Justin Bullock:  
Welcome back to another episode of Bush School Uncorked. I’m your co-host Justin Bullock back with you. With me, as usual, is Greg Gause. How you doing, Greg?

Greg Gause:  
Asymptomatic, Justin, and hunkered down at home.

Justin Bullock:  
Well, I'm glad that you're asymptomatic. I'm glad that you're hunkered down at home. I'm also asymptomatic. I also am hunkered down at home. Before the pandemic, I think in the past nine months, I may have spent more than three nights in a row in my home, maybe once or twice, and I have now, as my wife can attest, been here 14 nights in a row, which I don't know what to do with that.

Greg Gause:  
How's the marriage holding up, okay?

Justin Bullock:  
I think she still loves me. I mean, we haven't been married that long, so we still have some of that positive glow, but let it be known that we do live in a travel trailer. We are both working from home, and we're sharing my personal hotspot because the campground does not have quality WiFi.

Greg Gause:  
Given the burdens that Americans are bearing in this crisis, you undoubtedly are at the top.

Justin Bullock:  
I think I'm actually getting off quite well, better than I certainly deserve for sure. So last time we met, it's been COVID-19 all the time now, in the rest of the world, and on the podcast. We had our first real focus on this a couple weeks ago during our students' spring break where we were encouraging them to start social distancing and stay home. Our last episode was with Professor Andrew Natsios, and we really started laying out what pandemics are, how this one has been playing out a little bit, and what are some of the types of responses. A week ago, Professor Natsios said, "I'd seen some things nationally and worked in disaster management," so he had some nice lenses there.

Justin Bullock:  
We actually have two really exciting guests with us this evening who follow the public health and pandemic expert lens who I think you're going to be able to give us some additional information, and with us, we have Gerald Parker and Christine Blackburn, and I want to take a moment and let them introduce themselves, and then we're going to jump right into it this week. Does that sound good by you, Greg?

Greg Gause:  
All good. Let's get into it.

Justin Bullock:
All right. Christine, how about we start with you just a little bit of your background and why you come to this conversation as a pandemics expert.

Christine Blackburn:
Sure. Okay, so I’m an assistant research scientist and the deputy director of the Pandemic & Biosecurity Policy Program with the Scowcroft Institute, and my background is unique. I did an interdisciplinary PhD, so I got a degree in political science, communication, and veterinary sciences, and in my doctoral work, I built mathematical models of pandemics and looked at how biological elements of disease interact with the social element. So, the people elements, all that stuff we’re trying to do with social distancing, how those things come together with risk communication to make a more effective pandemic response or a less effective pandemic response.

Justin Bullock:
Excellent. Well, I want to get into some-

Greg Gause:
Do you have anything that you can bring to the table about this crisis?

Christine Blackburn:
I think I don't, no.

Justin Bullock:
We were just having this conversation in class about ways. What are the more effective ways to convey the risks in a pandemic in particular and some of the challenges there? So, that's something I definitely want to come back to. Thanks so much for making the time. I know as a expert in this area and as everything going on, you are quite busy. So, thanks for being with us. We also have with us, Gerald Parker. Gerald, how are you, sir? Is it okay if I call you Gerry?

Gerald Parker:
Howdy. Absolutely. Gerry with a G.

Justin Bullock:
Gerry with a G. So, give us a little bit of background, Gerry, on how you come to this conversation and why you also are a good authority to talk about pandemics with us today.

Gerald Parker:
Well, I spent my career in biodefense, public health preparedness, pandemic preparedness, health security, really straddled public health preparedness and national security. My career most of was in the army 26 years, most of that at Fort Detrick, and a lot of that within the United States Army Medical Research Institute of Infectious Diseases, the army's only maximum bio containment laboratory. I was a deputy commander of the lab back in the day, and when I left the army, I went to the Department of Homeland Security for about a year and was drafted to come to the Department of Health and Human Services.

Gerald Parker:
Just before what I think everybody now knows as the Office of the ASPR, which is the Assistant Secretary for Preparedness and Response at Health and Human Services. I actually helped stand up that office when it was authorized by the Pandemic and Public Health Preparedness, original, Act in 2006. I ended up my government career as a deputy... I was a principal deputy assistant secretary for ASPR while I was at HHS, and I ended up my government career as a deputy assistant secretary for chemical and biological defense in the Pentagon, and then I’ve been at Texas A&M for six years now.

Gerald Parker:
I am the Director of the Pandemic & Biosecurity Policy Program and within the Scowcroft Institute of International Affairs, within the Bush School of Government and Public Service, and I’m also the Associate Dean for Global One Health at the College of Veterinary Medicine.

Greg Gause:
So, I think, Justin, what this means is you and I should shut up.

Justin Bullock:
I was having the same thought. I don't have anything to contribute. Well, I want to get into how we're doing, like how we're doing in our response, how we're doing as a country. But before we get there, we got a little bit of this in the last episode, and either of you that feels more comfortable doing this, maybe just give us the 10,000-foot view of how do we get to we are in a pandemic, which was declared I think about two weeks ago with now cases in the U.S. still exponentially going up, and it's not true everywhere but still true here. So, what's the background information of COVID-19 and where we are currently situated in the phase of a pandemic if that's the right language for it?

