ebola in Freetown, as treated by my country director and another one of my colleagues at the hospital. I was supporting Connaught Hospital in Freetown. So that was really the

beginning of my link with Ebola, with Sierra Leone, and more broadly, with my deep interest in doing something to help contain that outbreak.

To quickly continue that story, though we can dig into it, what ended up happening was I was quickly thrown into Ebola response activities at the very, very early stage. This is really only when Médecins Sans Frontières was doing their work in Kenema. It was not yet a Public Health Emergency of International Concern, there was very, very little international support to responding to the Ebola outbreak. Shortly after I arrived, and shortly after that first case of Ebola, I got the expected message from my university, the University of Chicago where I was still a full-time registered student, that I needed to evacuate the country. They were able to tell me that because I had received a small grant from them that was supporting me to be there. So I only actually ended up spending about two weeks in Freetown at that time with the King's group. A lot happened in that two weeks.

Possibly the most at least unreasonably scared I've ever been was at that time. Like I said, it was only the day after I arrived that my country director walked back into this very small office, and he was very sweaty because he had just taken off his personal protective equipment, and said, "I think we've had our first case." He's sitting about twelve inches from me, and all I really knew about Ebola, even being there, was what was the very small amount of information being presented on things like the BBC [British Broadcasting Corporation]. That was a very scary experience for me, particularly because I became quite ill for a period of a few days to the point at which I wasn't really

thinking straight, again in the context of knowing pretty much nothing about this disease. It would be unfair of me to say that I wasn't sure that I didn't have Ebola. It was something that the presence of fear, an associative fear around that disease was so high that because I was so substantially ill and dehydrated and not thinking straight, it was hard not to think, oh my God, what if? Maybe I do, I don't know how I would. But when I was there, people were still hugging and shaking hands, people were still behaving very normally. Within a week of me being there, the entire city had been shut down. There was a three-day lockdown, Land Cruisers were going around with megaphones, and the city that had gone from this complete sense of vibrancy and activity was deserted. All you could hear were these Land Cruisers with these megaphones on top, and a muffled voice was, "Ebola is real, Ebola is real, stay at home, you are not allowed out, Ebola is real." I hate to make the analogy, but in many ways it did feel a little bit like what you might see in a film, and it almost developed in Freetown at that time as a caricature of how a film might present a disease outbreak like this. As best as is possible, you maintain this sense of camaraderie and of lightheartedness. Still went out to bars, still had beers in the evening once I had recovered from some of my sickness, still went into work and continued doing non-Ebola response work as usual, but I knew I was not going to be able to stay there for long, so I never really got stuck in, knowing that if I did, it would only be detrimental. Like I said, after a couple of weeks, I was on a plane out of the country, which was a really, really tragic feeling for me, especially because my colleagues were still there. More cases were clearly coming in, and you could so easily sense the scale of what was about to happen. It turned out that I was actually on the last British Airways flight out of the country. My university had paid for an urgent ticket, and the only seat

available was in business class on this plane, and I remember crying on the plane when the flight attendant, before we took off, came to my lay-flat seat with a glass of champagne and asked if there was anything else she could do for me before we took off. And looking out the window towards the darkness of the airport area—it's not in Freetown, exactly. Just looking in the direction of Freetown and really truly not knowing whether or not the colleagues I had had for the past two weeks would survive. That was a deeply painful experience.

I ended up spending the rest of my summer back in Kenya because I was able to arrange at the last minute, to return to that project. I did not feel like I could spend another month and a half or two months in Wellesley after that two weeks in Freetown, so I quickly got back out to an environment where I felt I could help in some way, shape, or form, and then went back to school. This is now the beginning of my third year. But the whole time I was looking for opportunities to return to Sierra Leone to help out as best I could, and I did eventually find one in the autumn of 2014. At the very beginning of January 2015, I was back on a plane to return to the country that I had been pulled away from, for good reason, but pulled away from in a way that was very impactful for me.

Q: I want to stay with those first couple of weeks for a little longer. How did your sickness resolve? I imagine you had all the typical symptoms of vomiting and diarrhea and everything, is that right?

Boland: Yes.

Q: Were you telling anybody about this? How did you handle it?

Boland: I tried as best as possible to compartmentalize it and understand, okay, this is a new environment that I've been in. One of the reasons it was concerning to me, frankly, was I had gone through this whole process in East Africa when I first arrived with just adjusting to a new biome, and thought that I was kind of bulletproof in that regard. I was pretty proud of my stomach. But I was really, violently ill. I did come into work after I started feeling sick and I told my colleagues, and they said immediately, go home, this is not the right environment to be sick in, especially provided everything else going on and all these potential Ebola cases that are coming through. I was well enough to take a taxi back to the house I was staying at, and just spent three days indoors, actually. Thankfully, I didn't have nausea in a way that prevented me from drinking, and in a place like Sierra Leone, it's not hard to find oral rehydration salts, ORS, in the pharmacies all around because of how big a problem things like cholera and acute diarrhea are. I was able to find some ORS and spent a painfully confined few days in what I think must have been an old colonial house, doing my best in that time—it's only right after I arrived—to keep a clear head. I did not tell my parents. I did not feel that I could. I felt that that would concern them too much. I did have fever, vomiting and diarrhea, as you said, and I think that the—so the thing is, at this time, there was no real mechanism for dealing with anyone who had symptoms of Ebola. Later in the outbreak, had I had the same symptoms, I'm quite sure I would've ended up at KTTU, Kerry Town [Ebola] Treatment Center, which was the treatment center for international aid workers and Sierra Leonean

healthcare workers. There was no mechanism at this time. There was nothing for me to report. There was no way of me reporting my sickness to anyone. The 1-1-7 system which was set up later in the outbreak, which I had actually been asked to set up before being evacuated from the country, was not in place. At a point, the only thing to do was to try and treat yourself and get better as best you could, and thankfully, one of the benefits of working for health NGOs is you do have a lot of colleagues who are doctors. I did have one colleague who was a medical student actually who was staying with me and able to help not really care for me, but emotionally just say, look, it does look like it's getting better and this really doesn't conform to what we would expect to see, not that we have much idea.

Thankfully, it started resolving after about a day and a half, two days, and that helped me calm down. But that was a scary window of time, especially when you could hear those announcements in the street saying Ebola is real. I remember seeing from the top of the house, my colleague walking down the hill, and people pointing to her and pointing down side streets saying, don't go down that way, there's Ebola down there. I had an acute awareness that it had either spread to the immediate area, or that people were sufficiently worried about it that they believed it had, and at that point there was no way to know which was true. Unfortunately, the best I could do to try and keep tabs on stuff was really to just continue looking at what was on the internet. I had no better access to understand what was going on than what anyone back home did because I couldn't really leave the house. I basically just did my best spending the time avoiding feeling worried by reading about Sierra Leone, about the history, reading what I could about Ebola, but there was

very little. And having a lot of painful conversations with my partner from America, who was at that time in Turkey, about whether or not I was going to leave the country because I had said to her when I went to Sierra Leone that if Ebola came to Freetown, that was my threshold, that was my line, and I would leave. The day after I arrived, Ebola had come to Freetown, and I changed my line. In that context, in that environment when I was there, it did not feel yet like a situation that I needed to run from, and I was in a state of deep confusion about where that line was drawn, knowing that my colleagues were quite open about how they were preparing to potentially die to deal with this outbreak. I can't emphasize how much that—a lot of people do say that, but for those colleagues at that time, that was a very real possibility because this was, again, before there was a public health emergency declared. This is before DfID [UK Department for International Development] and the British military came in, this is before treatment centers had been set up, and there was a very real feeling that Freetown might fall and that the only people who were willing to put on PPE [personal protective equipment] and try and deal with this at this moment were just a couple, a handful of my colleagues, both international and Sierra Leonean, at this hospital I was working at. I was very humbled by that, and trying to understand how to understand my own sense of risk in the context of what was so clearly such a great need.

Q: I want to hear more about your colleagues. You said that they're both international and local, that they were working at Connaught, is that right?

Boland: Yeah, the Connaught Hospital in Freetown.

Q: Can you tell me about a few of them?

Boland: Yeah. The two that stand out most meaningfully are the then-country director of the KSLP program, that was Oliver Johnson. He was a pretty young guy. Not as young as I was, of course, and he had been there since 2013, so for a year and a half or two years. And another colleague, Marta [Lado], who was I think Spanish. She might've been Portuguese, but I'm pretty sure Spanish. She was an infectious disease specialist, and she just happened to be in the country at Connaught as an infectious disease specialist when Ebola came to Freetown. Both of these individuals ended up not only staying in Freetown at this moment when Ebola came to the city, but actually being incredibly integral in the Ebola response as it moved forward over the following couple of years. They had been there long enough to establish relationships with the Ministry of Health [and Sanitation] and to establish positive relationships with the medical staff at Connaught Hospital to the point at which they were not really Ebola responders, they were considered an equal part of the Sierra Leone health ecosystem prior to the people who flew in later on. They had a kind of rapport with people that allowed them to—they were in many ways seen as equal colleagues in a way that I'm not sure people who were flying into the country as Ebola responders were because those roles were always seen as somewhat temporary. Oliver Johnson was one of the primary initial advocates, both to me personally and also to others, that this was a situation that demanded international attention and international concern. He spent a lot of time on the phone doing interviews with the BBC. He actually flew back to Britain to meet at a very senior level with a number of individuals to try to

convince them to send help. He was also an incredibly astute man at understanding that help could come from anywhere, and I say that because in a sense, I was still in college, and he was there asking me, look, can you do this? Can you, for example, set up a 1-1-7 call center? I don't even know what that would look like, I don't know where you're going to find the building, but just because you feel incompetent and that you don't know how to do that is pretty much meaningless because really no one does, so do you think you can just try and take a stab at it anyway? He really understood how to identify good people when they came along, and I felt very privileged that he felt I was a competent colleague of his and he did trust me to do some of these things before I got pulled out.

He was a real stickler for the duration of the outbreak. He stuck in, he was someone who was not afraid to raise his hand in meetings, and pardon the French, but call bullshit where he saw bullshit, and it came up a lot. He was someone who was important enough and trusted enough that he really had the ability to do that when even big institutions like the WHO [World Health Organization] or DfID were trying to make decisions. If he felt they were the wrong decisions to make, he was not afraid to get stuck in and change those things and I respected him greatly for that.

Q: Do you remember what some of—

Boland: Sorry, go ahead?

Q: No, I'm sorry. Please go ahead.

Boland: Marta similarly was someone who not only had deep concern for the country and was very much willing to risk her life to try to deal with this outbreak, that was true to the point at which for a brief time, the entire King's team was evacuated from Sierra Leone, and she actually refused to go. She just said, look, you can't force me onto a plane, you can wipe your hands of your organizational responsibility for my protection, I'm not leaving, I'm staying. And she did. Just to reiterate again, this was a window of time in Sierra Leone when there was no sense among people that the city of Freetown was going to come out of this okay, and it felt in that moment that she was quite willingly and openly signing a real death sentence in order to help people while she could. That floored me, and both of those individuals and their commitment to responding to the outbreak and to helping people there were part of the impetus for me feeling that I had to return as best I could and as soon as I could.

