



Conversation with Dr. Neil Vora

Ashley Hopkinson

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Ashley Hopkinson: Can you introduce yourself, tell me a little bit about what you do?

Dr. Neil Vora: My name is Neil. I'm a medical doctor. I still practice medicine at a public tuberculosis clinic in New York City. Most of my work, however, is for Conservation International. And I am the senior advisor for One Health at Conservation International. So I do a lot of work at the intersection of research and policy, and I bring in my medical background to help protect nature for people.

Ashley Hopkinson: Can you share a little bit more about what you do that is distinctive in the space of Conservation International — your journey with epidemiology, conservation and how those two worlds started to mesh for you?

Dr. Neil Vora: Sure. So, I'll take you back to my childhood. For as long as I can remember, I've been very interested in public health. My dad is from India. When he was a kid, he had smallpox and thankfully he survived, which is why I'm here today, because smallpox is a disease that kills 30% of people that get infected. But even to this day, like 70 years plus later, he still has the legacy of smallpox in the form of scars on his face.

And so when I was growing up, I would see that and I could see the impact that infectious diseases had on people's lives, like my father's life. And so, he was the one who inspired me to think about a public health career. He told me about the amazing work of people back in the 60s and 70s and even before that, who eradicated smallpox — the only human infectious disease to have been eradicated — and that's just an incredible feat of public health.

And so, that set me on this track for public health. And then, I watched that movie *Outbreak* when I was maybe 14 or 15. And I knew right then that I wanted to chase dangerous diseases for the CDC, and I ended up going to med school. After I finished my internal medicine residency, I joined the US Centers

for Disease Control and Prevention, the CDC, as an epidemic intelligence service officer. So if you've ever seen that movie *Contagion*... Kate Winslet in that movie is an EIS officer. That's what I had the privilege of doing. I served in uniform for the United States, and it was a huge privilege.

But the other things that I've always loved since childhood are animals and nature. During medical school, I learned about this field of emerging infectious diseases. There was a paper in 2008 that was published in the journal, [Nature](#) that showed that emerging infectious diseases — which are new infectious diseases — mostly originate in animals; then, there's pathogens that cause them to jump into people. We call that spillover.

Reading that paper was a light bulb moment for me. I realized how what humans are doing to the planet is actually increasing our risk of infectious disease outbreaks like Ebola, novel coronaviruses, and other hemorrhagic fevers. And so when I joined CDC, I focused specifically on viruses that originate in animals that then spill over into people. So I did a lot of work with rabies and pox viruses and hemorrhagic fevers like Ebola virus.

And so that pretty much set me on this track where I am today. I've been in the line of work fighting outbreaks for over a decade now. And my work has shown me that there are a number of human activities that we continue to engage in around the world that are putting us at greater and greater risk of these emerging infectious diseases that can have fatal, tragic consequences. We've seen this many a time over the last decade with Ebola and Mpox and other devastating viruses. And so, that's the type of work I do now.

Ashley Hopkinson: I've heard your work described as pandemic prevention. I'm wondering what we're misunderstanding about the fundamental root causes of infectious diseases. What might not be immediately obvious if you're not a deep researcher in this field?

Dr. Neil Vora: For many, many decades, and even longer than that, we have seen these incredible gains in human health and well-being, based on the extraction of resources. So that's a good thing. People are living longer lives; less children are dying. These are amazing feats. But we're also reaching this tipping point now where these incredible science-based gains are now at risk of reversing. That's because of what's happening to the planet.

Climate change, pandemics, the loss of biodiversity — these are symptoms of a planet in distress. And our health as humans is inextricably linked to the health of animals and the planet. We can't separate ourselves from the planet. As others have said before, humans are a part of nature, not apart from nature. So there is this growing conception, I feel, in many segments of society that somehow humans

are separate from nature, that we have conquered nature, when that is the furthest thing from the truth. Everything we need to survive ultimately, materially comes from the planet.

There is no future for humanity on a sick planet. We are going to see more and more devastating consequences of climate change and the current mass extinction of species, unless we start to repair that broken relationship with nature. People are dying today and suffering today because of climate change. All of us are impacted.

And part of the tragedy, perhaps the worst part of the tragedy, is the inequity in all of this — that the people least responsible for the planet's current state of distress are the ones who are most susceptible to its adverse effects.

The people who emit the fewest greenhouse gases, because of the lives that they lead and the lack of resources that they have, are the ones who have the least means of overcoming the devastating consequences of climate change, whether we're talking about flooding, or poor air quality because of forest fires, or infectious disease outbreaks, or the worsening mental health crises that we're going to see because of climate change. And so, there's a lot of equity issues as well tied up in all of these issues.