Gerald Parker:
Sure. Dr. Blackburn, do you mind if I start?

Christine Blackburn:
Go ahead.

Gerald Parker:
So, this really came to the world's attention on 31st of December when China notified the WHO that there was some unusual cases of pneumonia in Wuhan, China, and things began to quickly accelerate. I think there was a little bit of misinformation, perhaps slow communication because it looks like now that probably the first cases were probably at least mid-November, but things began to accelerate about the 23rd or 24th of January, if I remember correctly, when it was reported that Wuhan was essentially put on a lockdown and a severe draconian lockdown, and then that expanded over the next few days to a lockdown of Hubei province, so probably involved 50 to 60 million people that were on really a draconian lockdown tight measures that only could be done really in China.

Gerald Parker:
Then at the end of that month, actually, finally, the World Health Organization declared a public health emergency of international concern. The Secretary of HHS, they declared a public health emergency for the United States. President Trump also announced some travel restrictions and travel bans specifically for foreign nationals coming from China into the U.S. So, that really began what was officially what I
would call our containment strategy. We were trying to contain the virus from coming from China or anywhere else in the world where it begun to spread to keep the virus out of the United States, and why is that important? That containment strategy actually was to slow the spread of the virus from another part of the world in the United States.

Gerald Parker:
It's extremely impossible. Really, it is impossible to stop a virus from traveling around the world, something like this, but it did buy us time. The containment strategy was something to buy us time. One, to blow off the dust of our preparedness plans. One, to rev up our scientific engine across the world and in the United States to better understand the virus, because we still... There's a lot of things we don't understand about this virus. We need to have a better understanding because that's going to guide our public health response.

Gerald Parker:
So, that really is about to buy us time. The WHO subsequently declared a pandemic, but before they declared a pandemic, they actually began to talk about the infodemic, and we can go back to that in questions because the infodemic is about bad information that's also circulating around that hampers our response efforts and actually puts people in danger.

Gerald Parker:
So, we have clearly, clearly reached an inflection point about three weeks ago where we had to transition from not to contain the containment strategy but to a mitigation plus a containment strategy. So, that mitigation strategy is now where we're having to essentially slow the spread of the virus down in our own communities, and you've heard a lot about flattening the curve. So, that flattening of the curve, every outbreak is going to have a curve where there's a rapidly escalating number of cases. It reaches a peak and then the curve goes back down. So, we're in that rapidly escalating, exponential escalation of that curve right now.

Gerald Parker:
So, our goal in the mitigation phase of this is to flatten that curve, so the peak is lower, and maybe we spread it out longer, and the goal is to hopefully reduce the strain on our healthcare system in hospitals, and that will reduce the number of deaths that could happen. So, we've gone from, to summarize, initial recognition of pneumonia, strange pneumonia cases in Wuhan, to the containment strategy here in the United States, to the mitigation strategy plus containment where we can. So, that's in summary where we're at containment and mitigation, and we're clearly in the mitigation phase now here in the United States and around the world.

Greg Gause:
Christy, what do the models say?

Christine Blackburn:
About how it's going to end up or what do you mean?

Greg Gause:
Yeah, where we are and what are the alternatives based on different public policy reactions?
Christine Blackburn:
Well, okay. So, I haven't seen any models that are talking about different public policy reactions per se. It's just talking about the range that could occur, and that's based on a lot of assumptions. So, if you put in the assumption that everyone is social distancing, you get a different outcome, but there's nothing that I've seen, and Gerry can correct me if you've seen something else that's compared, like I mean there's been comparisons to doing nothing or limited social distancing and full social distancing, but nothing that's looking at social distancing versus something else, I haven't seen.

Greg Gause:
So, this the Imperial College study that's gotten a lot of play and supposedly had an effect on President Trump. They said, "Do nothing, 2.2 million deaths in the United States. Do something, fewer deaths." To me, that's the public policy side, right? I mean, doing something is not simply telling people social distance. I mean, you've got to have some government reaction to get people to social distance. They're not going to do it on their own. You've got to close the bars. You've got to do all these things. So, talk to us a little bit about, based on your extensive expertise in this stuff, how important is it that that range between doing nothing and doing something.

Christine Blackburn:
It's very important. So, if you just think of it in terms of the biological side, if you limit the contact that you have with people, you can't spread the disease. So, doing something is already minimizing the amount of people that are going to be contracting it, or like Gerry was talking about, lengthening the time between those contacts that you're going to have and giving the healthcare system more time to accommodate because I'm from Washington State. So, all my friends and family are up there, and a lot of them are working in hospitals and just anecdotally, the things that they're saying is that they're already on the verge of being overwhelmed, and they already don't have masks.

Christine Blackburn:
They're deciding, "Should I use a mask for this and not use a mask for this?" So, if we are able to put policies in place that can have less people showing up into those hospitals and protect our healthcare workers and protect the vulnerable populations, I think that's huge. There's a big difference between those options.

Justin Bullock:
Go ahead, Gerry. Sorry. Go ahead.