Q: You talked about Oliver as a guy who wasn't afraid to call bullshit when he felt something was bullshit. Do you have an example of one of those times?

Boland: Let me think. It came up with some frequency, really. I'm trying to think of what a good example might be. [pauses] Bear with me for a second while I ponder, because there must be a choice anecdote I can come up with.

Q: Sure. And it can be anything.

Boland: I do remember that there was a time when—well, I think possibly the most significant example, I briefly referenced, which is that as far as I could tell, there was a time when a lot of people around the world were considering West Africa a lost cause, and Oliver Johnson was not going to let that fly. He stuck in and essentially marched into offices in Britain to demand that support get sent, and I don't think that it's him alone, but I think it was a fairly small number of people like him who ended up mobilizing, far too late, but mobilizing the international community to come to Sierra Leone. I have found in my experience and also from my research after leaving Sierra Leone that individuals like him really do have an ability to effect change and to move decisions in a way that I think most people don't fully understand single individual people can, and he was one of those people. I do think, of course, help would've come had he not done that, but he really refused to let the rest of the world ignore what was unfolding in Sierra Leone. He was taking every opportunity he could not only to give reports from Sierra Leone, from Freetown, but to make sure those reports included the voices of Sierra Leonean people and that they did not sugarcoat the situation because there was no sugarcoating to be done. I really respect him for his transparency because I think the brutality of what was going on needed to be presented to the rest of the world, and I think he was one of the very few people doing that and doing it effectively.

Q: I want a sense of what your days are spent—what you're actually doing. I know it's probably a fluid situation. When you were not violently ill, what were you spending your time on?

Boland: Just in that two-week period, when I wasn't—

Q: Yes.

Boland: Really kind of helping out where help needed to happen. It was a very fluid situation, and I think that's the key takeaway. It was at a point where it was not entirely clear whether or not existing programming that the organization had been doing would or could or should continue. Some of what I was doing was creating, for example, educational posters and reminders that would be printed and put up in the wards about clinical procedures and practices for X,Y, and Z. I was working with an English doctor to write down in the most simple way possible how to do this and that and to prepare that for a training they were having. I was gearing up a little bit to try and help with establishing this 1-1-7 call center, which meant beginning the initial calls to people to find a space more than anything to be able to do that. I was essentially just sitting in—the very short answer is, I was just sitting in this very, very, very small office, which I think remained the King's office for the duration of the Ebola outbreak. It was not more than probably twelve by twelve feet or something like that. Being there physically and helping out people as best I could with their various different admin [administrative] tasks, it sounds very boring, and I suppose it's one of the things I really enjoy about this work. Even if you're doing something that is ostensibly office work, you're doing it in an environment and around circumstances that are incredibly interesting and meaningful. It's kind of a good question. I actually don't remember that well what I was doing. I'm afraid to say I think most of what I was doing was intentionally not getting stuck in, due

to what I knew was coming, which was that order to evacuate. I did spend a lot of that time writing. I'm afraid I did not, when I returned to Sierra Leone, keep any kind of journal or blog, but I did at that time, and that was really because of how emotive the experience was and how upset I was about the prospect of being taken away from the country, and also how upset I was about the circumstances of the international support that just wasn't there. It was so clear to me that had there been a small chunk of change and a few experts in addition to those that had been sent, it would've been possible to have curtailed the outbreak. I remember when the US first announced that they were going to deploy some CDC specialists, and they were going to deploy fifty people, I think was the first announcement at the get-go, and I remember looking at that and wondering at the number. I was like, wow, that's a huge number of people. That they were going to commit fifty million dollars, someone was going to commit fifty million dollars, and thinking, wow, that's an astonishing amount of money, I wish we had that a couple of months ago.[1] [laughs] Of course, that pales in comparison to anything that then came. But more than anything, I had a real sense of anger about how evident it was in Sierra Leone at that time that any following investment, any funds, any people, any effort that was going to come in to respond to the Ebola outbreak, had it been invested in the basic health infrastructure over the previous ten years, fifteen years, twenty years, that probably I wouldn't have been in a circumstance where I was about to get pulled out of the country and potentially, according to later CDC estimates, upwards of seven hundred thousand or a million people's lives were at risk.

[1] Note from S. Boland, July 2018: I looked up my original writing about this. Over the course of a couple of days in late July/early August 2014, the WHO committed $100M to the response, and the CDC committed fifty response workers—at the time, that felt immense, though in the course of the larger outbreak that was proverbially small change.

That's not really answering your question, but that's because in fairness, what with the sickness and preparing to leave as quickly as I arrived, there wasn't much to do other than just feel the environment and the impending emergency and try to understand what that meant for Sierra Leone and for myself.

Q: I like your point about the lack of the health infrastructure you were seeing. You must've also seen that in Connaught Hospital itself. Can you tell us a bit about Connaught Hospital and what resources they have there, which ones they lack, that kind of thing?

Boland: Connaught Hospital was much better resourced than Juba Teaching Hospital, but that is a very low bar. I remember, I think there were maybe two or three working sinks for a hospital with several hundred beds. I am aware that there were only a few working toilets, and the toilets that did work flushed into a gulley that ran right through one of Freetown's main slums. It was not uncommon to see medical waste in that gully, and also for there to be periodic endemic cholera in that slum due to the cases of cholera coming into the hospital. Power would go out with some frequency, and in my field of work, this almost goes without saying, there was a complete lack of available medication and the ability of people to get the medication they received, and by that I include necessary equipment for procedures as much as I do medication to deal with a specific ailment, was just not there. But in addition to that, and perhaps more importantly, was the real need for additional human resources for health. There were a few nurses and community health

officers, CHOs; there were a couple of doctors; but that was really it, and we're talking about a facility that was there to try and treat more than a hundred people. I think it had two or three hundred beds. Especially in the context of hearing news about healthcare workers who were dying in the rest of the country, you had an acute awareness of how precious and valuable someone with any degree of medical training was because there just were not enough people to go around. So it really ran the gamut of what a lot of people would stereotype the context of what would be an African hospital, and I use that as a generalizing term to really emphasize how problematic that stereotype is, but in this particular instance how true it is. I can only say from having worked in other parts of the country, and again, it's not surprising that all of the difficulties, the challenges and the lack of resources that Connaught Hospital experienced were experienced in a much bigger way the more and more away from Freetown you got. Working in Port Loko at the government hospital or Kambia, at their government hospital, then again at the community health posts and peripheral health units that you saw around the more rural parts of Sierra Leone. You got down to the place where those most rural health units really were just a building, and you were lucky if someone could give you clean water, let alone any kind of medicine or anything along those lines.

Q: I wish we could keep talking about this, I think we should probably continue on. Do you remember what month it was that you were there?

Boland: I was there towards the end of July and the beginning of August of 2014.

Q: So you come back to the United States and then back to Kenya, is that right?

Boland: Yeah. I came back to the United States for—I think it was only maybe four or five days. I couldn't really bear to be in a place as comfortable as Wellesley after having been pulled away from Sierra Leone. So I jumped on a cheap flight to Nairobi and continued the work I had done the previous summer in Kenya until the beginning of school, in I guess that would've been the end of September 2014.

Q: Tell me about starting school again after that experience you had in Freetown.

Boland: In many ways, it was not dissimilar to starting school after having been in South Sudan. It was just this incredible sensation, and really vivid feelings and thoughts about what I had seen and where I had been. Some of that had mellowed out a little bit because I had been able to go to Kenya, though what I found in Kenya and still found when I returned to Chicago is that a lot of individuals and colleagues, perhaps understandably, really did not want to be around me because the problem of Ebola and West Africa was only getting worse and worse and getting reported more and more. I do remember a number of people deciding very consciously that until they had a better idea about what this virus was, even though this is now weeks later after having left the country, that they had decided they wouldn't want to see me.

Q: How did—they just told you that straight up, or—

Boland: Essentially, yeah. I remember bumping into people on the street, so to speak, and reaching out a hand to shake their hand or hug them, and they'd say, hmm, no, I don't think I can do that. And I don't blame them for it. There was a lot of fear that surrounded the Ebola virus and the outbreak, and I didn't blame them at the time either. It was just very sad.

Q: So tell me about—as time progresses, you're probably still paying attention, to some extent, to what's going on. What happens next?

Boland: I'm paying a lot of attention to what's going on because I'm already sending out applications to try to find work that would bring me back to Sierra Leone to work on the Ebola outbreak, and part of that was for this kind of emotional need to return. Part of it was that I figured there was not a better way, as someone interested in public health, to learn what the international community was capable of doing in response to a public health emergency, than being there and working in one. I had spent some time in Kenya sending out applications to various different organizations. I had continued to do that when I returned to Chicago, and funnily enough, it was actually at the end of the day a connection of mine from South Sudan that linked me with an NGO—this would've been maybe late October or early November—who was willing to take me on and willing to bring me back to the country to support their projects, off the basis of the recommendation of this colleague of mine from having worked in South Sudan. That was the NGO GOAL Global, which is an Irish NGO. My friend was working for them, having been sent there at really the most difficult time; again, that August/September 2014

window, and the couple of months thereafter, which was I think realistically the most challenging and burdensome for people who were there, while I'm sitting in Chicago having beers with friends. But anyway, they were able to link me with people at GOAL Global who were willing to take me on.

GOAL had committed to building an Ebola treatment unit in the Port Loko district of Sierra Leone. It hadn't been opened, but it was in the process of being built, and there was this kind of tacit arrangement that I had with them, which was that they would just give me a job title. Because I was still in college, I was kind of like the lowest-level employee, which was program support officer. They threw something down on a page which was something like, he'll help write reports for donors for the grants we receive, he can report back to them and be someone who helps us with that. Even at that moment, they were very clear that we have no idea what you're going to do, but we have a couple of people vouching for your ability to work comfortably in this kind of environment, and right now that's what we need. We don't know what you're going to do, but we need good people here. So they did offer me an opportunity to return.

I had a very, very prolonged and difficult period of decision-making around whether or not to take that offer. I had pushed forward quite aggressively with finding an opportunity, and I think I always knew I would take it if it was offered, but it also felt irresponsible not to do due diligence and to understand what that kind of commitment could mean. I had never done this before in my life. But I then did turn to the twelve or fifteen or so people—professors at school, family, friends from home, other professional

mentors—and call them and speak to them very directly and say, should I do this? To be honest, the process of asking people and going through that process did not actually make things any easier because about half of them said, yeah, I think that can make sense, and probably slightly more than half said, I really don't think you should go. I suppose more than anything, talking to those individuals just helped me work out my own thoughts, as much as they were providing their own guidance and advice. I did ultimately make the decision to take the offer I was given by GOAL, and I left for Sierra Leone after arranging for a leave of absence, which the University of Chicago was actually very supportive of. There were no questions or qualms about it. They said, yep, you're on track to graduate, so just sign the paper, you can come back whenever you let us know you want to come back. I went home, I had Christmas with my family, I had New Year's with my partner, and I think on the 3rd of January of 2015, I was on a plane.

Q: What happens then?

