

When it Mattered

Episode 54: John M. Barry

Chitra Ragavan:

John Barry remembers the exact moment he gave up his boyhood dream of doing medical research for his other boyhood dream of writing. He was 13 years old and had returned from summer camp eager to examine some bacteria cultures he had grown and left in the freezer, only to find it gone.

Chitra Ragavan:

Hello, everyone. I'm Chitra Ragavan. Welcome to When It Mattered. This episode is brought to you by Goodstory, an advisory firm helping technology startups with strategic brand positioning and narrative. Little did he know it at the time, but after a long detour away from his childhood love for medical research, Barry would write an award-winning book on science and medicine called, *The Great Influenza: The Story of the Deadliest Pandemic in History*.

Chitra Ragavan:

The acclaimed book positioned him to give timely history, context, and framing for the COVID-19 pandemic when it exploded on the world stage last year. The crisis of pandemics and how to deal with them would largely take over Barry's life. I'm joined now by John M. Barry, prize-winning and New York Times bestselling author of six books, two of which, *The Great Influenza* and *Rising Tide: The Great Mississippi Flood of 1927 and How It Changed America*, have pulled Barry into various policy advising roles with state, federal, United Nations, and World Health Organization officials on influenza, water related disasters, and risk communication.

Chitra Ragavan:

Barry is currently a distinguished scholar at the Tulane School of Public Health and Tropical Medicine in New Orleans. John, welcome to the podcast.

John M. Barry:

Thanks for having me.

Chitra Ragavan:

You were pretty serious about medical research even when you were 11. How did that start?

John M. Barry:

I was just fascinated by it. I was one of those kids that had a lab in their home. I actually had a pretty good quality though ancient microscope. It had lights, lens, and things like that, an expensive microscope. Grew my own media, agar-agar, and all these dyes. I was playing with E. coli, which can kill you, but seemed pretty tame because I could use that in my school class. I figured if it was in school, it wasn't very exciting. I sent away to the American Bacteriological Supply House in Washington, DC.

John M. Barry:

I actually remember the company's name, it doesn't exist anymore, and asked for some staphylococcus aureus. Of course, today if you did that, you'd be all sorts of...

Chitra Ragavan:

You get a knock on the door from the FBI.

John M. Barry:

Yeah, they figured anybody who ask for it must be qualified to use, so they sent it to me. I had fun growing that and playing with it and so forth and so on and went away to camp. It came dehydrated in a vial. I hadn't used all of it. I put what was left in the freezer so that I could reconstitute my cultures when I returned from camp. When I came back, I opened the freezer and asked my parents, "Where's my staph?" They explained that their friend, a physician, a family physician, they had mentioned it to him and he said, "Are you nuts?"

John M. Barry:

He threw it out and then wrote a blistering letter to the company that had sent it to me so they'd never send me anything again. I was really furious. I'm still mad about it as a matter of fact. I was as angry as you can get when you're 13 years old, which is pretty, pretty angry. I had always been torn between a desire to write and a desire to do medical research. At that moment in time, I actually said, "Okay, I'm done with the research. I'm going to be a writer."

John M. Barry:

As you said in the introduction, eventually I did write about science, although I don't consider myself primarily a science writer. I have several books that are, I guess, fairly technical.

Chitra Ragavan:

But it would be a while before you fulfilled your dream of becoming a writer. You did history, I guess, in graduate school and then dropped out and became a football coach. First of all, why history? And then why did you drop out of college and start focusing on football?

John M. Barry:

Well, history is pretty easy. To answer both questions, it's pretty easy. I think history encompasses every field of both human endeavor and natural events. It seemed to be the best way to try to understand the world. In terms of football, I love the game. I wasn't very good at it as a player. I sat on the bench in college in a poor team in the Ivy League, so it wasn't exactly big time football. I was kind of frustrated by that experience. I didn't want to leave the game that way.