Gerald Parker:
Yeah, so right now, we do not have a vaccine, and we also do not have a therapeutic, and we're definitely going to have therapeutics on the rise and much sooner than we will a vaccine. We do have some diagnostics, but you've seen that we've been pretty challenged of deploying diagnostics in a sufficient way until recently, and even recently, it's not good enough. So, our only tool actually comes down to basic public health measures, and actually basic public health measures can be extremely important and extremely effective.
So, it comes down, very essentially, if you can avoid exposure, you're not going to get infected. You're not going to get sick. If you are infected, either asymptomatically or symptomatically, you do not want to expose others, so that's really the basis of social separation. Now, implementing social separation is pretty challenging on a public policy venue because the models have gone, and actually the models are... A lot of them are coming from pandemic influenza preparedness that was started back in the 2007-2008 time in a very serious way, and in the space while Neil Ferguson's recent WHO report that you mentioned, Greg, and that for social separation at the community level, for them to have an effect, they need to be fairly aggressive, and they need to be implemented early.

Gerald Parker:
If you just try to piecemeal social separation, community intervention measures, you may not be very effective. So, that's why we're seeing some fairly aggressive comprehensive social separation community-based interventions that are happening right now over the United States, and some communities are more aggressive than other communities. So, it really comes down... That's one of our only tools that we have in the toolkit until we can have other countermeasures come along, but they can be very effective.

Justin Bullock:
So, I want to ask a question about this. Some of the stuff that you see from experts and from quality journalism is comparisons across how different countries have responded and the different types of social distancing or public health or public policy measures they take, and Gerry, you mentioned one end of the extreme, which is the Chinese response. You used the word draconian there. I mean, we can ask a little bit about what that was and what were the consequences for China as a response. I know, for example, today, what we're going to get to watch out is Modi of India just announced everyone in India was going... all 1.3 billion people were to stay home for three weeks as another kind of pretty extreme measure to stop the spread.

Justin Bullock:
There's also have been in other East Asian context places like South Korea, cases like how Taiwan's dealt with it, and compared to, for example, how Western and Northern Europe have responded. So, have you been able to glean or have public health experts been identifying the degree to which... You mentioned early and aggressive. Is there variation across how South Korea and Italy and Spain and some of these other countries, the U.S., in how early and how aggressive the responses have been and has that led to a flattening of the curve even without a treatment or a vaccine? Have other countries been able to use some of these strategies either to flatten the curve or because of how they behaved, not flatten the curve?

Gerald Parker:
Sure. I'll take it first, and then I'll throw it over to Dr. Blackburn. So, actually, just look at China. We'll start with China, and I think we're all aware that it was pretty... In Wuhan, Hubei province, it was pretty severe in there, but guess what? That was mitigated. That was mitigated. What if they hadn't have done that?

Justin Bullock:
Oh my goodness, yeah.
Gerald Parker:
Then look outside of Hubei. Actually, it's a lot less severe in the rest of China outside of Hubei province. So, even in Hubei province, that was mitigated, and then that also have been spared the rest of China in a pretty significant way. Now, you look at some other countries, and I don't think... Yeah, I'm going to go back to that. Most people don't realize that what happened in Wuhan and Hubei was actually mitigated, and that's the community mitigation social... that was just implemented too late, but it was still mitigated, and it would have been a lot worse.

Justin Bullock:
So, in that case, containment failed, but through these oppressed measures, it was mitigated.

Gerald Parker:
Yeah, containment failed, and you could say mitigation failed because it was implemented too late, but it would have been worse had they not done what they did, and then it definitely spared the rest of China because the rest of China had a much lower case level and death rate outside of China. Now, there's some other really good comparisons, and that's Singapore, Taiwan, and they took some aggressive actions, but they also had a lot of testing that was important, but they were really very good at their containment strategy, and then you compare to Italy, and Italy got out of control, and it's extreme crisis in Italy, and their hospital systems have been overwhelmed, and you're seeing some extremely gut-wrenching things that are happening in their ICUs and very, very difficult decisions that physicians are having to make about the patients who live and die.

Gerald Parker:
Then South Korea almost got out of control. Then really the big lessons learned with Korea was the ability that they were able to ramp up and roll out their testing, essentially almost testing everybody in their entire country, and they could make more localized decisions about who needs to be isolated and so forth. They still have a lot of cases, but they really mitigated the deaths, and they really mitigated, and they stopped that curve from going out of control.

Gerald Parker:
So, those are some of the country comparisons within a country and then comparing different countries. So, yes, the world is learning from what we've observed in other countries very early on, and as part of the lessons observed that the United States and our own state Texas that we're looking at those other countries and what happened and when they took these actions. So, we are trying to learn those lessons. Dr. Blackburn, do you have anything to maybe add to that I missed?

Christine Blackburn:
No. I'll add on to that. I really think timing is really important. So, when you talk about every country is... I mean, there are some differences with Taiwan and South Korea, definitely, in terms of the targeting and specific measures, like more localized, but every country is taking relatively similar measures, but it's about when they're taken, which is having the biggest difference. So, if you wait too long, and it spreads too far, then you're going to have less of an impact once that's actually implemented.