Boland: I'm flying to Sierra Leone, and I really have very little idea what to expect. I have no idea. I had not heard of GOAL before, though they had worked in South Sudan. I did not know any of the people I was going to be working with, I did not know the environment I was going to arrive at, and to me, that was okay because it was pretty much exactly the same sensation I had when I was first leaving for South Sudan. As much as that was a very difficult state of mind to be in, it was also one that I found to be very productive and in some ways exciting. It would be dishonest not to say there was some sense of excitement, which has only helped because in Brussels, where I was

connecting down to a flight to Freetown, I ended up bumping into a very, very close old friend of mine who was also going to Sierra Leone to work in a different part of the country on the outbreak. We ended up sitting together on the plane and being able to catch up, which was a very kind of personal way of arriving back into Sierra Leone and back to the airport that it was not long before I had flown out from.

Q: Who was this friend?

Boland: This was a friend from South Sudan. Her name is Erin [Polich] and she is someone who I remain very close with who currently works in the Boston area. She was also working for GOAL Global, but in Freetown, not in Port Loko, not in the district where I was heading off to.

Anyway, I arrive at the airport and bags come through and it's a standard kind of janky airport. You're not quite sure whether or not the money counter there is a good place to change some dollars, but you do it anyway because you don't really have much choice. I walk out of the airport. Almost did not get picked up by my organization by accident, but was able to find the driver. Chuck my bags in the back of a pickup truck, and was on my way to Port Loko, which was not far from the airport. It's actually the closest town to the airport.

I was with a colleague, an Irish gentleman, Davey [David Adams], and I think the thing that most struck me, having not been down this road—to go to Freetown, you go to the

airport and you get on a boat to go across the bay, and you show up at what is clearly a city. This road was going down away from the city and into the country of Sierra Leone, and it was quite an odd experience because there were no lights, as was expected. This is now at night. It was only maybe a couple of weeks before that there had been a BBC reporter who had come to Port Loko District and had stood on this road and had been in a community along this road that had essentially separated people who were sick onto one side and people who were still healthy on the other, and there were people literally falling over and dying in the open air with no one there to do anything about it. I knew I was driving down this road, and we did pass that community as well as several others with big red and orange tape stretched across households to indicate that there was a quarantine in that area. I remember the car ride going from incredibly quiet and solemn, staring out the dark window at these quarantined households, and also in some ways when it wasn't quiet and solemn, being quite vibrant, being with an incredibly funny and chatty older Irish man who was kind of whip smart and could crack jokes in a way that only older Irish men can.

I rolled into the compound in Port Loko, there were very few people around, and it was clear that the organization was gearing up to accept a lot more people, but I was really kind of the first new person to come to the Port Loko area. There were three or four people in this compound, and I dropped my bags and had a few beers with them, just learning about the new people I was going to be working with. You know, you're at that point where you've just come off a flight, you're not remembering anyone's name, but someone hands you a beer, and of course, you say yes.

It was only after that and the following day that I really started learning what it was I was going to do. What I mean by that is no one knew, so I was just there, like I said, and it was really an opportunity for me to find what needed to be done. The organization was opening up the Ebola treatment center, and it had just opened, and there was a lot of work to do there, so I did some help with them. I went there and helped out there a little bit in terms of some of the non-clinical logistical and operational support they needed. I was helping the staff health doctor with some of his needs because he had suddenly a few hundred additional staff that he had to work with and needed some administrative support. I worked with another colleague of mine on helping her prepare for a training she was doing on infection prevention and control. Eventually, what I ended up getting stuck into, bouncing around and helping out where I could, was I started attending meetings at the District Ebola Response Center. Me and a couple of colleagues, the two senior colleagues, realized that with my support, GOAL could be prepared if they had the funding to support disease surveillance activities in the Port Loko district. That was something that sounded most exciting and most fulfilling to me, and that is what I ended up doing before, as I said, becoming a bit more centrally involved in the day-to-day running of the Port Loko Ebola operations.

Q: Could you briefly describe these few activities you're doing before getting involved in those meetings at the DERC? You mentioned, for example, the colleague you were helping with training.

Boland: There's not really too much to say because similar to what I had been doing in Freetown, a lot of it is really admin and office work. For example, this colleague who needed help with training, one of the things I helped her do was come up with a template for a certificate she could give people at the end of the training, because it was very helpful for people to have this physical documentation to show they had been trained professionally by an international organization. I helped design the certificate on my computer. I also helped coordinate the training space and made sure all the materials were there for her to use. I was able to go into Port Loko Town and collect the things I needed that GOAL didn't already have, and make sure I could coordinate with some other colleagues about getting them in the back of the pickup truck to get off to that training center for the right time, including a small generator. Logistical stuff like that.

At the Ebola treatment center, one of the things was creating clear guidance and finding out the best place to present this clear guidance to people who were donning and doffing their PPE. Working through with people, what might be the best way to present visually the instructions for appropriately taking off your PPE when you're sweaty, you're tired, you might have a racing heart. It's a very anxiety-provoking thing to wear PPE, so people are feeling quite a sense of urgency about getting their PPE off. How do we most effectively present information on doing that properly, with the staff health doctor. It was coming up with a rota, about cycling through all of the incoming staff who he needed to do an initial checkup with and making sure I could work with the health management colleagues who were there to make sure that we could pull staff one at a time in a way that was both efficient, but didn't really pull away from their need to be in the treatment

center working. All quite random and perhaps disinteresting stuff like that. Though again, it's happening in this context where whenever I go to the Ebola treatment center, you're looking straight through to people wearing plastic uniforms you used to see on the television, and you could see a bed and you could see a patient on that bed, and you knew that that was the confirmed ward, and you could look at that and say, wow, that is Ebola, that is this mysterious thing that everyone has been talking about and that right now seems to be the center of the world's attention. You could just stand there and be around—in a funny way, be around it and normalize it in that way, though you could only normalize it to such an extent provided your colleagues were wearing bright yellow and green uniforms, so to speak.

Q: Who was operating the treatment unit?

Boland: The treatment unit was run by GOAL Global, the same NGO I was working for. There were three Ebola treatment centers in the Port Loko area. There was the GOAL Global Ebola treatment center, which had been built by the British royal engineers, the British military had helped build the facility; there was a Partners in Health/Sierra Leonean government-run facility known as the Maforki ETU [Ebola treatment unit]; and then there was an IMC [International Medical Corps] Ebola treatment center in a place called Lunsar, which was a town further down the road than Port Loko Town proper.

[break]

Q: We're back. Sam had just described to me the three different ETUs that were in Port Loko, the one operated by GOAL, with whom he was working, GOAL Global. Where in Port Loko was that one located?

Boland: The GOAL Global ETU as well as the Partners in Health/Sierra Leonean government ETU were both in Port Loko Town. Geographically, you have the airport to the west, which is in Lungi, and you go probably about an hour to the east, you hit Port Loko Town, and then about thirty to forty minutes further to the east, again, you get to the Lunsar area where there's another ETU run by IMC.

Q: Can you tell me a bit about what Port Loko Town is like, and what your initial impressions were?

Boland: There is not much in Port Loko Town. The area I was living specifically had just been built as a hotel, and the organization GOAL had essentially a long-term lease on every bedroom, so really, GOAL was running the facility. It was really quite comfortable in the sense that we did have hot water, we usually had power, and we had internet that didn't really work, but allowed you to occasionally send a message home. Port Loko Town, at this point, it was incredibly dusty, incredibly hot. It was kind of the height of the dry season where it feels very dull, and by that I mean that the colors are washed out by the dust in the air, the dust that had settled on all of the buildings and trees and so on and so forth. That actually, it's funny how much that changes when that first rain comes through and you suddenly realize that there are some colors, an intensity of colors that

you've really forgotten exists. There were a couple of small shops, though unfortunately, there wasn't that much opportunity to go to them because one of the policies of our NGO was to prevent people from going out any more than they had to, which represented a risk among a population of people who had active Ebola outbreaks. The organization was self-catered, and more or less, you were expected to be at home. I later, somewhat uniquely, had the privilege to get away from that, which meant being able to go to places. For example, there was one real bar in Port Loko at a hotel called MJ's [MJ Motel] where a lot of socializing happened because there weren't too many other places to go. With the exception of GOAL actually had a bar at the base, which was great, because only an Irish NGO would have a bar at their compound. [laughter] There were a couple of places to sit down and have a drink with a friend, and that was really what there was to do at the end of a very long and stressful day, because elsewhere in town there weren't—there were some churches, there were certainly some mosques, couple of small shops, and at that point, no other real infrastructure. The place really existed as a crossroads between the highway that ran from Conakry and Guinea to Freetown, and I think on to Liberia, and the crossroads to the Sierra Leonean airport. It felt like a bit of a crossroads town, if that conjures up an image to anyone.

Q: Yeah, absolutely, thank you. Okay, so tell me about finding your footing with these District Ebola Response Center meetings.

Boland: That's a good question. I started going to these meetings at the request of a colleague of mine, Chris [Christopher Mores], and Chris was very reasonably massively

busy, and kind of sent me along on his behalf in order to represent GOAL and feed back to the District Ebola Response Center information from the ETU about how patients were doing, how many new cases we had received, and any other concerns and challenges that we had. There were these evening forums, these evening meetings, where organizations would come and present their updates for the day, and you could scribble down notes about what other people were saying to keep as best on track of the situation as you could. At first, I was just there in the evenings, but then we really became very centrally involved once GOAL agreed to help with disease surveillance and with funding from DfID. That money came through, and then I was essentially at the District Response Center full-time.

Once the disease surveillance component came online, I was going not just to the evening meetings, but was there the whole day. I was linked in closely with a woman named Allison [Connolly] who was then working for the WHO, but I believe was seconded from the CDC. I was working with other folks from the CDC, as well as some of the DfID logistics advisors, to really build up what was an existing but massively limited disease surveillance structure in the district. For a couple of weeks, all I did was really just watch. I took the opportunity to go out with a couple of WHO and CDC colleagues on field visits to do their field investigations as they supported surveillance officers, Sierra Leonean surveillance officers. Sat down with as many of those surveillance officers as I could to ask them about what the challenges were that they faced. And started to learn a little bit about why the quality of disease surveillance was so low in Port Loko.

At that time, something like one out of ten cases of Ebola in the district had an identified source case, so nine out of ten cases, we had no idea where they came from. Even after we found the case and the case was positive, we could not identify where that case was coming from. But it was clear to me that the WHO staff epidemiologists, the CDC staff epidemiologists, the Sierra Leonean staff inside the DERC, as well as the Sierra Leonean surveillance officers, it was very clear that all of those different collections of people were very eager, very smart and very willing to do the right thing. What was completely missing was any sense of ownership over the structure of deploying people in the morning and putting in place any kind of structure for making sure that alerts that came to the DERC of sickness and death could be effectively and efficiently distributed, investigated, and those investigations then returned and discussed at the DERC. There was no structure, really, whatsoever. There was a Sierra Leonean military officer who would somewhat haphazardly take these alerts coming in, get on a mobile phone, call one person, but maybe in a different occasion he would call another, even if that other person happened to be previously investigating a case on the other side of the district. The vehicles didn't have fuel, so they couldn't get out of the DERC until one o' clock in the afternoon when someone would finally decide that they shouldn't be hanging around any longer and would find some way of getting money to fuel their vehicles. Didn't have enough vehicles. People kept losing these paper case investigation forms, which had been provided by the CDC. There was no structure—I know this sounds so basic, but there wasn't even a structure for how to collect and file them. They were strewn all about the place, different case investigation forms were in different offices, and there was no kind of central place for putting them all down, with the exception of the CDC's VHF [viral

hemorrhagic fever] database, but that was sort of a private CDC database that the DERC did not have access to. Of course, the DERC was the one coordinating the people going out to investigate things. There was really no organization whatsoever.