Ashley Hopkinson: Inequity is baked into some of the problems that we're facing?

Dr. Neil Vora: Absolutely. And so, that's a tragedy here, and we need to do a better job of addressing this, right? All of us are impacted by this. So that's the core of my work — trying to get people to understand that our well-being and our health as humans depends on what's happening to the planet. And that a better future is possible, but we have to be deliberate about creating that future.

Ashley Hopkinson: Are there any initiatives or research that you're involved with that are working at that intersection of protecting planet and protecting people? Are you a part of anything that you feel like is helping to bring this idea forward more?

Dr. Neil Vora: Yeah, there's so much. Three and a half years ago, before I joined Conservation International, when I was not working in this area full-time, I had so little insight into the range of amazing efforts that are going on around the world at this intersection, to secure a better future for people and planet. There is so much going on. And once you dive into this, you realize that action is the best antidote to despair. There are people doing incredible things all over the world.

First of all, I would point out that I've been talking a lot about this linkage between human health and the state of nature and the planet, but this is an understanding that has popped up at various points in

time throughout Western history, all the way back to the ancient Greek times. But it's only been in the last 20 or so years that, in modern sciences, it seems to be taking off.

When I was in med school back in 2004, very few people that I would approach about this topic could have that conversation with me. But now, there's this growing climate and health movement, and people talk about planetary health in the health sector. So these are incredible gains.

But, I also want to acknowledge that this understanding of the connection between human well-being and that of the planet is an understanding that many indigenous cultures have had for millennia.

These indigenous cultures have their own ways of knowing about the world that have been honed by how they have observed the world and experimented in the world, and they have their own form of knowledge that often gets relegated to the side, which is a real shame. Because to understand the truth of what's happening on the planet, we have to take a lot of different perspectives. And so, I just want to emphasize that as well.

So many indigenous cultures have a traditional knowledge about how to interact and manage ecosystems in a way that can benefit both people and planet. And so, that's something that we can do more of. Because 80% of the world's biodiversity right now is stewarded by indigenous people. They are doing a service for the entire world that we all benefit from, even if we don't know that we're benefiting from that stewardship.

And so, that's one thing to do. We need to give people who have been marginalized an opportunity to share their wisdom and experience with the rest of the world, and we need to remove the structural barriers so that they can keep doing their important work and living their lives.

Separately, I'll give you another example though. There's this nonprofit called Health in Harmony that has been doing incredible work in Indonesia, Borneo, Madagascar, and Brazil. Around maybe 15-20 years ago, this nonprofit in Indonesia and Borneo approached rainforest communities and asked, "How can we help you protect the rainforest?"

And these rainforest communities reported that, well, one of the reasons that they were engaging in logging was for their survival, because they couldn't pay for healthcare, they couldn't pay for schooling for their children. And so, this nonprofit and its partners built a clinic and they invested in youth education. And a decade later, infant mortality dropped after building the clinic, and rates of tuberculosis and malaria all dropped. But at the same time, rates of deforestation dropped as well.

There was a 90% reduction in the number of families that were engaging in logging. So that's an example of a win-win for people and planet. So these solutions exist if we take time to find them and invest in communities.

Ashley Hopkinson: In the absence of structures to support this work, can you share something that you feel is making a difference? There are all these interdependencies, but there isn't really a structure to support a lot of that interdependency. What have you found has worked to advance this connection?

Dr. Neil Vora: My friend Jonathan Jennings, who's the co-CEO of Health and Harmony, often says that, "The solutions to the existential threats that we face such as from climate change, will not be found in any single person, discipline or institution. So we all have to work together as a team. No single entity is going to be able to do this by themselves."

So we want to be working together. And that's why I work in partnership with many, many other people and organizations. All of this is a team effort. And we have to recognize that it's not about the ego, it's not about the self — it's about the collective well-being. And there are a number of coalitions being built around the world. There are movements happening.

I look at younger people today and their level of awareness. For example, my niece, she's around 15 years old. She has this awareness of what's happening to nature, and she takes action and uses art to share messaging, and that's incredible. Greta Thunberg, all these younger generations of activists are doing so much, and there's so much to learn from their hopeful approach.

Around the world, though, I'm also seeing that there's greater and greater recognition that human well-being depends on planetary well-being. Right? In the last few years, the Convention on Biological Diversity, which is a UN convention, was able to secure a landmark framework that sets the agenda for biodiversity conservation for the next decade. So that's a huge achievement.