John M. Barry:

As you said, I did drop out of grad school in history. I was pursuing a PhD and did coach for a few years. I never intended to do that for the rest of my life.

Chitra Ragavan:

But it would lead you to writing because your first piece was sold to a coaching magazine and I guess you went from there to journalism, right? And then to writing your book.

John M. Barry:

Well, that's true. I wouldn't say exactly that it led me to writing. Actually the first three stories that I ever got published or paid for were all in a magazine called Scholastic Coach. One was about a system to change your blocking assignments at the line of scrimmage, one was maximizing the use of the tight end, and one was about off season training. I already was attempting to write. As you say, I did end up covering national politics and economic policy in Washington DC for not quite 10 years.

John M. Barry:

Left a job on a magazine to finish my first book, which was on politics called *The Ambition and the Power: A True Story of Washington*, and then never went back to a regular job after that.

Chitra Ragavan:

Wow, that's amazing. What led you to write *The Great Influenza: The Story of the Deadliest Pandemic in History*? I mean, tell us briefly what the book is about and how you decided to write it? You weren't particularly interested in writing it in the beginning.

John M. Barry:

No, I actually planned to write a book on the homefront World War I culminating in the events of 1919, which I consider one of the most interesting years in American history. A lot of things happened in 1919 and during the war, of course. But the way I conceived that book, I thought it would take me at least seven years to write. I live entirely on my writing, which means an advance... If you say it all at once, the amount of money needed to live decently for seven years plus paid research expenses, that sounds like a lot of money.

John M. Barry:

That book idea I didn't think was going to generate that kind of an advance, so I thought I could write a book on the pandemic in at most two and a half years and probably less than that. It would subsidize the larger book. I got what's a pretty hefty advance for a book you could write in two years. Unfortunately, the influenza book ended up taking me seven years. The same amount of money divided by seven is a lot less than when it's divided by two. I was kind of looking at life like a graduate student almost.

John M. Barry:

I was pretty old to be doing that toward the end of that book. It was not a labor of love. At the beginning, for the first five and a half years, I wanted to throw the whole thing out practically every day and abandon it. But a character in the book, Oswald Avery, actually got me inspired, his persistence, and he's probably the single person most deserving of the Nobel Prize who never won it. He was being considered for the Nobel Prize for his lifelong contribution to immunology when he came out with the paper that said DNA carried the genetic code, which was extremely controversial at the time.

John M. Barry:

Since most people didn't believe that he was right, so they didn't give him the prize. Of course, he was right. In the book, I quote about five or six Nobel laureates including Jim Watson, Peter Medawar, Salvador Luria, Macfarlane Burnet, all saying Avery was key. He basically launched the entire field of molecular biology, but he never got the prize. At any rate, Avery struggled with

that paper for 25 years trying to solve the problem, which ended up in that conclusion. And knowing what he went through, it did kind of keep me going.

John M. Barry:

As I said, for five and a half years, it was hell almost every day, but it then came together in the last year and a half. Things worked out pretty well and obviously the book fortunately. I'm quite proud of it. Both in the scientific community and commercially it did pretty well.

Chitra Ragavan:

It had all kinds of good ramifications for you. It kind of pulled you into the policy world, didn't it?

John M. Barry:

It did. It came out by coincidence a year after SARS. Right around the time, H5N1, so-called bird flu surfaced. After, of course, 9/11, and the Bush administration was very concerned about pandemic preparedness. I've been told by many people in positions to know that the book was actually useful in terms of actually getting a \$7 billion piece of

legislation passed for preparedness. In fact, Secretary of HHS Mike Lovett apparently read portions of it to a handful of key senators in a meeting.

John M. Barry:

They went out the next day and took over the floor, so I've been told quite recently by a pretty senior person who was there.

Chitra Ragavan:

You scared the heck out of them.