I took a couple of weeks, went out, saw what the needs were in the field, recognized that the vast majority of the needs for responding, for resolving a lot of these issues were actually at the DERC. And from there on, I really became stuck in the DERC, working with those two Sierra Leonean military officers and with the WHO and with the CDC and with the DHMT, the District Health Management Team, really sit down and try to work out some SOPs [standard operating procedures] and some basic structures so that people, these surveillance officers, could do their work. That's what we did. Some of those things involved, for example, working with the WHO and the CDC less on them going out to the field to do their investigations, more on them working with the Sierra Leonean surveillance officers on going over their investigations and making sure that they had asked the right questions. Working with them to identify what was missing in their investigations and giving them feedback on how to do better in the future, as well as anything that might be serious enough that they might need to go back and go over again. Getting some consistency with these incredibly well-trained individuals to really provide that technical oversight and feedback while—so even the forum for that feedback was something that didn't exist. For example, they were doing that in the evening when the surveillance officers would come back to the DERC, and I only just remember talking about it now, that even the surveillance officers coming back to talk about what they had found during the day was not something that existed. I was in college, I don't have any

real, serious training, but it doesn't take much to say it would probably be a good idea if these people could come back and go over the cases that they found so we know what we need to do the following morning because otherwise, we don't get out the door until two in the afternoon. Even some things as small as saying, please come back to this response center by five o'clock; you can sit down with people from the WHO and CDC and talk about what you found so they can help you get better at what you do. They can help, for the CDC and WHO and for the DERC, to collect that information from you to effectively process it so we know what to do with it, and so on and so forth. Even that hour meeting in the evening wasn't there.

So, we put that in place. We got a filing cabinet for the case investigation forms and hired someone who could really collect all of them, make sure to photocopy them, give them to the right people who needed them, and file them in case we needed to go back to them. Slowly but surely, we worked out a lot of these kinks to the point at which by the end of February, which was only about seven weeks later, we had gone from one out of ten cases with an identified source case to pretty much the reciprocal of that, to knowing where nine out of ten cases of Ebola were coming from. Now of course, it's not just an accomplishment of surveillance—that's equally, if not more so, an accomplishment of the treatment centers taking positive cases away from their homes and cutting down the pace of the outbreak to give the surveillance officers more time to build these investigations and understand these epidemiological trends. But, with the support of the WHO, with the support of the Centers for Disease Control, with the support of DfID, and especially with the support of the Sierra Leonean District Health Management Team

surveillance officers, in a very short period of time, we were able to take what was a well-meaning but completely mismanaged situation and really make it a very impressive machine. Which is why I then later ended up in Kambia, because the WHO and the CDC and Port Loko saw what we had done, went to their colleagues in the district to the north, and said, can you bring up GOAL to do the same thing? Because the same problems existed in Kambia. That was why I ended up in Kambia later on, really trying to effect the same changes.

Q: I think my first question then was, when you come in and you're seeing this poor organization of the overall response in Port Loko, was there recognition and concern about that before you got on the ground among the people who were running things? Like the military person who was there, among people in GOAL? Or was it something that you noticed and had to start a conversation about?

Boland: I would say it was really both. I think that one of the real failures in the way the Ebola response was—the response to the Ebola outbreak was mounted is that most of the other people, at least in an international sense, who were coming to the environment, coming to Sierra Leone to work, were only there for about four weeks at a time. I think by the time that people were—a couple of weeks after they had arrived, these problems were very obvious, but no one was there feeling that they had a sense of responsibility for dealing with them. Because for example, if you're an epidemiologist coming with WHO, your job is to try and trace these cases, but your job is not to sort out fuel. I think there was a wide recognition once people had been there for two to three weeks about what

were the real failures and making sure things could happen efficiently, but by the time people came to that realization, there were only around for another four or five days. There was never an opportunity, particularly provided that people didn't, I think, feel that responsibility for resolving any of those issues. That being said, a lot of these problems were things that I would say are kind of patently obvious needs. Things like having that after-action review, that was not my idea, but that was the idea of one single individual, this woman, Allison, who again was working for WHO, but I believe seconded from the CDC. Even just having weekly meetings was an idea that I had about getting everyone together to say, these are what we have identified as the current problems with disease surveillance, let's talk about what solutions might be and figure out who might take charge of actually moving forward on those recommendations. Those meetings weren't happening. I don't think that anyone had really come to terms with the fact that these forms were flying all over the place, and that when we had a case come back positive from the laboratory, oftentimes we had no idea what that case was or where it came from because we couldn't then find the form that was associated with that patient who was in the hospital.

For all of the failures in the response in recognizing and dealing with those problems, it would be completely unfair of me not to say that this was a crisis environment. In Port Loko at this time, we were dealing with more than a hundred confirmed cases of Ebola a week in that district. There was an acute awareness that that number came nowhere near recognizing the true scale of the outbreak, and that a couple of these Ebola treatment centers, both GOAL and IMC, had only just come online, really within a week of me

arriving. People, even in places where they might not have recognized or dealt with the problems in front of them, that wasn't because they were lazy—there was just too much to deal with. No one had appropriately prioritized resolving these issues with disease surveillance because they didn't have the time. I feel very empathetic to people who—I feel no kind of ill will towards people who were not recognizing or dealing with these problems because in that kind of context, I very much understand how much you have a very short list of what you can deal with. And what you prioritize might not be what other people prioritize, but there's no time to even communicate between one another about what might be more effective ways of prioritizing. I'm talking in completely useless and roundabout ways, what I'm really just trying to say is these problems were recognized, but I don't think that anyone really recognized them as solvable problems because there was no one there to solve them, and they sure as hell couldn't because they had no time to do anything.

Q: No, I think you're making a lot of sense, actually. It goes back to what you were talking about initially when you said that there was a lack of ownership of organizing the response, which is interesting to me because I had always imagined the District Ebola Response Centers as existing for the sole purpose of having a very clear incident command structure.

Boland: Mm-hm.

Q: So I can understand the people who are only in-country for four weeks, not feeling like they are able to take on these larger systematic issues with how things are being done. But tell me about the people who are there for longer. For example, you mentioned someone from the Sierra Leonean military, I think, who was in the DERC.

Boland: It's a very good question, and I think, framing my answer in my own mind at least, the most important thing to start with is a broader point that I had a real issue with: the political organization and the kind of organizational organization, for lack of a better way of putting it, in the DERCs. What I mean by that is that activities were very siloed, and so people who were working on social mobilization, they were there to work on social mobilization. They had donor money to work on social mobilization and they were not about to use any of that money or get involved in any way in dealing with disease surveillance. But that clearly doesn't work because you can't perform effective disease surveillance without appropriate social mobilization linked with it. So with the military officers, for example, they had been told that they needed to deal with or coordinate things, disease surveillance officers. And they were doing the best they could, but they had no money to do that. DfID wasn't about to start paying the Sierra Leonean Armed Forces, and there was no other institution that had given any money or remit to deal with these problems. The WHO was doing their technical epidemiology, UNICEF [United Nations Children's Fund] was doing social mobilization, the [International Federation of] Red Cross [and Red Crescent Societies] was helping out with delivering food to quarantines, and these couple of soldiers had been told that they needed to get a grip on disease surveillance, but they had no training in doing that; not that I really did either. But

what they certainly didn't have was money. It doesn't take much money to get a filing cabinet, but they didn't have enough money to top up their mobile phones in order to call the surveillance officers to give them alerts of people who were dying. It was that lack of resource for this particular problem, keeping in mind that the DERC had only been there for about a month or maybe six weeks before I arrived. There were a lot of teething problems, and this was a very significant one.

Q: I have a few questions. How did you bring up some of these problems, and how did people react when you did?

Boland: What I started by doing was try to be as—"democratic" is the wrong word. I did try to make sure I went through, ostensibly, the proper protocols of making sure that the people who were there running the DERC knew about all of the different things I was flagging and what I was planning to do in response to them. For better or for worse, at the time—and there was no way of knowing, but ultimately for better—I was fairly quickly thereafter given full remit because of how little time other people had. Once I had gained a little bit of trust among the leadership of the DERC, I was pretty much told to do whatever the hell I wanted and didn't really need to get approval from anyone else to effect changes that I saw fit. For example, the process of communicating these issues, like I said, that forum didn't exist. I was the one who put in place this weekly surveillance meeting where I would pull in the WHO, the CDC, pulling DfID, pulling those Sierra Leonean military officers, try and pull in people from the other, quote-unquote "pillars" of the response, social mobilization. Also, of course, pulling the Sierra

Leonean DHMT, and say, this is what I have identified or/and what a couple other people have flagged. This particular issue we're experiencing with surveillance up here on this Power Point slide, this is really a problem that we think social mobilization could deal with because the surveillance officers are getting threatened when they're going into towns because people don't know who they are. UNICEF, can you develop messaging around this and show me in three days that you are delivering this messaging out to the field? And they would say okay, and they would go from there. This is, again, why I ended up working for the DERC because over a fairly short period of time, I wasn't even just doing disease surveillance, I was just in the DERC as one of the people bouncing between all of the different pillars of the response, identifying what problems there were and trying to make sure that people were dealing with them.

Q: A couple more follow-ups I think. Can you tell me early on about some of those field visits that you went on?

Boland: Sure. I remember the first couple quite vividly. One was with this woman Allison, one was with two colleagues, Chris and Gillian [McKay], and in both cases I remember bouncing in the back of a car for quite a long period of time. Port Loko was a very big district. And eventually, coming to a very quiet household, a very quiet area, which somewhat un-surreptitiously had some orange tape around it. One of them, though not both, had a soldier sitting around twiddling his thumbs outside. Standing there with white Western colleagues next to Sierra Leonean surveillance officers, who were there to follow up. They would often go back to these quarantines in order to say, hey, is

everyone okay, is everyone still feeling well? Feed back information about how the Ebola-positive case from that household was doing. I did have an acute awareness that my, and really, the presence of anyone from sort of the West, so to speak, was really not necessary, and felt to me quite obtrusive, actually. I really felt—not in the way, but it felt very awkward for me to be there because there was really nothing I could do. I did not feel that I had any input to provide a Sierra Leonean person on how best to talk to another Sierra Leonean person.