But on top of that, in the World Health Organization, there are conversations happening around linking human health to what's happening with nature and climate change. People are seeing these connections. Everything is connected to each other. We can't work in isolation. Humans are connected to each other. We're connected to animals; we're connected to plants and the environment. And so I'm seeing a lot of reasons to be hopeful. We need to keep building those types of connections.

But I also want to emphasize that we all have a role in this. We can each do our own part. And I'm more on the science side. I'm a scientist. I do policy advocacy. But I also want to acknowledge that, of course, science is important. Science has to be the foundation of so much of this work. But facts will

also only get us so far. To actually inspire the societal transformation that's needed, we need art and creativity. So we need to bring in the artists and the people who can tell stories, and that's how we're going to get people to feel the connection to each other and to the planet. So I really think that, again, there's an opportunity for all of us to get involved and do our own part in this really important work.

Ashley Hopkinson: That's a good point. We want to get to the point where those connections are happening in the mainstream, and that includes art, media, all these different areas and sectors coming together to really be able to elevate what's happening.

Dr. Neil Vora: And journalism, right? Journalism and telling those stories. So, we're all doing our own different parts, because we all have a role in this.

Ashley Hopkinson: Given the right support, what would you like to see expanded, replicated, or scaled in this particular area? And by support, I mean funding, people, resources—everything you would need.

Dr. Neil Vora: Well, I think part of my concern is that the funding is often not there for very good reason. Funding structures, whether from government or philanthropy or other entities, often focus on reductionist approaches, meaning diving deep into a topic through specialized expertise. Of course, there's a lot of value in that. We need those experts who can dive deep and really know a subject.

But the reality is that, again, the solutions to the existential threats that we face from climate change and pandemics and the loss of biodiversity are not going to be found in a very narrow approach. We need that broad, intersectional approach. And so there's not as much investment from funders in generalists. And that's a problem.

I'll give you an analogous situation. In the United States, it's a lot more lucrative and in certain ways, frankly, easier to be a specialist in clinical medicine than to be a generalist like a primary care doctor. But we need primary care doctors to manage a patient's overall well-being. We also need that specialist doctor. So both have their roles: the specialist has their role when people have a rare disease, for example, but also the generalist [has their role] to see the patient as a whole.

On the funding side, I'd love to see more support for people who are generalists, and who can see the big picture, as well as the people who are specialists. It's not that one is more important than the other. And then we have to work together.

Doing this interdisciplinary work and working across sectors is not easy. [In] each discipline, you might be a medical doctor like myself. I have my own way of working, the language that I use, the style that I

work in. That's different than when I collaborate with an anthropologist or a veterinarian. And that can lead to misunderstandings.

But we need to learn to work together and to see each of us have our own different perspective on the same problem. But all of those perspectives have their own valid viewpoint. And so, we have to train people to work across these different disciplines. And again, that's not easy, but it's important.

Ashley Hopkinson: Working at this intersection, what would you say is a lesson that you would like to pass along? If somebody else is working or wanting to work at this intersection, how would you advise them? What would you share that has helped you along the way in working within these two spaces?

Dr. Neil Vora: Well, several thoughts here. If I were talking to a person still in their training, maybe still in school, I would say number one is to hold onto your idealism. It's really easy for the grind to wear it out of you, but you've got to hold onto that idealism because a better future is possible. Humanity has made the impossible possible many a time.

Two hundred years ago, the end of slavery didn't seem possible, especially if you were in that horrible, awful scenario. But people were able to change the situation. It was people who did that. We've seen the end of feudalism around the world. We have made the impossible possible, and we can envision a better world. So hold onto that idealism, number one.

Number two, when trying to figure out where you go, I learned about these three sets of questions from this Georgetown professor, Michael O'Leary: What brings me joy? What am I good at? What does my community need from me? Try to be at the intersection of the answers to those three questions for yourself.

There's a variety of reasons why we might not all be able to be [at that intersection]. There are personal life circumstances; there are structural barriers like sexism and racism. There's all these horrible other reasons why we might not be able to be at that intersection. But we can strive to be at the intersection of the answer to those three questions. But when you get there or as you're approaching it, you feel the state of flow and this inner peace that very few other things in this world can bring you. So, I'd recommend that.

And then number three, the third piece of advice I would give is, effective mentorship. I am where I am today because people ahead of me invested in me, and they continue to support me. Having mentors is so important.

Don't be shy. Reach out to people that you don't know. You find their information, you read about them in a news article, or you read one of their publications, and you like what they have to say — reach out to them.