Justin Bullock:
Did Italy eventually put some more serious mitigation measures in play? Was it just way too late? I mean, is that the takeaway from Italy?

Christine Blackburn:
That would be my opinion. It was just too late. People were still wandering around, touring big sites, and doing all this stuff, like what? Three weeks ago maybe. So, yeah, it was just too late.

Justin Bullock:
So, I think the immediate follow-up question that I'm really interested in what the two of you have to say is we've made some measures. There's some debate about whether they're aggressive enough as part of the debate I'm hearing. The consequences for the economy as a result of the aggressive measures is something that I want to get to, but where were we in this kind of instituting real mitigation measures after containment failed? I mean, are we doing that now I guess is one relevant question, and if we are doing that now, are we Italy or are we South... I mean, we're not South Korea in terms of the amount of testing and stuff, but are we Italy or are we closer to Taipei or to Taiwan or somewhere else? Where are we on this exponential growth? Have we already waited too long in some ways? Where are your senses on that?

Gerald Parker:
Well, I don't... Actually, Dr. Blackburn, why don't you go first?

Christine Blackburn:
Okay. So, I'll preface this by stating this is my opinion. My opinion is we really should have taken actions much sooner, and I'll just give a really small scale example because this is a personal example. The bars around College Station were open for St. Patrick's Day, and they were closed down the day after. We had hundreds and hundreds of students going out and drinking all together on St. Patrick's Day when that should have been something that we as a community looked at and said, "This is probably going to draw a lot of people out. Let's take this action before that happens rather than after." So, that's a small-scale example, but my opinion is we've been a little bit slower than we should have been.

Gerald Parker:
I want to say something also. I wouldn't categorize containment as failure. Viruses don't respect borders, and it's extremely hard in our globalized world even with travel restrictions and travel bans and in fact, the travel ban was put in place well into what would be the Chinese New Year, and even the draconian measures taken at Wuhan and Hubei province toward the end of mid to third week in January. A lot of people already traveled around the world, but I still wouldn't categorize containment as a failure. In fact, the containment was to try to mitigate more spread of the virus through other countries and the United States as well.

Gerald Parker:
I think it would be worse had we not done that, but I agree with Dr. Blackburn. There are communities. I think we were slow on the start to seriously begin to think about the mitigation measures in any given community in the United States, but on the other hand, I've been really impressed though how people began to really take the virus seriously at one point when it became clear that we had to... this inflection point from containment to mitigation. I think it became clear that some were talking including me at some point in time. We were on the similar curve, and I think we still are.
Gerald Parker:
If you look at the outbreak curves of Italy, Italy's still going up. Although the last couple days there's been a little bit of a... looks like it might be reaching the peak, but we don't know yet, but we're only two weeks behind Italy on that curve. If you lay those two curves out, the slope of the curve looks very, very similar. So that's why, actually, in the United States, we've begun to take this extremely seriously. If we start early enough, time will tell, but it takes also a couple weeks to see any impact of the social, the community interventions to take place because now we have an incubation period of two to 14 days, and then it takes another... The median time seems to be about five or six days of incubation period.

Gerald Parker:
Then you factor on another five or six days to show symptoms. So, it may take at least two weeks before you could see an impact on the outbreak curve.

Greg Gause:
So, talking about the contagion in the U.S., New York City and the areas surrounding New York City has become the epicenter at least so far, and I think that's completely understandable. Large population center, people packed close together, lots of international travel, but Christy mentioned Seattle and Pacific Northwest as another center. So, why Seattle? Have we been able to figure out why Seattle was one of the earliest places where the virus struck in large numbers?

Gerald Parker:
Well, Dr. Blackburn, this is near and dear to her heart being her hometown.

Christine Blackburn:
Yeah. I mean, I would say just from growing up in the Seattle area that it's probably because we have a very large Chinese population. I think the Asian population in the state of Washington is 15% of the population in total. So, there's a lot of people who travel back and forth on a regular basis. So, I would say that's probably one of the main reasons that it first showed up there.

Gerald Parker:
When it got into a nursing home as well, I think the critical thing is the... I think we understand now that the vulnerable populations happen to be those over 60. I count myself in that category, but it's also the vulnerable populations also include those that have a comorbidity or another underlying health condition, and if you look at the United States population, look at the numbers, so that vulnerable population there, 70% of that population does fall in that over-60 category, but in that 18-to-59-year-old category, there's still another 30% of the population that falls in that category, and the total population of that vulnerable population is almost 110 million people.

Gerald Parker:
So, the number of people in this vulnerable population is still quite high, and we have a total population of 330 million in the United States.

Justin Bullock:
The good news is I learned from the lieutenant governor that Greg here as my more elder co-host might be really just to sacrifice himself for us younger generations, and I must say in advance, Greg, I really appreciate your public service sacrifice for us young folks.

Greg Gause:
You can go screw yourself, Bullock.

Gerald Parker:
Where's your dedication to public service?

Greg Gause:
Yeah, Lieutenant Governor Patrick has his own opinions, and I fully endorse his willingness to throw himself into the bridge.