What I do remember though, perhaps more importantly for my own work, was even in those first visits, recognizing how—recognizing the needs that families had as relevant to the utilitarian need of containing this outbreak. What I mean by that were two primary needs, one of which was the need for families to know how the family members who had been picked up in ambulances were doing. Now that didn't—that doesn't include families who had people die at home who had been swabbed and those bodies had been found to be positive, but for people who had living relatives who had been picked up in ambulances, it was clear in those initial visits that there was no mechanism for returning that information to families. This was clearly causing a deep sense of distress and really not imparting a sense of transparency and honesty among the remaining family members about whether or not they would say whether they got sick. From their point of view, someone got sick, they did the right thing by calling the 1-1-7 number that at that point was working; surveillance officer had shown up, an ambulance had shown up, their family member had gotten back into the ambulance; and in seven out of ten cases, that family member never came back because they died, but they had no idea what happened.

That person just disappeared. You could hear—through translation, because I could speak with surveillance officers in English, but usually not with people in quarantined homes—but you could hear through translation they would respond to questions about their health, but would really be very persistent about yeah, I'm feeling fine, but what about my wife? And no one was there to give that information. That was one key failure, which was completely and utterly reasonable for them to be upset about.

As was the other failure, which was that a lot of the households we would go to, they had been quarantined, they had been quarantined for maybe let's say the period of a week, and they still had no food. They were told that at risk of a significant fine, that if they left their quarantine—well, that they could not leave their quarantine. And the systems had not been set up at this point such that the different elements and aspects of the response were clicking together quickly enough. A quarantine would get put in place, and they wouldn't get anything for up to a week. These are not households that have a pantry or a deep freezer. These are households that farm every day for their sustenance, and so what that meant was you either had families who were very clearly struggling to survive in the confines of their quarantine, or you had people in families who had just left. Maybe they hadn't left to run away—there was a big narrative of people who had quote-unquote "escaped." More often than not, they had just gone to their farm to collect some food, to collect some water, and come back. This is another really big need. These are the needs that I felt were almost more pressing than the investigational needs and the ones that I was flagging for myself in terms of things that I had the power to change, provided I trusted the WHO and the CDC to provide the guidance on how to do a good case

investigation, on how to do good epidemiology, on how to ask the right questions. I didn't see it as my place to inform any of that—I saw it as my place to deal with these other issues that surrounded people talking to the right people.

Q: You mentioned a common narrative that people in quarantine would escape. How were you hearing this narrative?

Boland: You'd hear it all over the place. You'd hear it in the command center when someone would, you know, let's say the field co [coordinator] for the WHO would put up their hand and say "Hey, we had a case today, we had fifteen contacts, but we were only able to follow up with twelve of them." And someone else in the room would respond, "What, they escaped?" And they'd say, "Well, we don't know. We couldn't find them." You'd hear it on the radio, particular cases, especially in parts of the country where the outbreak had started dying down, they would really focus and zero in on particular households and the people who had "escaped" from those households who were high-risk contacts. It was really common parlance, and I would be aloof to say that it wasn't sometimes something that I—terminology that I used as well. it was hard not to because a lot of times, you would have people who were in quarantine who would disappear, and then you'd find someone from Port Loko would die at a house in Freetown and start another outbreak there. And there was really this sense, because of the structure of quarantine, of the kind of criminality around people who didn't follow the rules. Now, of course the criminalization of that is deeply unfair, but it was kind of the—this is a lazy answer for me to give, but it was the structure that we were dealt with. The decision

about how quarantine was to occur was something that happened before anyone that I was working with had gotten into the country, and it was a decision that really sat in the hands of Freetown. We did our best later on, once we had the time, recognizing how big these issues were about providing comfort at quarantined homes, to emphasize that comfort in Port Loko. We were sort of not supposed to do this, so we were annoying some people in Freetown, but we would often get mobile phones and solar chargers and extra food and perhaps provide some radios so people could listen to music. We even got to the point later on in Port Loko and Kambia that we would hire local laborers to work people's farms so that they were able to stay in quarantine at their household without losing their farms to animals or to people coming and taking their food, which was an uncomfortably common problem. There was a real knowledge of how difficult and challenging the problem of quarantine was. It didn't necessarily feel like there was much we could do to prevent a common narrative of criminality, provided the emergency bylaws that had been passed really did make it illegal. It was illegal to leave quarantine. It was illegal not to report sick. There were significant fines and jail times for people that did. Particularly provided the police and military presence in quarantined homes, it very much was a quote-unquote "securitized" environment.

Q: You had described seeing these Sierra Leonean district surveillance officers out surveying communities, but then also seeing people from CDC and WHO to the side and not contributing very much. I take it that that led to your impression that they should be really refocusing as technical advisors. Do I have that right?

Boland: Yeah, I think that's fair. I would just clarify that I don't think that it was any kind of error on behalf of the WHO or CDC to be doing work in the way that they were because before structures were put in place, the kind of quality and consistency of investigations done by these Sierra Leonean officers was really quite poor. Without the physical presence of someone else to write down and retain that information, there was no structure for making sure that the flow of that intelligence could be contained and dealt with. It was necessary at the time. I think it was highly necessary at the time, but what seemed to me, and I think was widely understood to be a much better setup, was to have a structure whereby simple cases could be dealt with just by the Sierra Leoneans while the few staff from CDC and WHO could provide guidance, technical oversight, and when a case became particularly complicated—let's say there was a very confusing or complicated cluster of cases—then there was an opportunity for people to go and provide that real expert oversight. You have to remember we're talking about a district of several hundred thousand people. We're talking about upwards of thirty or so people dying a day. Every single case had to be investigated, and at least that number getting sick, though reporting was not great at the beginning, but that's a different story. In a district of several hundred thousand people that has bad roads and is really, really large, we didn't have enough surveillance officers to get to every case. We definitely didn't have enough WHO and CDC staff to do the same. It was really just about targeting resources in that sense, and we found a happy compromise with that arrangement, that I discussed, taking a little bit of a step back from the day-to-day field investigations and concentrating more on the ones that were highly complex, while maintaining technical oversight, training, and leadership of the epidemiological aspects of the surveillance pillar once it was easier

to identify what that actually meant. When I first arrived, there was no real pillar, it was just a collection of ten cars and twenty-five people who weren't receiving a salary.

Q: I'm wondering about the effect of these changes that you made and helped implement to reorganize the structure of the response in Port Loko, what effect that that might have had on the mood of people who were working. Do you feel that it did? Do you feel like it was a different environment at the end of February, socially, for example, than it was when you first got there in early January?

Boland: Yeah, I think it was. Most importantly, that was true for the surveillance officers. Because when I arrived, they had not been paid since something like October, and this is January. They had been the—I forget the right phrase in English, they had really been kind of an excuse for failures that were happening—

Q: Scapegoat.

Boland: Yeah, they were really scapegoats for the failures that were happening across the board. And it just wasn't their fault. They didn't have what they needed, the oversight and the structures that they needed to do their work. I think genuinely probably the most important thing I was able to accomplish for the duration of time I was in Sierra Leone was to show to these people who were working seven days a week with no pay, that their work was valued. Because no one was saying that to them at this time. They had just had a colleague who had died just before I got there, one of the surveillance officers in Port

Loko had died of Ebola. They weren't being paid by their government, and they were getting yelled at every day for not doing their job right. No one was there to show them that their work mattered. And because of—not because of me personally in any way, but just because of the fact that there was someone who was willing to try and help them with their needs, like getting—like for example, "Osman, what is going on with your day? What is the challenge that you're facing?" "Well, one of the things that I get really worried about is I go to the field and I do these investigations, but I have no way of washing my hands when I'm done." "What? You have no way of washing your hands when you're done? That's crazy. I will get you hand sanitizer." "Ade, what are the challenges that you're facing in your day?" "Well, we're not getting paid, so what I'm really struggling with is being able to eat because it's not safe for me to eat and there's no way to find food quickly in the field, and it's taking a lot of time out of my day." "Ade, thank you for telling me that, let's arrange for you and for all of the other surveillance officers to get a packed breakfast and a packed lunch so you can continue to work as quickly as possible." Small things like this, up to bigger things like finally, after a long, long process, sorting out the mismanagement of their payment to get these people paid and to really show them that they mattered. To thank them for what they were doing by at least acknowledging their good work and doing what one could to help them was, I think, probably more important than any of the other structural changes. Because I cannot express to you how depressed the situation was when I first got there. More than anything, people just needed to feel that they mattered, because I don't think people can do good work if they don't. Because of the fact that someone was beginning to help them, and I don't just mean me, myself—the other colleagues at the DERC and so on and so

forth were able to show them, we think that you matter and we're willing to commit resources to you to help. It really showed them that what they were doing was important and that they mattered in the fight against Ebola. That didn't quite answer your question because you were asking in reference to improving data and improving epidemiology, and that certainly had an effect too—

Q: No, I think you—

Boland: I think more so than that, it was—yeah—I think more than that, it was just ensuring that these colleagues knew that the sacrifices and the risks that they were taking were not for nothing.

Q: Did your time there overlap with a person from CDC named Jessica [C.] Goodell, to your knowledge?

Boland: Rings kind of a bell.

Q: Okay.

Boland: Not, unfortunately, in a way that I could speak to it.

Q: Sure, sure, sure, okay. I was speaking with her a couple of weeks ago and she was talking about the same kinds of things, the mood of especially the surveillance officers,

especially after that colleague had passed away. I don't know, even if you guys are talking about two distinct parts, [laughs] two distinct areas in the epidemic, listeners, you might want to jet over to Jessica Goodell's interview and get some more context to understanding the mood of what people were actually going through.

Okay, a couple of small, little questions before we move on to Kambia, I think. Were you acquainted with a bartender by the name of Henry at the MJ Hotel [note: Motel]?

Boland: [laughs] I was acquainted with him, though I couldn't say that I kind of knew him on a first-name basis. I only say that because a lot of the—I was around there with a lot of, specifically, folks from the CDC with some frequency, because then a lot of them were holed up there. I never had any personal conversations with Henry, but he certainly opened a lot of beers for me. [laughter] Despite not knowing him personally, he did provide quite a lot of emotional comfort.

Q: Tell me more about that, what it was like over at the MJ [Motel].

Boland: To be honest, it was really fun, and I know that that's a crazy thing to say in the context of this crisis environment. But for me, it was almost a place of escape because as I had referenced before, I had somewhat of a unique privilege of being able to move away from my organization, and that was due to the fact that I was working at the DERC. I was the only person for quite a while working at the DERC, which meant I needed my own vehicle, and also because of surveillance activities, I then also had reason to have a

driver, to have a car, and to be out. It made it possible at the end of the day to roll over to MJ's, and that place was important for a lot of people, myself included. More than anything, it provided a venue for normalizing the professional relationships you had at the DERC into what were also very powerful friendships. In that kind of environment, friendships grow quite quickly, and grow quickly they did. I remember a good number of going-away parties. I remember nights where there was dance music, but of course no one actually dancing together because that would involve touching, and you couldn't do that. So kind of slightly weird social arrangements like that. I remember at one point, seeing the then-WHO field coordinator playing Journey or doing a karaoke version of Journey using an empty wine bottle as a guitar. [laughs] That was a fun memory. But more than anything again, it was an opportunity to speak as people, to people that you were working with in a very stressful environment every day. That really carried to how effective, I think, people were able to be, myself very much included, during the day. I developed relationships with people at MJ's that meant when I went back to the DERC and I needed something done, I could go to someone as both a colleague, but also as a friend and say hey, I need your help. That was very powerful, and I feel very lucky for being able to develop those relationships because a lot of people couldn't, either because they were holed up in their organizations or they rotated through these situations too quickly. Or because they just want people who are interested in doing that.