John M. Barry:

Apparently. Anyway, at the same time, a lot of the planning was based on analyzing what happened in 1918. And since I knew about that, I was asked to get involved in the early days of those planning meetings, sort of conceptualizing how to respond to a pandemic. It was intellectually challenging and fun. I enjoyed it. I was very happy to participate in that and been involved in that issue ever since really.

Chitra Ragavan:

The timing and the sense of historic context must have been quite eerie for you when you started to see COVID-19 evolve. What were your thoughts when you first started reading about it? Did you start to make those connections between all of the things you had written about with The Great Influenza and what you were seeing emerging with COVID-19?

John M. Barry:

Yeah, they're hard miss really. I mean, there are a lot of differences. There are also a tremendous number of similarities. Understanding what had happened the way the virus in 1918 had moved, it did I think give me some help in understanding what might happen this time. Even in January of 2020, it seemed apparent to me that that virus was going to be a pandemic. COVID-19 would be a pandemic. I wrote a piece of work entitled, This Virus Cannot Be Contained, which ran in January in The Washington Post.

John M. Barry:

It just seemed so obvious. I couldn't understand why other people weren't seeing it. I mean, obviously some were, but too many weren't. Based on what happened in 1918, I guessed in April I wrote another piece saying that summer was not going to provide relief. I think the virus is a seasonal virus, but in that under normal circumstances, summer does help contain the virus. Heat and humidity and so forth, the virus doesn't do that well as it does in other temperatures. But so much of the population in the United States during the summer was still susceptible.

John M. Barry:

I thought that was much more important than the fact that the temperature was going up. Unfortunately, that prediction proved true. That was based on historical evaluation. The so-called, the social distancing, the hand washing, ventilation, all those things were used in 1918. Analyses of cities that did more of them, did them earlier, and so forth demonstrated that they were effective somewhat at any rate in 1918. I mean, models suggest they did as well, but having that historical precedent, all those things combined to make them the policy of the preparedness plans.

John M. Barry:

Of course, you got to execute the policies. I think the single biggest lesson coming out of 1918, however, was that you need to tell the truth. If you're going to get the public to comply with your recommendations, they have to want to comply. They're not going to go ahead to do that unless they believe you. The truth is absolutely crucial to get that public acceptance.

Chitra Ragavan:

And that wasn't happening for a while.

John M. Barry:

Not in the United States. There obviously are countries around the world where that worked very well. A lot of countries have been very much more successful than the United States. Some of them have all but eliminated the virus. Their containment has been extraordinary. A lot of countries have done better than the United States, most of them frankly, and a few have done even worse. But I think if you look across borders, the ones that have done well that were not totalitarian countries have told the truth.

John M. Barry:

That was very important as part of their plan. Transparency is very high in the pandemic preparedness plan that was prepared by the United States. Very high priority. The highest priority really. It's the same in every state plan all of which are modeled after the federal plan. But as a football coach would say, you got to execute, and we didn't execute.

Chitra Ragavan:

You've been doing a lot of public speaking. You've been writing on this. You've been educating people at all levels, and you've been doing a bit of policy work as well advising the administrations on this. Tell us a little bit about some of that work has been doing and has your message been heard.

John M. Barry:

Well, not this administration. But the Bush administration, yeah, I did get pretty involved. We've already talked about the preparation of... I mean, the whole planning process and development of policy over how to deal with the pandemic. In 2009, I got pretty

involved, not in an official way I guess, but pretty involved with their response from the Obama administration to H1N1, the so-called swine flu. Some people on the national security council and I are pretty friendly and we would talk quite often.

John M. Barry:

One thing that was interesting back then was scientists around the world were sending me fairly significant information, and I would forward that to my friends in the White House. They are pretty busy. At one point, I was asking them did they want me to keep sending this stuff because it takes time to open an email and was it worth it. They responded, "Oh yes, please do," because I was giving them information that they were not getting through official channels for weeks sometimes, whereas I was giving it to them in real time.