Justin Bullock:
Well, if you change your mind, let me know. I don't know how to pass it along. So, this gets to a couple of policy responses, and we've I think laid out the picture of how we got to here and reasons for New York and Seattle being some epicenters, but we're also seeing exponential growth in Texas where we are and in Georgia, which is my homeland and plenty of other states. So, we've moved on from the containment phase I think this point in the U.S., and we're moving to the mitigation phase, and we've talked about how... We've had varied responses to that. So, what should the leadership be doing in general to help encourage mitigation strategies?

Greg Gause:
I would just add that here in Brazos County, we just had a shelter in place directive issued that takes place in a couple hours from now. This is March 24th, and we're recording at 6:30 PM Central. Our shelter in place I think begins in a half an hour. So, right, we shouldn't have been in bars on St. Patrick's Day, but where do we go from here?

Gerald Parker:
Well, first, overall, this is not just a leadership issue. This is all of our issue and all of our responsibility, and everybody wants to say, "Blame the federal government," or, "Blame the local mayor," and they all have responsibility, but we also as individuals have responsibilities. Actually, I was involved in a lot of pandemic preparedness back in the '06 to 2010, 2011 time frame, and I was at HHS and the Operations Center during the 2009 pandemic.

Gerald Parker:
It's very unrealistic to expect that the federal government can be everywhere every community and something that affects the entire United States, and this is just like any other disaster. It comes down to the local elected officials who have ultimate decision about their elected community, and I give our elected officials particularly at the local level a lot of credit for taking these things seriously and trying to implement policies in their communities where it makes sense. Listening to guidance from local public health and trying to implement what makes sense and in a very trying situation where we lack all the information we need.
Gerald Parker:
So, those are tough calls when you have to make extremely difficult decisions that are going to impact all of our lives and maybe in a profound way when you have low-confidence information, and we’re in that situation, but it's not all that low confidence because we're seeing some of the serious impacts that can happen like in Italy for example. So, these are tough calls at every level. Recently, this is locally implemented, state managed, and the federal government has got to assist. So, what you are seeing now playing out with the mitigation strategies, there's a big focus on spreading and reducing the infection and spread of infection across our communities, and everybody's got decision authorities, but you and I as individuals have our responsibility as well to keep our six feet amongst from other people to try to mitigate that spread.

Gerald Parker:
So, I think a lot of people are taken seriously. There are pockets, you know like with Northgate. The students weren't maybe following the advice. I think that's the things that we probably haven't done a good enough job of communicating the responsibility in this case locally why it's important that we got to take care of the Aggie family no matter what demographic we fall in and like that. So, I'll stop and throw it over to Dr. Blackburn and let her add her thoughts.

Christine Blackburn:
I'm just going to move a tiny way... it's related to policy, but I'm going to step a little bit away from policy, and I think one of the challenges is in terms of when you’re talking about crisis communication, it's highly, highly important to have a consistent message, and I think that's one of the things that has been a challenge is that a lot of people... I'm not really sure what to believe because the message at least at the federal level to some extent changes frequently, and that makes it really hard for people to know, "Oh, is social distancing something that I should do? Should I not go out to the bars this weekend?"

Christine Blackburn:
When people don't really know what's happening, it can dampen the impact of whatever policies you put in place. So, I would say that that has been... That is at the federal level. I would not say I've seen any of that at the local level or anything, but it still causes confusion at the local level because they're not exactly sure what they should be doing or what's the right thing to believe in. We have seen studies that have shown people's belief, and the seriousness of it has declined in last month in the United States, which is going to make them less likely to follow the policies.

Gerald Parker:
If I could echo Dr. Blackburn just real quick, and I think actually the message from the highest level has been confusing. For the longest time, the message sound like, "Oh, it's not a bad deal." Most people are just, "Mild, and this is going to pass," and that often happens at high levels. We want to send a positive message, but it's got to be a realistic message, and even public health authorities were saying, "Well, 80% of patients would be a mild case." Some of them, asymptomatic, but we didn't talk enough early on about the other 20%, and it's really the other 20% that is the issue. So, it's nice to know that if 80% of people who get infected are going to have mild cases, but it's the other 20% is our issue, and there are 15% of those with severe cases, and many of those have to have hospitalization if they're severe enough.
Gerald Parker:
Some of those slide in this critical category, and over 50% that slide into that critical category die. So, that's the issue that our hospitals even with the numbers that we're seeing can be quickly overwhelmed where physicians are having to make hard decisions about who lives and who dies and in some countries, they're making that just on age. If you happen to be over 60, you're not going to get the vent. You're going to get sedatives, and you're not even going to get palliative care. Your family's not going to be around when you expire.

Christine Blackburn:
Just to add to that, I think... I had a friend that put it in perspective really well. She was saying, "Stop saying that it's only older people or it's only immunocompromised people." She's like, "What you're saying when you say that is that those people don't matter," so we shouldn't be thinking about it, and I think that really puts it in perspective is that that matters. So, we still have to pay attention to that in addition to the fact that there are all of these other things that Dr. Parker covered.

Greg Gause:
So, this is a perfect segue to the fact that it's 6:40 PM Central Time on March 24th, and the headline of the New York Times is "Trump, Defying Experts, Talks of Easing Restrictions by Easter." Is that a good idea?