Q: Can you tell me about a couple of these people who you were able to form these strong relationships with?

Boland: Sure. Let's see. There was a really wonderful colleague from the CDC, this is a little later on—I remember Dan [Daniel W.] Martin, I don't know if you've spoken to him?

Q: I have.

Boland: Dan is the definition of a gentleman in my mind. [laughs] He was and remains an exceptionally close friend of mine despite the, you know—he is a number of years older than me, but to him that just didn't matter. We were able to work very much as equals, and I can't say how much I feel grateful for his ability to do that because again, from a purely professional background, there's no reason that that should necessarily be true. I was in college. But Dan and I were able to work together and would frequently end up having dinner and a couple of drinks together at the end of the day. And we were able to find things to talk about that weren't Ebola. We were able to talk about religion, we were able to talk about politics, we were able to talk about our families and our interests moving forward. We were also able to talk about some of the Ebola response solutions we had been thinking of that maybe we didn't necessarily feel comfortable bringing up alone, that maybe we wanted to bring up as a group, or challenges that we faced that we knew we could do nothing about, but just needed someone to complain to. These are not things unique to Dan Martin. I know him better than I know most because he was able to stick around for quite a while, and I am therefore using him as a placeholder because a lot of people who came through are very good people. But he was a gentleman to me, he supported me emotionally, professionally, and I don't know what to say other than the

fact that he's just a really nice guy. Being able to have a drink with a really nice person after a very stressful day was really the only thing that one could do in this kind of environment to get out of bed the next. He really helped that happen. The same goes in much the same way for a number of different colleagues who I had: Boris [I.] Pavlin was at the WHO, he was phenomenal; Neetu Abad and Brigette Gleason, who were working with the CDC. When I had the opportunity, too, some people from DfID and the British military, but they were a little harder to rope down because they had these protection procedures that limited their ability to go out and socialize in that way. The general point is that this environment really does lend itself to very close friendships, and there were quite a number of them.

Q: Just very quickly, what's an example of something that you would have, in a meeting, been hesitant to bring up as one person, but once you have brought it up more informally in the context of hanging out at the MJ [Motel], and found that other people can share your concerns, that you can actually bring them up as a group?

Boland: It really happened quite a lot. Let me think of what a good example of that might be. I always played kind of a funny role in the DERC, provided I didn't really work for the DERC, but I kind of did, but I couldn't call myself a full member of that command team. It wouldn't have been fair for me to do that because I was sort of seconded from an NGO. I was very young, and I was quite open about the fact that I did not have the technical background that other people had. But that being said, it was fairly frequent that a decision would be made or some kind of structure would exist that needed changing. I

never—I did not feel like I was the right person to really effect that change. I think that there is a complicated balance to strike between breaking down the hierarchy of institutional relationships and respecting them. Sometimes things needed to come from the WHO; sometimes they needed to come from the CDC; sometimes they needed to come from DfID; sometimes they needed to come from the Sierra Leonean government; and sometimes, something that should come from that organization really needed to come from someone else in order to make sure that the primarily responsible institution knew that other people also kept tabs on that issue. I'm talking in circles. But an example of that would be—a general example of that would be something which did come up specifically in a conversation with someone, Oliver [W.] Morgan; I don't know if you know Oliver.

Q: I do.

Boland: I remember he came to me, and it was in the mid to late spring of 2015 in Port Loko, and it was during a time when cases had come way down and it had not yet gotten to the point where cases had flared back up a bit, as they did later that summer. He pulled me aside because he knew that I had been there for some time. He had been told by his colleagues in Port Loko that I might be someone who would be worth speaking to, just to give a bigger picture about how things had developed over the previous month. What he said to me was that the CDC was considering closing the Port Loko office. And he wanted to know what I had to say about that. All I could do was stand to him and just beg to him, please do not do that. The reason for that was not because, to be very open, not to

say that the CDC was always right or best, and not to say that the WHO was always right or best, but that every individual and every institution is capable of making bad choices and bad decisions about how something needs to be dealt with. And the presence of the CDC and the reliability of the CDC meant that when something that the WHO was doing that I felt was inappropriate, which happened with some frequency, I really did feel that I could turn to the CDC and say look, you are in a position to dispute a technical solution to which I do not feel I have the political ability to dispute because I don't have that kind of training. But I know that you understand this issue. I know that I can turn to you and look, here's how I understand this, I don't think this is a good idea. Therefore, the CDC was in a position to push back against some of that. And that wasn't a one-way street, that happened in both directions, but that kind of debate was so crucial and one that in a funny way, I sat in a weird triangle with because I had such a good and close relationship with both of those offices. In a sense, I could feed my concerns—when I knew that things were moving in a difficult direction in one office, I could make sure I discuss those concerns with that office, but also discuss them with the other office because they were in a position to perhaps change that.

Q: You probably know what I'm going to ask, is for an example.

Boland: Right. I know I'm beating around the bush when it comes to the examples for this. An example of that would be—I can use an example from Kambia perhaps because—I'll use an obvious example from Kambia, and perhaps it's an unhelpful one because of how obvious it is. There was a time in Kambia when we did not have enough

surveillance officers, and we were trying to train up additional resources so that we could lessen the burden on those that we had. The surveillance officers were exhausted, they were so tired. They were working seven days a week without break. The same problem of doing so without pay was there, and they had every reason to say that they were overworked. We were not in a position where we could really afford to carte blanche allow people time off; we needed to come up with a more strict and informed rota for cycling people through and making sure that anyone we were able to give a day to rest, their work could be replaced while we brought more people online. There was a somewhat unilateral decision which was made in Kambia that surveillance officers would just not work on the weekend. I won't say by which organization that decision was made, but that decision was made, and without being made in consultation with other people or really discussed in any forum where people might have said, that's crazy, people still get sick and die on the weekend. I'm not sure that if someone dies on a Friday night, that we should be leaving the body there until Monday morning. That was an opportunity where very obviously, that was a bad decision, but it was more effective for pushback against that decision to come from, let's say, the field coordinator of the CDC, who was in a position to discuss the real epidemiological reasons why that was a bad idea, instead of from someone who was really there providing logistical and operational support. It's a bad example because that was a very obvious problem, but it gives—it speaks a little bit to how frequently this did come up because there were so many people cycling through that even that, to some people, seemed like a perfectly reasonable idea. What might seem surprising to someone, even someone with no knowledge of public health or really the circumstances of the outbreak, needs to remember that in every field there are basically

people who make bad choices and bad decisions or are not particularly pragmatic about what's in front of them, and they need people to tell them to do things differently. But I was not necessarily in a position to do that, and I could use these relationships to make sure that the right people could go to them and sit down with them quietly and essentially explain why that was a bad idea and make sure that those decisions got overruled or adapted in a way that was most effective for responding to the Ebola outbreak.

Q: That makes a lot of sense. That makes a lot of sense. Sam, my big clock in here just turned to noon, I still want to talk with you about Kambia and about your work that you're doing on your PhD, but we've been talking for two and a half hours. I'm good to continue, but how are you?

Boland: I am perfectly fine for the time being, I'm happy to keep going.

Q: Okay. So how long did you stay in Port Loko?

Boland: I was in Port Loko full time from the beginning of January until the very end of April, I believe. From that point, I went full time to Kambia. I was the only staff of GOAL in Kambia for a while, while operations got brought online. I was there full time until June, maybe the late June window, at which point I ended up bouncing back and forth between Port Loko and Kambia depending on which district was in most need of support. That did change quite a lot, because over that summer there were clusters of cases that happened in Kambia that then caused clusters of cases in Port Loko, that

caused all sorts of other consequences elsewhere. I always maintained a relationship with both districts for the full time I was there. I eventually departed in mid-to-late September 2015. Partly, that was just because those two districts are adjacent. Port Loko and Kambia border one another, and you could drive from one DERC to the other in about forty-five minutes. It was very possible for me to keep a foot on both sides of that district border.

Q: I think you alluded to this earlier—was your transition to Kambia in, I think you said May, occasioned by people looking at the improved Port Loko decision-making process? The surveillance process, and wanting to bring that to the district of Kambia?

Boland: Essentially, yes. We had seen such rapid improvement in Port Loko with what was relatively speaking a very small investment of funds, just getting a few more vehicles, someone to oversee getting those vehicles fueled, and getting breakfast to people, helping people get paid, putting structures like this after-action review, this evening meeting in place, making sure that people could file their case forms. There were a number of other, different challenges that came up that we were able to deal with. The success of surveillance, both technically and emotionally, was fairly profound with the investment of everyone's time and energy into a structure.

In Port Loko, that WHO field co [note: Boris Pavlin] moved up to Kambia, and I had a good relationship with him. I also had a good relationship with several people in DfID and the CDC. As a group, those institutions came to GOAL and essentially asked exactly

that, which was whether we were capable, with DfID's funding, to come up to Kambia and replicate a number of the interventions that we had done in Port Loko in Kambia. And try and bring Kambia's disease surveillance program up to snuff. Because at that time, in Kambia, I'm trying to remember—I don't remember if it was the March-April overlap or the April-May overlap. I actually think it might have been the March-April overlap, I think I misspoke before. But in that time in Kambia, there were three, I think, Sierra Leonean disease surveillance officers. Surveillance was really being done by the CDC and by the WHO because there just weren't any people there to support that. In Port Loko, by this time, we had almost sixty disease surveillance officers, and there were just three or four in Kambia. So there was a very clear need for bolstering the system of surveillance there, particularly because cases kept coming out of nowhere in Kambia. It was the WHO, CDC and DfID together who came to GOAL and asked if we might be able to reproduce what we had done in Port Loko.

Q: Can you tell me how it proceeds from there?

Boland: Yeah. I ended up bumping up into Kambia, and I'm afraid to say that the transition was not great. The reason for that was in Port Loko, I had the kind of institutional support of a district office that had almost, I think something like five hundred staff, close to one hundred international staff and close to four hundred national staff, including all of the catering and the transportation and the security and the internet and all that kind of support that in most circumstances and most parts of the world, or many parts of the world, would be very straightforward, but in a place like Kambia are

not. So, I—and I really mean me, personally, and quite alone—went up to Kambia and was able to—I spent about a month living in a hotel called the [Kambia] Africana [Village], which had a number of CDC staff and other international staff living there. I say hotel, but they were really these mud tukuls; I don't think tukul was the right word, but it's the word I know of them from South Sudan. Basically, a thatch roofed mud hut, where someone could make you dinner and there was a bed behind a closed door. I spent about a month there and going to the DERC, working with the CDC, working with the WHO, working with the DHMT to come up with what would be the new surveillance standard operating procedure, to make sure that everyone was on board with some of the initial significant changes that we were going to make. It was more substantial in Kambia because it wasn't just that we were going to put a structure in place. In Kambia, we also needed people to plug into that structure. We needed to really bring in new people and a lot of new resources. My day-to-day really involved sitting down with people and thrashing out what they saw as potential problems. That was a very difficult conversation to have with a lot of people because what we didn't want to do was make people feel sidelined, but of course when you bring new people on board, I think that there's understandably a concern that existing people would get pushed out of the way or that things might not get prioritized effectively. And a lot of people there did not know me, and that was perfectly acceptable. So it took quite a while to work out what those new structures were going to be in a way that it didn't in Port Loko. It was such a crisis environment when I first arrived in Port Loko, it was basically, do whatever you want, just do it. We don't have time to pay attention to the changes you're making, but we need someone to make them so don't ask, just do. It was really the opposite of that in Kambia.