A lot of the time you're not going to get a response, but a few times you will get a response back. And in a handful of those times when you do get a response back, some of those people might even give you life-changing opportunities. But it's only possible if you put yourself out there. I think Michael Jordan said, "You miss a hundred percent of the shots you don't take," and you just got to put yourself out there. And so, that would be my advice for people looking to [work at the intersection of health and climate.]

Ashley Hopkinson: When you talk about partnerships and coming together with people who work in different areas, how are you doing it? How do you get this cross-collaboration happening? What have you found has worked for you in those spaces?

Dr. Neil Vora: When you find good people, like I've been so fortunate to have had in my own career experience to date, you want to keep working with them, when you share a vision for a better world together and when you're able to work together.

Networks are so important for all of this. Like I said before, we're all interconnected. And our networks really help to move the work forward. And so I would say, yeah, build that network. You're going to find people that align with that vision that you care about and you're able to work together, and you just keep doing that work together.

It's not always easy, like I said before, especially when you're working across disciplines, and you have to figure out how you make your different styles of work coincide. But the rewards are so tremendous, and you learn so much, and you grow so much through the process.

And so, I would encourage, again, people who are still in their training and trying to figure out where they're taking their career, to learn to work with other people and to build those collaborations. Wonderful opportunities are possible through those interactions.

Ashley Hopkinson: What challenges come up in working at the intersection of two huge areas of importance like our human health and our planetary health? How have you responded and worked to overcome some of those challenges?

Dr. Neil Vora: I talked already about the challenges of working across disciplines. I think another challenge is that many of the people making decisions— gatekeepers, people who hold the funding

and the purse strings — might see the world differently. And again, our funding structures are designed to reward researchers typically for diving deep into a subject. And again, there's a lot of utility with that. But if you have a vision for the world when it comes to addressing climate change or the loss of biodiversity or pandemics, these people making decisions might not have a vision that aligns with yours. And that can be discouraging.

And so, I would again encourage people to remember those three questions.

Even in the face of rejection — we all get rejected, like funding proposals, or you write something that means a lot to you that you have trouble getting published — I would say, hold on to your ideas.

Believe in yourself if you're convinced that what you're doing is right. Always be receptive to feedback. Pressure test your ideas with people you know so that you can refine the idea. We all have so much left to learn. None of us know everything. We all have to continue to try to grow and to be open to growing, and to learn. Be open to getting feedback, but don't lose that idealism. And to develop, frankly, the resiliency that's sometimes needed in these spaces.

It's really important that one has a social support network, which can take a lot of different forms, but something away from the work itself, so that they can take care of their own personal well-being.

Because you can't take care of other people and the planet unless you're taking care of yourself. You have to always make sure that you're nourishing your own mental health and your physical health.

And then, I would also add that it's important, aside from that social network, to have hobbies outside of the work itself to get your mind off of things. For me, it happens to be Brazilian Jiu Jitsu. It's a sport that I found four or five years ago. And it's changed my life in a lot of ways. Having that distraction that's completely unrelated to my work is so important for my own personal well-being. Thinking about those ways that you can take care of yourself when doing this hard type of work is really important.

Ashley Hopkinson: What do you think it will take to advance the conversation with funders, leaders and decision makers, and improve collaboration?

Dr. Neil Vora: I think we have to tailor our message to different audiences. We have to know who we're speaking to and what their values are, and see where our values all align. There's a lot of opportunity to build bridges, even with people who see the world differently. And so, if we are communicating our work to others, just remember to adapt the messaging so that we can find a middle ground that is good for both parties.

I do worry that in many settings in the United States and around the world, we're increasingly polarized. We all have different ways of seeing the world, and it's often not the case that one view is more correct than the other, right? There is validity in a lot of different perspectives, even if the perspectives are [in opposition]. That's not always the case, just to be clear.

Compromise has become a bad word, but compromise is so important. Seeing the humanity in each other and trying to find a middle ground and moving away from the extremes, I think, is really important. And finding ways to compromise so that we can help more and more people, I think is really important.

Ashley Hopkinson: Is there anything I didn't ask you that you would like to add about climate change, epidemiology, planetary health, or the intersection of the work you're doing?

Dr. Neil Vora: No, no. This is good. Thank you so much for talking to me.

Ashley Hopkinson is an award-winning journalist, newsroom entrepreneur and leader dedicated to excellent storytelling and mission-driven media. She currently manages the Solutions Insights Lab, an initiative of the Solutions Journalism Network. She is based in New Orleans, Louisiana.

** This conversation has been edited and condensed.*