Gerald Parker:
I'm not going to make a prediction. I think one thing that we do, and I go back to The Lancet article that actually as soon as I read it, I emailed it to Professor Natsios, and I think it caught his attention as well. It was an op-ed in The Lancet about social distancing, and the first two sentences of this op-ed were really the most important, and it did emphasize the importance of personal and community mitigation strategies, but the second sentence was about the important function of government to mitigate as much as we could the economic impacts of that.

Gerald Parker:
So, we have to talk about these public health interventions, and we have to also talk about the economic impact of those, and we haven't figured out how to calibrate that yet. I mean, this is really the first time in a large scale that we've tried to mitigate in a long, long, long, long time. This kind of scale of community mitigation measures. So, this is truly uncharted territory, but we haven't quite figured out how to mitigate and manage the economic impacts or the public health impacts. I'm not going to answer your question about what to the president-

Justin Bullock:
Christy, anything to add on to that?

Gerald Parker:
She's going to answer that.

Christine Blackburn:
I mean, I think that it's hard. As somebody who spent a lot of time working in the service industry, in grad school, years and years and years, I still have a lot of friends that do that. So, I understand. A lot of
people I know are being impacted personally with job loss and not knowing how they're going to pay their bills after a month from now. So, I do understand the economic side is really important but at the same time, it's figuring out how do we find a balance between making sure that we take care of the economy to the extent that we can, but we also don't unnecessarily cause loss of life. How do we make sure that we're doing the best that we can to contain this disease and keep people alive?

Justin Bullock:
I have a different way of asking Greg's question that maybe is framed a little different way. Let's say that a country is in the exponential growth phase, still in the exponential growth phase, evidence is they've taken some important measures to mitigate that, but they're still in the exponential growth phase. A country that's in that phase is unlikely two weeks from then to want to return to normal would be my suspicion based on what we've observed from other countries. Does that seem like a fair thing to say?

Gerald Parker:
I think it's going to have to be actually managed to keep... A pandemic is going to be something that's not going to spread across the entire United States at one time. It is going to be something that's going to hit community by community by community by community by community. So, I think it's difficult for the United States to say that everybody's going to pull the brake off of community mitigations in two weeks. I think there may be some communities that can, and I think there are some communities that will not, because these really have to be factored on what's happening in our individual communities.

Gerald Parker:
So, I would suspect in New York... In two weeks, if New York is still seeing an exponential acceleration, I seriously doubt if they're going to make adjustments. Although I think we haven't totally explored how do we... If there other some risk stratification. We haven't explored that enough on these community intervention strategies, so we're going to have to explore that more. There may be other mitigation strategies or risk stratifications and other ways to try to protect those vulnerable populations while some of the economic engine begins to turn back home. So, we just have to explore that a little bit more. I don't have the answer, but I've begun to think about it, and I know others have begun to think about it because we cannot just continue to keep on shutdown mode forever.

Christine Blackburn:
Yeah, I would say too that, again, back to the messaging. The messaging, I'm saying, like we're thinking about raising restrictions implies that while we're at this exponential phase in the growth in the United States that we're also thinking that we don't need to social distance anymore. So, I would say it goes again back to that component as well as potentially enforcing to people that it's not that serious, so we don't have to continue.

Gerald Parker:
Yeah, and then one of the solutions, fortunately, diagnostics and lab testing is going to be very, very important, and the quicker we can roll out diagnostics in our country, the better that we will be able to understand who's been infected, maybe who's recovered, who's got maybe immune. There's a whole new class of diagnostics. Right now, we're all focused on PCR detection of the actual virus or pieces of virus that remain, but we need a whole new level of what's called antibody and serologic survey and look at populations exposure. If we can begin to get a handle on that, like who's been exposed, who hasn't, who may be susceptible? Then we can make some of these risk stratification things and go about
it a little bit differently. Unfortunately, right now, we just don't have enough data, and that's what's challenging.

Greg Gause:
Gerry, why are we so bad on testing?

Gerald Parker:
I'm not sure if I want to talk about it publicly, but to me, it was a failure. That's going to be an after-action that's going to be examined very, very thoroughly, but I think it was a failure, and there's already several investigations underway on that. It's embarrassing actually. When you look at the success that South Korea had in ramping up the ability that they were able to test even early on, the per capita testing, and we were extremely slow. We had technical problems and et cetera, et cetera, but I think we're going to have to re-examine exactly how we do public health surge diagnostics for these things in the future, and it is the private sector that's coming to the rescue right now on the lab testing.

Gerald Parker:
So, I think we're going to really have to re-examine our policy and our approach and strategy in the future for pandemic surge diagnostics because this didn't work.

Greg Gause:
How can universities like A&M play into that?

Gerald Parker:
Actually, if you look at other universities that have medical centers that already had CLIA labs, they played a huge role. Look in Dr. Blackburn's hometown of Seattle, the University of Washington. Their medical center already had CLIA, which is a... That's just that quality kind of control system for doing human type testing that physicians can make treatment decisions on. So, they already had CLIA labs, and they were able to surge their labs, and they were really the backbone, the University in Washington for the early rollout in their community to support the diagnostics. So, A&M actually in the future needs to play a much bigger role. We ought to get involved. We ought to build programs in global health, global health security at Texas A&M.