That was emphasized by the fact that very reasonably, it did not appear that I had much ability to do anything because I did not show up with an office of five hundred people. Eventually, that did begin to change. I was able to find my organization more permanent accommodations. We actually took the forward operating base of the British military, who pulled out, though later came back, which was a beautiful, beautiful house. Well, not a beautiful house, but in a beautiful location with a roof overlooking a river from which you could watch the sunset, which was a very important emotional—a very important place to go at the end of a stressful day. Meanwhile, again, kind of largely as one person bouncing back and forth to the DERC, feeling quite overwhelmed by how much there was to do and the relative difficulty of doing it compared with being in Port Loko, until more staff came online, more resources came online. We were able to show people that these changes were not antagonistic to the oversight, for example, of the WHO, but actually complimentary to their ability to exercise their roles as technical advisors to this process. There are a lot of very vague comments that I made in that last statement, so feel free to ask questions about any of them that aren't clear. [laughter]

Q: Well, tell me about what you found vague and go ahead and explain.

Boland: I had quite a problem in the Kambia DERC. And I think, over spending a good couple of years going over that, I can identify some of the reasons why. One of the problems that I saw was that the outbreak in Kambia had never been quite the emergency that it had been in Port Loko, and I alluded to this in my last statement. But in Port Loko, any help that came in was immediately welcomed and given whatever they needed

politically, and mostly that meant people getting out of the way to implement changes and bring in resources in a way that that person saw fit. So I had a lot of leeway in Port Loko. In Kambia, that never happened, and I think that there was very much a culture that had developed of being very slow. I don't mean that in a pejorative way, I just think—maybe "careful" is the right word. Being very careful about making any changes to the political dynamics, and sheltering and emphasizing the siloed nature of what each institution and organization was there to do. There was a camaraderie and a flexibility in the institutional role in Port Loko that did not exist to the same extent in Kambia. In Kambia, there was a bunch bigger emphasis, due to largely the input of the then-DfID team lead, Mike McKie, and also the Sierra Leonean District Coordinator, Dr. Alfred Kamara, that lent itself not to creating a sense of openness and conversation, but to making sure that no one did work that on paper was not theirs to do. I spoke before on Port Loko about how much the work of surveillance necessitated linking different elements of the response and making sure that what the surveillance officers did was in conversation with what social mobilization did, what dead body management did, what the teams supporting quarantine, food quarantine did, making sure that they all spoke to one another, making sure the surveillance officers could feed information to the right people and make sure that those people could feed information to the surveillance officers so that those things were linked as best as possible. That was not emphasized in Kambia, and in fact, there was quite a pushback about trying to create that kind of conversation.

The only way of really getting things done in Kambia was through personal relationships. I was quite capable of doing that, and I had a number of very close relationships with people in a number of different institutions, both international and national. But there was very, very little ability to create that kind of conversation professionally in the context of institutional conversation and coordination. That was a real challenge, and I think really did stunt the ability to efficiently respond to the Ebola outbreak in Kambia, in a way that Port Loko kind of opened the door, Kambia kind of closed it to that kind of cooperation.

Q: A lot to dig into there. I know personal-relationship-building can be slow going. Was it, in fact, a slow process of slowly gaining the trust of people so you could bring up some of these concerns about breaking the siloes?

Boland: It wasn't necessarily a slow process in building those friendships. As before, a lot of those personal relationships were not necessarily there for very long before they were gone again. And that, again, speaks to a bigger problem with how these responses are mounted and the very little time that people are given to deploy. I remember having great friendships and relationships with people like Rebecca Levine, who was working for the CDC; with Helen Richards, who was working for DfID; with Henry Dowlen, who was in the British military; with Osman Barrie, who was one of the—we kind of—I kind of built him up to run and then coordinate the surveillance teams that we had been able to train, and the list goes on. The difficulty was not in establishing those relationships, it was in—it sounds so reductive to say, it was in the necessary—the difficulty was in the unnecessary bureaucracy and overwrought democracy of decision-making. By that, I

mean that conversations between two people or two institutions off to the side in Port Loko, that was enough to say that the conversation had been had and that decisions could be made to move forward. In Kambia, that had to be discussed at an evening meeting where anyone who could raise issues could. What genuinely happened with some frequency was that you'd get far enough that you had gotten people on board, but then two or three of those people would cycle out to their colleague who was replacing them. There would not be a handover that would include the conversations that had been ongoing, and you'd start the process all over again.

It got to the point where even bringing in resources, like for example, additional vehicles, this was a big problem that came up. It seems relatively straightforward: we were willing to bring in additional vehicles, and we were willing to do it at no cost to the Kambia DERC. That money was coming from DfID to us, and we had the logistical ability to bring in those vehicles and fuel them. We needed to do that because we had brought in additional surveillance officers in consultation with the WHO, the CDC, the DERC, the Ministry of Health at the district level, and at that time, we only had a couple of vehicles we could dedicate to surveillance. Now in the Ebola outbreak, there had been an organization that had been designated for providing and resourcing vehicles at the district level. That was CRS [Catholic Relief Services] in Port Loko and an organization called CAFOD [Catholic Agency For Overseas Development] in Kambia, and it fell under the kind of Caritas [Internationalis] umbrella. There were responsible for having vehicles and maintaining those vehicles and in the evening keeping those vehicles in a depot, fueling them in the morning. They did not have themselves the ability to bring in additional

vehicles, so we raised our hand and said, screw it, we'll bring them in, that's fine. We can fuel them, we can bring them in, we can oversee them. And that was shot down. In Port Loko, it would be well, great, awesome, bring them in. In Kambia, that was shot down because it wasn't our role or responsibility to do that. And also, in addition to the fact it wasn't our role and responsibility to bring in additional vehicles, it was seen as overstepping the bounds of what should be the decision of the WHO, or at least something communicated from the field co of the WHO. The reason that this was all backwards and crazy is, this was a decision that was made in consultation with the WHO, it was just the fact that we, as an NGO, were the ones who were bringing it up instead of having to make the field co be the one to bring these issues forward every single time. [It] meant that these decisions happened very slowly. I went and I got the field co, and I brought the field co back, and I was like hey, standing here as a group, I have talked to the field co, he's fine for us to do this and he thinks it's a good idea. Then you run back into the problem that it wasn't our responsibility to provide vehicles, and that needed to be the responsibility of CAFOD. So you go to CAFOD and you'd say hey, can you provide more vehicles? And they'd say no, we can't, we don't have the human resources to do it, and we've asked for more human resources to do that, but they haven't been approved—so actually, no we can't. All of a sudden, we're in a situation where you have one organization, our own, saying we have the ability to bring in these resources, we have the ability to plug them into a structure, we can do that at no cost to you, but we're being told that we can't do that. I understand all of the political processes around why that happened, but in the context of this kind of emergency, I don't think you have the privilege to be a stickler to MOUs [memorandums of understanding] in the way that

people were in Kambia. And at the point of transition between the old—the DfID team lead in Kambia, he was actually replaced by the DfID team lead in Port Loko, a guy called John [W.] Raine. At that point of transition, things happened ten times faster than they did before because he knew me, I knew him, and he was someone who, putting me aside, did not really care about whether or not GOAL or CAFOD was responsible for bringing in vehicles. If someone was raising their hand saying we need vehicles, and the WHO agreed that we did, then the answer was sure, where are they? Bring them in. It's a stupid example, but it—

Q: No, that's a great example.

Boland: —speaks to a much bigger problem that happened, not just in these logistical spaces like vehicles, but also in technical spaces. In Port Loko, I would say, we should really have an after-action review so we can have people sitting down and talking to these surveillance officers. In Port Loko, people would go yeah, that's a really good idea, of course let's do that. And in Kambia, it would be, who are you to say that we should do that? You're not an epidemiologist, that should be the WHO making that recommendation. Then you'd have to go through this whole process of finding the time to go to the WHO and say look, I know that you know this, we've already talked about it, but can you be the one to bring it up at the evening meeting. [That] kind of thing.

Q: Why was it so different up in Kambia? Was it specific individuals?

Boland: I think it was largely specific individuals. I think it was—this is reiterating myself a bit. Partly again, it was that there was never that emergency circumstance where all help was immediately accepted regardless of where it was coming from.

Q: That's a good point. The epidemic itself is different in Kambia than it was in Port Loko.

Boland: Yeah, and in Port Loko, it was like hell or high water in Port Loko because it was more than a hundred confirmed cases a week, whereas in Kambia it just kind of bubbled along. That being said, we clearly were not identifying the vast majority of cases, but there was this very unreasonable belief that Kambia had its shit under control in a way that Port Loko didn't because they only ever had a few. None of those cases had identified source cases, and a lot of them were bodies, which meant that clearly there were other cases. People didn't really seem willing to engage with how little understanding there was of the outbreak, and people broadly felt that the outbreak was going just about okay in Kambia. In Port Loko, there was a clear understanding that it—that they did not have a handle on what was happening, so anyone who was raising their hand and saying, we can commit resources to help make changes that we think will help, were invited and welcomed. That wasn't really true in Kambia.

In addition to that, I think the—it's a tough conversation. The political ownership of Port Loko was in some ways almost commandeered by this guy, John Raine, and DfID. It's not a comfortable thing for me to talk about, but in that particular circumstance, I think it

was necessary because the leadership of, for example, the WHO, rotated too quickly, the CDC at that time did not have an identified field coordinator, and the district medical officer was really ill in Port Loko. In addition, the district coordinator, which was an appointed position brought in especially for the Ebola response—I hate to say it, but was a massively incompetent individual. So this guy, John Raine, came in and realized that there was this total vacuum of coordination and incident command, and just stepped in and played that role. There was a much, much, much greater emphasis in Kambia on making sure that everything went through the appointed district coordinator, for all of the reasons that are appropriate from a developmental point of view. In South Sudan and in Kenya, I was working in development as much as I was working in public health. I get it, you need to make sure that you have national people making these decisions. You need to make sure that the decisions that the Sierra Leonean government has made about who is going to be in charge of this are respected. You're dealing with these really complicated issues of sovereignty, of capacity development and training, of trying to create sustainable change in an environment when it comes to building leadership attributes. The reality in an Ebola outbreak is that that can't be your primary concern, not when people are dying. I don't think that the people who were in charge of making those decisions in Kambia felt the same way that I do.

Q: I was going to ask if there were others who saw this same problem.