John M. Barry:

Those official channels are not always very good movers of information. I think we've discovered that again this time the way information has flowed to the World Health Organization from China, for example. Not exactly timely and not exactly with total candor, so-called transparency. I don't really like the word transparency, but everybody else seems to use it, so I guess I might as well.

Chitra Ragavan:

You're a New Orleans resident. You've experienced the violence and destruction of Katrina, and you've also been deeply involved in water issues and policy making around flood protection. That rose in part out of your third book, *Rising Tide: The Great Mississippi Flood of 1927 and How It Changed America*. How did that work that you did on Katrina come about?

John M. Barry:

Well, the *Rising Tide* was about a flood that nobody ever heard of really in 1927. The Mississippi River was the biggest disaster in American history, natural disaster in American history. It flooded just about 1% of the entire population of the country. It killed people from Virginia to Oklahoma all of which is in the Mississippi River basin. It elected Hoover president. It changed the way people thought about the federal government and its responsibilities toward individual citizens.

John M. Barry:

In terms of percentage of GDP, it was five times the impact of Hurricane Sandy and significantly larger than the impact of Katrina. A huge event, even though most people unless they lived close to the Mississippi River never heard of it. That book did come out. That also fortunately won some awards. In Louisiana, it was a huge bestseller. Nationally it wasn't quite as big, although it did actually make the bestseller list. I was pretty well-known in Louisiana.

John M. Barry:

After the storm, the congressional delegation and bipartisan based asked me to chair a working group on flood protection. Then the state passed a constitutional amendment to create a new levee board for Metro New Orleans. I was asked to serve on that, which I did. This was an extraordinary board. Levee boards normally are highly political and they spend some money, so

they had resources. But they were all localized. Whereas we had on it from California, the head of flood plan management for the State of California who had before that been the chief engineer for California's levee system.

John M. Barry:

We had from North Carolina, the chair of National Academies of Sciences working group on coastal risk reduction. We had the past president of the American Society of Civil Engineers who happened to be local in New Orleans. Had a guy who wrote college textbooks on engineering. This was really an extraordinary board. We were determined to try to protect the city as well as we could. Louisiana has lost 2,000 square miles of land. Coastal Louisiana just melted into the ocean. That's bigger than the State of Delaware.

John M. Barry:

One of the main causes of this was oil and gas production in the coastal lands. Those lands serve as a buffer. If you put the State of Delaware between New Orleans and the ocean, you wouldn't need any levies at all. While our primary task for this board was to try to oversee the new levee system that was being built to make sure that it was done properly and make some suggestion where possible or where needed, because I hope your listeners understand, just to back up for a second.

John M. Barry:

The levee system that existed before Katrina was designed to hold a storm like Katrina. It should have held that storm. The levees that flooded the city, they're actually flood walls, not levees technically. They were not overtopped. The water never came within two feet of the top of those levees. They just collapsed because they were not well-designed. We wanted to make sure that things were done right. But looking out to the longer term to protect the city, we recognized that we had to restore some of that land that was lost.

John M. Barry:

That's very expensive. The oil industry by its own studies is responsible for roughly a third of the land loss. Other people think it's a lot higher, but the industry's own studies put it at a third. We did something extremely controversial in the state of Louisiana. We filed a lawsuit against 97 oil and gas and pipeline companies seeking their help in

restoring this land. It did spark quite a political battle in the state legislature and gubernatorial campaigns and things like that.

John M. Barry:

It's kind of interesting. Our case was dismissed. We did take it to the Supreme Court. We never got to trial. It was dismissed beforehand, and the claim was that we didn't have standing to file the lawsuit. However, we did spark lawsuits by several parishes, counties, we call counties parishes in Louisiana, which explicitly do have standing in the law and a whole host of private land owner lawsuits. All of those are preceding. There has been a settlement in theory worked out between one company, Freeport-McMoRan, and the parishes.

John M. Barry:

That requires legislation and all sorts of things to go forward before that settlement can be truly worked out. It's not clear whether that will be resolved. And if so, whether it will be a model for the other companies that would have to come forward with a lot more money than Freeport-McMoRan has agreed to do.