Gerald Parker:
We have a new bio containment lab, the Global Health Research Center. It's primarily focused for livestock, large animal, but in the future, it can play a major role. So, I think we're going to have to up our game, and we have expertise and capabilities, and we probably got to do some recruiting of faculty that can play a role in the science of global health and global security. We got to get in the game.

Justin Bullock:
So, at the risk of asking you to directly respond to Andrew Natsios, as he was on the podcast, one of the things that he said to us was that this is just a preview of other pandemics that we might have that because of the way our public health is set up and because of our, for a variety of reasons, that this might just be one of a number of viruses that might be coming down to and be infectious over the next 10 to 20 years. So, I was wondering, do the two of you have any sense as to why that's the case? Is this
just step one into a world where we’re going to have to deal with things like COVID more regularly? What is your sense of that?

Gerald Parker:  
The answer's yes. I'll let Dr. Blackburn elaborate.

Christine Blackburn:  
I mean, my sense is that, yes, we are going to see more outbreaks like this. We have already seen, if you go back the last 20 years, they're increasing in frequency, and they're increasing spillover events, and there's all of these things occurring like climate change, deforestation, all these different elements that are coming together to make the emergence of new pandemic diseases, potentially pandemic diseases more likely, and then on top of that, we haven't done a great job of learning lessons from past pandemics. So, that's something that we always talk about, and I think Dr. Parker uses lessons observed rather than lessons learned.

Christine Blackburn:  
I mean, we wrote an article two years ago about the potential supply chain issue with masks. When I was writing my dissertation, I wrote about the issues with hospital capacities, specifically with respirators or ventilators, and that sort of thing. These are our problems that we've known about for a long time, and we've observed them as problems, but we haven't really learned them. So, moving forward, I do think there will be more occurrences, and we have to learn the lessons this time, so that we're better prepared next time.

Greg Gause:  
Gerry, you talked about an infodemic. I'd like to hear from both of you where you think people should go to get good information on this.

Gerald Parker:  
It was the Director-General of the World Health Organization that used the term infodemic before he declared a pandemic, but it really is a serious problem that there's just so much bad information. They get circulated in social media. There's a lot of great information that also gets circulated in social media. Some of the information I put out on Twitter is pretty good.

Greg Gause:  
Only some of it? Wait a minute.

Gerald Parker:  
However, I think what the best recommendation that I think I want to make sure everybody hears and hears often that the best information is in your local community, and in there for COVID-19, the best information is your local public health authority in your local community and then your elected official in your local community. It's great to go out and seek other information and so forth, but if you hear the latest and greatest new cure, hopefully, it is, but there's a lot of things out there that don't make sense.
So, also, always validate and verify things that you might hear at in the social media sphere with what is authoritative information coming from local public health, and they get a lot of their information from state public health and the CDC, and I'm not saying they get it all right all the time, but they're the ones that are the most authoritative voice over time. It is the local people you know in your community and trust, and those, it really comes down to in this case for COVID-19 is your local public health authorities. The Scowcroft Institute is putting up pretty good information too.

Justin Bullock:
The Scowcroft Institute. Christy, do you have anything to add there on other sources, people in addition to their local health officials... I'm not sure I can actually say that people should always listen to their local elected officials. I can't completely agree with you on that one, but I would say-

Gerald Parker:
Actually, in a disaster like this, it's been pretty unprecedented of the degree of people working together. They're putting apart their differences. So, in a disaster like this... Now, I hear what you're saying, but people are trying to make the decision they can under an unprecedented time, and I think people have their best thinking, and their heart is in how to protect their citizens in their local community. They really are, and it's unprecedented. Even at the federal level, everybody's holding hands and singing Kumbaya until the Senate vote for the last couple days, but it's quite different in an unprecedented crisis like this, but I agree with you, but-

Justin Bullock:
My only concern is that the local officials might be following the president's Twitter feed, and then they would have all kinds of incorrect information.

Gerald Parker:
Well, that's a good point, but I think local officials, from what I've observed, they're working hand in hand with their local public health officials, and their local public health officials... it's a pretty tight community of listening... The state Public Health and CDC and the World Health Organization. Now, again, they don't always get it right, and there's some political things that happen in all those communities as well, but public health authorities, that's in their DNA to protect the public health, and even the emergency management community, and their DNA is Public Safety, so yeah.

Gerald Parker:
I mean, I hear you, but this is an unprecedented time, and they may not always get it right, but they're not listening to my Twitter or... Everybody listens to it, but they only listen to their local guy.

Greg Gause:
I think Gerry is absolutely right on this with the possible exception of the lieutenant governor.

Justin Bullock:
He's hardly a local official.

Christine Blackburn:
But I would say also Dr. Fauci is a phenomenal resource. So, what he has been saying is good quality information. He's a brilliant scientist. He's been working with six different presidents. So, anything that he's saying is good information.

Gerald Parker:
It's outstanding. No, he is a national treasure. Dr. Fauci is a national treasure. End of story.

Justin Bullock:
So, we're getting close to the end of time here, so what I've-

Greg Gause:
Not the end of times, but at the end of our time.