Boland: I think yes. I think most people saw the same problem. But I don't think that people really felt that there was much that they could do about it because even someone

who really—I was willing to stick my neck out, and a lot of other people were too, but instead of finding that doing so and raising these issues was creating change, we found that it made it increasingly difficult every time that that happened to work with personal relationships to make smaller changes. What I mean by that is it actually was counterproductive because you were pushed aside by the leadership of the DERC when you tried to raise these kinds of issues. To the point at which the most politically and pragmatically exigent strategy was to work within what felt like, and what I think was, a fairly rigid structure. That rigidity caused a lot of problems, but it was very, very, very difficult to change it.

Q: When did this transition of leadership happen that you mentioned? When this individual, John Raines, is that his name?

Boland: John Raine was the guy who came in, and he had been in Port Loko for a long time. It must have been maybe August or September, perhaps—yeah, must have been August or September because it was right around the time that I was actually preparing to leave. Unfortunately, I can't speak a hell of a lot about how things changed thereafter; I only know from having a brief window of time at that point of change and also from further conversations with others afterwards that it became easier. It became easier when there was someone there who respected the urgency of the situation. That being said, at that point, there were pretty much no cases anyway. That was the other reality in Kambia, is that there was a clear need to get on top of cases, but by the time we had really—by the time that it was possible to work through dealing with some of these political difficulties

in the district, we had actually still, despite that, managed to get a fairly good handle on what was going on. And we were talking about only a trickle of cases. So at a point, it became more work than benefit to deal with addressing those problems, if that makes sense.

Q: It does. Yeah, okay. I had the opportunity to interview Osman Barrie when I was in Sierra Leone, so I want to ask—

Boland: Oh awesome.

Q: Yeah. I want to ask if you can tell me a bit about him, maybe describe him.

Boland: Sure. Osman Barrie is one of the best people I have ever met, and I consider it a great privilege to know Osman Barrie, to have worked with him and to have helped him in his career. He was someone who came to Kambia, Kambia Town, where you met him, partly because of the structures and the changes that GOAL was trying to effect. I said before that there had not been enough surveillance officers in Kambia, and there was a need to bring more in. He was one of the individuals that had been identified by the district medical officer as someone who could be brought in, trained up, and help become one of the new district surveillance officers. He had previously been working in, I think, Briama Chiefdom—yeah, Briama Chiefdom of Kambia, and he came in, and within forty-eight hours of meeting the new cadre of people that were coming in—it was I think about fifteen people—it was immediately evident that he had a head on his shoulders that

very few people do. He was exceptional conversationally, managerially, he was kind, he was communicative, and he was smart. That's not to say that other people weren't, but he really did stand out among the people we brought in, and he even stood out in relation to the people that had been there for some time coordinating surveillance activities.

I worked with him alongside—I think it was Rebecca Levine at the CDC, to build Osman Barrie up to then coordinate surveillance in Kambia. It was very tiring for him; I don't know how much he spoke with you about this, but he has a couple of kids, one of whom is not his, he has a very, very large family with many siblings, many of whom are incapable of taking care of their own children. So not only was he working seven days a week responding to the Ebola outbreak, but he was also there taking care of his family and his siblings' children in many ways. And he was able to do that despite that stress and despite that effort in a way that was dignified, professional, effective, and ultimately human in a way that a lot of other people lose in this kind of circumstance. He was able to remain sensitive to the social needs of quarantined families, of families affected by Ebola, even families that hadn't been affected, families that were interfacing with surveillance officers as having had sickness or death in their house. He understood the human need that those families felt more than most. And was able to really carry forward some of those needs to real changes in how we did surveillance in a way that was really productive and healthy and meaningful.

Q: Was there an instance in which his compassion and empathy made themselves apparent to you?

Boland: Yeah, I think that he was one of the first people I met who was not afraid to get stuck in and not afraid to fight in a very difficult political environment for the well-being of the people he was coordinating. In a number of small ways, that included making sure that they could get paid, making sure that they could get their food as coordinated by us; I worked with him at great lengths about most effectively providing for his surveillance officers. In the context of something more specific, I remember there was a period of time at which I had to demand that he, as a friend—I didn't oversee him, although technically I had some ability to do so—but as a friend, I demanded that he take a couple of days off because he was sending emails at two or three in the morning and was always the first person at the DERC when we got there at six thirty or seven. He was not willing to prioritize himself over the work that needed to get done, to the point at which it was really dangerous for him. He made it so clear that he didn't really care. He only cared about making sure that he did what needed to get done and that he could support his surveillance officers to do what they needed to do. To the point at which it meant he was spending almost no time at all with his family, that he wasn't sleeping, that he was making significant and sustained sacrifices for his own personal well-being in order to most effectively support the Ebola outbreak. A lot of people did that routinely, but he did it to a degree that was incredibly humbling and almost bittersweet to see, if that makes sense, because you were sad and really felt challenged by the fact that he needed to do that. You were, in some ways, desperate for him to rest, but it also was incredibly empowering to see how much someone could love other people around him, including Ebola-affected families who he did not know, including strangers to the point at which

you could see him really, in some ways, deteriorating from how much work he was doing. Thankfully, we were able to work with him so that he didn't need to drive himself into the ground quite so much. But from his point of view, he didn't care, and I think that says a lot about him. He's probably one of the most selfless people I've ever met.

Q: Thank you. Keeping an eye on the clock again, because I think we really probably should think about—yeah, I'm sorry that I'm asking you to talk at such crazy lengths.

Boland: No, no, it's fine, good topic.

Q: Is there anything else from your time, any other memories or reflections on your time in Sierra Leone that you want to get to, maybe that I haven't prompted for?

Boland: I could talk forever about this stuff. I think that Sierra Leone, during the Ebola outbreak, really ran the gamut when it came to emotional experiences. It went from some of the deepest frustration and anger that I have ever felt in relation to particular institutional failures in Port Loko that resulted in really, people dying, to a sense of being humbled by people like Osman Barrie and all of the surveillance officers that I worked with, to a sense of gratitude to people like Dan Martin and John Raine, who really trusted me despite my age and my qualifications to do good work. I could go on and on and put a story to each of those things. It would be difficult for me to come up with one particular anecdote that might speak to any of those things because it's so hard to prioritize one over the other. I think that ultimately, what's important to remember is just that the Ebola

outbreak represented the best and the worst of what people are and what people can and can't do. I think that that's probably true in a lot of circumstances, like the Ebola outbreak. But to be there and to experience that was not only something incredibly powerful and meaningful in the context of helping end the Ebola outbreak and overcome that situation, but also for creating a reference point for what we need to prioritize in our own lives more broadly, and also politically, as countries and as people and as governments. I feel ultimately a great privilege and gratitude for being able to have been a part of it, despite the frustrations and in light of the opportunities.

Q: I just have to go back to one thing. When you're talking about the institutional failures that you witnessed that led to—directly to deaths, are you referring to what we've already discussed? Some of the lack of organization with the surveillance team? Or is there something else on your mind?

Boland: No, I was talking about a specific—I was referencing a specific event really, which was partially picked up and written about in the *New York Times*. I can only really give you the short story because it is, I think understandably, quite a sensitive situation.

Q: Sure.

Boland: What has been reported was that the Partners in Health-supported Ebola treatment facility in Port Loko did not have nearly sufficient managerial staff or logistical staff or operational staff to maintain safety. It felt very much to me that despite wide

recognition that that was the case, that there was a greater emphasis on continuing to try and get Ebola patients into this facility, despite the fact that there were a huge number of beds available at two more established, safer, more modern, bespoke Ebola treatment centers. Ultimately, what happened was an American volunteer with Partners in Health actually did contract Ebola—contracted Ebola likely in the Port Loko Government Hospital, not in the Ebola treatment center. But in the DERC, we were not told that that individual had contracted Ebola for some time after he had begun to feel sick. And in the chaos of Partners in Health deciding to evacuate all of their staff from Port Loko, we were never really informed or kept abreast of the decision to do so. They evacuated the facility without properly triaging or transferring patients within the facility, and a number of people had to be transferred to a different treatment center, but that was too late to potentially save their lives.

Q: So, I'll ask—this is obviously an important story. People who are listening, we did a joint recording session with some people I think you know, Sam—Oliver Morgan was one of them—

Boland: Mm-hm.

Q: Sarah [D.] Bennett—

Boland: Mm-hm.

Q: Ian [T.] Williams—

Boland: I don't know Ian, but the other two I do.

Q: Sure, sure. An EIS [Epidemic Intelligence Service] officer, I forget what his name was [note: Mahesh Swaminathan], but talking specifically about these Partners in Health exposures. But the matter of a patient who was not adequately transferred to another facility and then passed away, is this one person? Is this multiple people?

Boland: It was multiple people. Again, it was in the context of what was very much an emergency for Partners in Health, but was more broadly an emergency for the district because the individual from Partners in Health who had fallen ill and become sick had been living at the International Humanitarian Partnership camp, where the vast majority of international responders were living. Which meant that all of a sudden, with the exception pretty much of GOAL and some CDC folks at MJ's because GOAL had their own accommodation, the Public Health England lab [laboratory] had to temporarily stop work, the NHS [UK National Health Service] staff working at the GOAL ETU couldn't go to work because they were quarantined, a bunch of WHO staff were stuck there. It was really, really difficult. There was this crisis environment of dealing with the consequences of having a hundred international staff suddenly unable to go to work. And it was in the context of that crisis that—and the evacuation of Partners in Health, that these issues were not really communicated to the DERC and were discovered by accident. Then, those patients were sent to GOAL. I think not all of them had died by the

time that they got to GOAL, but I do believe that all of them had within twelve or twenty-four hours.

Q: Do you know how many people we're talking about?

Boland: It's something like ten. It might be more like seven or eight, it might be more like twelve or thirteen, something around that number.

Q: Are we talking about individuals who just had gone days without care?

Boland: This is where I have to be kind of careful—

Q: I understand.

Boland: —because it's a difficult and broadly unpublished story. No, it's not really fair to say that these are individuals that went days without care. However, it is, I think, fair to say that there were a group of individuals in that treatment center who were not given anything close to an acceptable or professional level of care, in light of the evacuating staff from Partners in Health and a belief by Partners in Health that local staff, nurses, and hygienists would be able to appropriately care for and transfer those patients. What never ended up happening was a notification to the DERC or to GOAL that there were patients that needed transferring, and there was an assumption that there were patients—that the remaining national staff would raise that flag and would communicate that, and

that assumption was not—sorry, I just got a knock on the door—that assumption was basically unfair. I am afraid to say we can continue this conversation at another time; my partner's just come upstairs and my grandmother, I think, needs to go to the hospital.

Q: Oh my goodness.

Boland: So, I'm going to have to end the call now, but I am happy to talk to you; I know you have more questions. I apologize for ending the conversation there. But I should probably run.

Q: No, no, no, no apologies needed. You talked to me for over three hours. So you're good; you're great. [laughs] Thank you Sam Boland, this has been an excellent conversation and I very much appreciate you dedicating your time and energy to it. Thank you.

Boland: If you have any further questions, Sam, don't hesitate to reach out, I'm happy to jump on another call at a different time if you think it would be valuable for you.

Q: Perfect. Okay, thanks so much and good luck.

Boland: Thanks Sam, bye-bye.

END