Chitra Ragavan:

I guess your popularity as a writer was a little bit offset by your lack of popularity as somebody who's suing 97 oil, gas, and pipeline companies.

John M. Barry:

I don't know. I was accused in fact in the state legislature of filing the lawsuit for the sole purpose of having a book to write about. They actually said that. I was just trying to look for a subject. West Virginia and coal. Louisiana and oil. There used to be a saying that the flag of Texaco flies atop the state capitol in Louisiana. Of course, Texaco doesn't exist anymore. Part of Exxon, I guess, or Chevron rather.

Chitra Ragavan:

I guess you live in the French Quarter, right, in New Orleans. I mean, between Katrina and COVID-19 shutting down all the restaurants and bars and music and culture, you've seen it all, haven't you? What was that like to see all of that unfold?

John M. Barry:

Well, obviously pretty depressing. In Katrina, we had water in our street, but it didn't get above the curb. Of course, I have friends who lost everything, so I had survivor guilt. The French Quarter was a desolate place a year ago at this time. There's a hotel next to me that had its very depressing large driveway. They put plywood over the driveway. Normally it's so active down here. You see nothing. Probably everybody listening can remember pictures of Beijing with these massive road systems that are about 12 or 14 lanes wide that don't have anything moving on it.

John M. Barry:

That was kind of like the French Quarter in New Orleans. My wife and I would walk around every day. There was one guy that used to play bagpipes a few blocks away. That's a pretty haunting sound. Of course, everyone has gone through something like that in the past year. Not fun.

Chitra Ragavan:

What do you think is going to happen next? Are we actually going to be able to open? You're seeing all these variants. There's this kind of struggle politically and socially and culturally between opening up, should we open up. We have to mask. We have to get vaccinated. What's your prediction knowing everything you know about these things?

John M. Barry:

Well, I do follow it pretty closely. I'm writing a book about it. I knew several members of Biden's advisory committee. A couple of them are friends. I knew a couple of others. So I'm reasonably plugged in. The variants are a real concern, but I'm optimistic. In 1918, there was a first wave that was not at all lethal. I'll give you one example. There were 40,000 French soldiers hospitalized, sick enough to be hospitalized. Fewer than a hundred died.

John M. Barry:

That's pretty mild, particularly back then when you didn't have any antibiotics and really not a lot of things you could do in terms of medical care. That virus mutated. The other thing about that

first wave was it was not particularly... I mean, it was contagious, sure, but it had a tendency to peter out not nearly as contagious as it became. A variant of that initial virus emerged. And when it did, it was highly contagious and it also was much more lethal, much deadlier.

John M. Barry:

That's sort of what's happening now. Fortunately it's nothing like the difference in 1918, but these new variants, they are significantly more transmissible. The original wild virus was extraordinarily transmissible. Much more transmissible than influenza. Influenza is seasonal. Influenza has a reproductive number of about 1.28. 1918 was probably about 1.8, and the initial virus of SARS-CoV-2 was 2.5 to 3. That's much more transmissible than influenza, much more transmissible than the 1918 pandemic.

John M. Barry:

The variants are roughly 50% more transmissible than the original wild virus. The real concern is that they... Well, that's a pretty big concern just the numbers. But in addition, they are more lethal. Not like the difference between 1918, between the first and second wave, which were orders of magnitude, but there was a study saying that the B117, the

UK variant, was I think the number was 64% more lethal than the virus that it replaced. The other variants, the numbers aren't really clear, but they seem also to be more deadly than the virus that they are replacing.

John M. Barry:

It's not an order of magnitude higher as 1918 was, but it's worrisome. They do seem to be vulnerable to the vaccine, all of the variants. My real concern is the variants that we have not seen yet. The possibility that a really nasty version of SARS-CoV-2 could be out there and could develop. Obviously we have some very effective vaccines. I'll give you a sense of just how effective. The best influenza vaccine we ever had was 62% effective. You were 62% less likely to get the disease. Normally they're about 40% effective for influenza.