Justin Bullock:
The end of our time. Hopefully, not the end of all time. I think what will be helpful or what I'd like to leave the listeners with is for people are listening to this, this will probably go live in one to two days. What would you say to people that are listening? What should they be thinking about? What should they be trying to do? How should they go about their lives given that we're still in this exponential growth curve? There's a lot of uncertainty. There's a lot of misinformation. What should people do? What kind of advice would you give them?

Christine Blackburn:
I mean, I would say, one, please stay home. Please follow the shelter-in-place orders. Remember that it's not just for yourself, but it's for everyone else in the community, and everyone should be careful about jumping to assumptions. So, I know everyone's panicked. It's hard to get information. A lot of things are changing as we learn more about it, but be careful about jumping to assumptions and also about believing everything that you read on Facebook.

Gerald Parker:
Yeah, I would say that I know everybody has got some anxiety. They're worried, but I would put your thoughts into a more productive thing. It's healthy to be concerned. It can be counterproductive to just worry. So, try to take positive things and be concerned, pay attention, be alert, be prepared, but don't panic is really the message I would like to say. Take common-sense approaches. Avoid having yourself be exposed and avoid... If you think may could be incubating the virus, avoid exposing others. Very common sense type things. Be respectful of other people. Treat other people with dignity during this period, and by all means, since we're here in Aggieland, keep your fellow Aggies safe.

Greg Gause:
Justin, I counted. You touched your face 27 times during this podcast.

Justin Bullock:
Not again. Not again. I did it last time. Aw.

Greg Gause:
I think what you have to do is take a bunch of Clorox wipes and just wipe them all over your face.
Justin Bullock:
Don't worry. My wife keeps Clorox wipes [crosstalk 00:56:04].

Greg Gause:
I don't want you infecting your wife.

Gerald Parker:
I'm glad you brought that up, Greg, because that really is... Seriously, that's very important. All the recommendations, you've heard them again and again and again and again, but the personal hygiene is extremely important. Basic public health actually is very effective. So, washing your hands with soap and water for 20 seconds. Sing the happy birthday song. That's about 20 seconds as you're washing your hands, cough etiquette, and if you're sick, stay home. If you feel like you need to see a healthcare provider, please do so, and call in before you go in to the healthcare provider because they can give you specific instructions about how you should report. As Dr. Blackburn said, follow public health guidance.

Justin Bullock:
So, just having my evening wine is not going to keep me safe from COVID is what I've learned today.

Gerald Parker:
Well, I think that will help you ease the anxiety.

Justin Bullock:
That is already doing-

Greg Gause:
It couldn't hurt.

Gerald Parker:
If you're going to do it, I'm going to do it.

Greg Gause:
And don't share glasses.

Justin Bullock:
Well, yeah, don't share glasses. Well, thank you so much. We originally planned to have this conversation before the pandemic and our hosts at Downtown Uncorked in Historic Downtown Bryan. So, I appreciate the two of you being flexible with us and moving to this online format. Greg and I really think it's important to have some of these conversations as there is a lot of misinformation out there right now and talking to actual experts, because while we might be able to have some debates about some of the international affair's responses and some of the policy and economic responses, neither of us are public health experts and will not be accused of such. So, thank you so much to sharing your expertise with the audience. I'm now noticing me going to touch my face. I'm going to fix my glasses with the back of my hand.
Justin Bullock:
So, thank you so much. I’d to say to listeners too, and particularly those of you at The Bush School who might be following along, next week, Greg and I are going to do a live recording you can join us for. We’re going to make a Zoom link available and be pushing it out on our Bush School Uncorked Facebook page, so you can follow along. So, we'll make that link available via our Facebook page and be sending out the LISTSERV to our students and the faculty and staff.

Justin Bullock:
So, if you'd like to join us at the same time, which will be next Tuesday, which is April 1st, right? April 1st. Is that right?

Greg Gause:
No, no, March 31st.

Justin Bullock:
March 31st. Thank you, Greg. So, March 31st at 6:00 PM Central Time, we'll be doing a live conversation, and we'll be talking about COVID-19. I'm sure we'll be talking about some of the policy responses, diving into some more of Greg and I's expertise, which is some of the international affair's consequences and thinking through some of the public policy responses, particularly some of the economic responses domestically, which is something that I have some expertise in as well.

Greg Gause:
And how all this plays into the 2020 presidential-

Justin Bullock:
Oh, yeah. There are still primaries, huh? We didn't talk about that at all, so we'll save that for next week.

Greg Gause:
We'll get in that next week.

Justin Bullock:
Maybe it's coming to a close. We need to be able to vote. That's something I'm a little worried about.

Greg Gause:
Well, we voted here in Texas, but other places haven't voted yet.

Justin Bullock:
Yeah, Georgia's doing mail-in ballot. So, I saw them announcing, so hopefully, we can get that systematically done.

Greg Gause:
So, Gerry and Christy, thanks very much. We'll have you back for an after-action and hopefully in a bar.

Christine Blackburn:
Thanks.

Gerald Parker:
Thank you.

Justin Bullock:
Thank you so much.