John M. Barry:

These vaccines came in at the 90% level. Even ones that are a little bit less, the 70% level, and they've all proven to be 100% effective in preventing severe disease defined as admission to an ICU. It might even be half. I've got the precise definition. Everybody listening, if you've listened to this and you're probably interested in COVID, and then you know we are in a race to get enough people vaccinated before the variants really take hold and spread widely and also to prevent the emergence of a really nasty variant.

John M. Barry:

I do think we are in the United States just about dead even with the variants, maybe slightly ahead. We have a chance of winning that race in the United States. If we do that, if a really nasty variant doesn't emerge, then I would think you're going to have a lot of football stadiums with some pretty big crowds in the fall. But worldwide, the virus is going to be continue to be in check. It is possible you get a really nasty version of it that emerges somewhere, or it could emerge in the United States.

John M. Barry:

It could emerge anywhere, or it may never emerge. But it's not over yet. It's certainly in the self-interest of ourselves to make sure that the rest of the world gets plenty of vaccine and gets it fast.

Chitra Ragavan:

In wrapping up, John, looking back at that 13-year old boy back from camp, angry at having lost his culture that he was looking forward to playing with and deciding to become a writer on the spot and looking back at your rich career since as a historian, coach, influenza and pandemic expert, environmental activist, policy advisor, what would you say to that 13-year old about the incredible journey that you've been on?

John M. Barry:

I'm not very clever. Just keep on trucking. Do what interests you and what you're curious about and what drives you. Hardly an original thought, but it's not so much pursue your dream, but work hard and have a goal and pursue it.

Chitra Ragavan:

Do you have any what I call "viral insights" in the wake of COVID-19, that moment of clarity brought upon by a crisis?

John M. Barry:

Not really. I guess a moment of clarity is more a moment of incomprehensibility. What's so overwhelming in this whole thing is the incompetence of the response of the Trump administration. Everybody in public health, everybody who knows anything about pandemics is so frustrated, furious, depressed, because there are hundreds of thousands of people in the United States who should be alive. Practically on a daily basis, you just shake your head in disbelief over how poorly this was handled in the United States.

John M. Barry:

Nobody that I know of in the community ever imagined something like a mask could be politicized. Could we imagine that some people wouldn't want to wear them? Yes. But could we imagine that it would be part of a partisan political fight? No. That's sort of the clearest that comes through whenever I think of COVID-19 is that so many hundreds of thousands of people in this country should be alive who are dead.

Chitra Ragavan:

John, thank you so much for joining me on When It Mattered.

John M. Barry:

Thank you.

Chitra Ragavan:

John M. Barry is a prize winning and acclaimed New York Times bestselling author whose books have won multiple awards. His books include *The Great Influenza: The Story of the Deadliest Pandemic in History* and *Rising Tide: The Great Mississippi Flood of 1927 and How it Changed America*. Barry's writing has received not only a slew of major awards, but less formal recognition as well. A 2004 GQ named *Rising Tide* one of nine pieces of writing essential to understanding America.

Chitra Ragavan:

That list also included Abraham Lincoln's second inaugural address and Martin Luther King's Letter from Birmingham Jail. Barry's first book, *The Ambition and the Power, A True Story of Washington*, was cited by *The New York Times* as one of the 11 best books ever written about Washington and the congress. His book, *The Transformed*

Cell: Unlocking the Mysteries of Cancer, co-authored with Dr. Steve Rosenberg was published in 12 languages.

Chitra Ragavan:

And a story about football that he wrote was selected for inclusion in an anthology of the best football writing of all time published in 2006 by Sports Illustrated. You can read more about John Barry and his incredible body of work at [johnmbarry dot com](http://johnmbarry.com). This is When It Matters. I'm Chitra Ragavan.