GlobalPDX Podcast
Episode 1 Transcript

Root Causes of Poverty

Andrea Johnson
Hello and welcome to our very first GlobalPDX Podcast.

Just like many of you, we are being creative and adaptable in these changing times, and are so excited to bring connectivity, content, and support to Oregon's Hub of Global Changemakers. My name is Andrea Johnson and I am the Chair of the GlobalPDX Steering Committee, and the Executine Director at Green Empowerment.

In this, our very first GlobalPDX Podcast, we are joined by Evan Thomas, the founding director of GlobalPDX. Evan is currently the director at ther Motensen Center of Global Engineering at the University of Colorado at Boulder. Evan's full bio can be found at the GlobalPDX.org website. Evan, thank you so much for joining us today and being the guinea pig for our very first podcast.

Evan Thomas
Thanks for having me! It's great to be connected back to Oregon again, especially in this time of everybody being at home.

Andrea
(laughs) Yeah! So what have you been up to since you left Portland?

Evan
Well, you know, in Portland we worked together to start GlobalPDX, which was a network designed to support all of the global development organizations and entrepreneurs working, not just in Portland of course but across Oregon and even in the Pacific Northwest, but the network was still small. You know, you had a couple of big anchor institutions like Mercy Corps, and Medical Teams International, or the Oregon Health and Science University, and then well established smaller NGOs like Green Empowerment, but there were a lot of other smaller NGOs or newcomers to the field that wanted to engage and didn't really know how.

So we worked together to start GlobalPDX to strengthen that network. So we started the S.W.E.E.T. lab at Portland State University (the Sustainable Water Energy and Environmental Technologies lab) and during the 8 years that I was in Portland we focused on our particular projects: designing and implementing global health interventions that often had a technology

component (anything from water filters and cook stoves, all of the way to satellite connected sensors and remote sensing) but we were focused on our particular projects. At the University of Colorady Boulder (where we joined two years ago) we have been able to link those projects into a bigger research portfolio.

There's a lot more people at the University of Colorado that do work that's related to the work that our team does. There's global health expertise, there's remote sensing expertise, I'm part of both the aerospace department and the environmental engineering department. And that lets us cross those disciplinary boundaries to take the best of aerospace engineering/remote sensing and combine it with environmental health and environmental engineering so that we can grow our global impact.

Andrea
So you just mentioned aerospace engineering. I think that's interesting because a lot of people might not make that connection. Is it true that you were almost an astronaut?

Evan
(laughs) I was a "strong astronaut wannabe". In 2017 I applied to the Canadian astronaut program. I am from Canada originally so I am a dual citizen of both Canada and the United States. I worked at NASA for the first seven years of my career in Houstin as an aerospace engineer, and I always kind of wanted to be an astronaut. There's 17 astronauts that graduated from the University of Colorado where I went to school, and when I was a student here, in aerospace engineering, it seemed like a pretty decent goal. And so I got as close as I probably ever will get three years ago when I was one of over 4000 applicants to the Canadian Astronaut Program and over the course of a year we had many many different weeks of testing and evaluations in Canada (all across Canada) and it got whittled down to three civilian finalists.

They ended up hiring one F-18 fighter pilot from the military and one civilian, so I was one of the last 3 civillian standing. Matt Banzee (?) was the other one and he was also a CU Boulder grad, but they picked the third one. So I'm not sure what that says about CU Boulder's track record now, but that's as close as I'm going to get, is in that final three civillians.

Andrea
So, Astronaut training. I would imagine you have to prepare a lot for that, what did you learn from that experience that helps you now in your current career?

Evan
Well so it wasn't actually astronaut training it was "astronaut wannabe testing". The testing resembled astronaut training except for the actual training part. The way the Canadians set up the program is we had a lot of water activities as the astronauts train in the nutro-buoyancy lab

in NASA, isolation training, sleep deprivation tests, extreme environment tests. We were in smoky rooms with fire and smoke coming from every side and we didnt know when it was going to end. We were in rooms that flooded with ocean water (this was in Hallafax) in February so it was freezing water. So they were testing both how we worked in teams, but then also how we reacted to being nearly hypothermic. We had to get in a helicopter simulator that dropped from 4 stories into a wave pool and they can sleep darkness and escape from it. Now all of these these environments and these actual Test Facilities are used to train Navy personnel and they resemble the test/training that NASA has for a astronauts. The big difference was we got no training! We are just thrust into these environments and evaluated in how we reacted.

Andrea
So how does that translate at all to your current career, or does it just make you glad that you didn't become an astronaut?

Evan
You know sometimes I feel like I'm a professional emailer. A lot of my day is email and a lot of Zoom meetings right now. Normally involves a lot of travel but right now it involves a lot of sitting behind my desk, and working with people remotely (just like we are now). So when I was in that very active, very physical environment working for competing to be a Canadian astronaut with a lot of other really impressive people, I definitely felt pretty out of my element. Especially alongside some of the people that had done these kinds of things before. They were F-18 fighter pilots, and they're special forces doctors and they were helicopter pilots and they were not nearly intimidated by getting almost drownt in Halifax as I was. So I definitely appreciated the opportunity and it was cool to be able to get as far as I did, and I think in terms of how it relates to our work today, there's definitely a common theme of resilience. Personal resilience, community resilience, environmental resilience, organizational resilience, and resilience at every level. How do our organizations survive this? How do we survive this? How do we address the fact that half a billion people are going to be pushed back into poverty by covid-19? And we are actually regressing in reducing Global poverty (in other words global poverty is actually *increasing* for the first time since 1998). And in Africa, where we have a lot of our team's work and we have a lot of Partners and collaborators, half a billion people will be pushed back into global poverty, half of all African jobs will be lost due to COVID. Now obviously everyone hopes that these rebound quickly, but as of now half of all jobs in Africa have been lost in the past couple months.

Andrea
So how has that impacted your work in the immediate term?

Evan

So our team at the University of Colorado Boulder the Morton Center of Global Engineering Works in about 40 countries around the world. We have undergraduate and graduate students doing practicums, working on projects, conducting research, working with ngos, working with governments, working with multilateral organizations. Our team has a research portfolio (we are a modest-sized research center) we're doing about four million dollars a year in research expenditures in about 10 countries actively. And that normally involves a lot of travel. This spring I was supposed to be in Nigeria, in Sierra Leone, in the Congo, and Rwanda, in Ethiopia, and Kenya that was all supposed to be the past couple months. That all got canceled, and at first that seemed like it was going to be very disruptive to our ability to do our work. It seemed like that travel was important (we needed to be in the meetings, we need to be doing the trainings, we need to be visiting household, and conducting research, we needed to be installing Technologies). And instead, it's actually made us realize that not only if we built strong collaborations that can survive not requiring getting on an airplane, and we have professionals who are working around the world who were capable of leading these projects, but it also definitely calls into question whether or not Global development actually requires all of this Global Travel. And you don't have to look much further than how Delhi or Nairobi's air quality have improved over the past couple months to question whether or not everybody needs to be a Globetrotter to be a global citizen.

Andrea

I really love that from Green Empowerment's perspective. We have been working on a partnership model even though much smaller scale than and you're talking about since you're almost 25 years so do you think that some of these lessons will sustain in the in the long term? Say travel opened up we have a vaccine covered goes away do imagine that our communities going to learn from some of this and maybe do our work better and support some of these local professionals better and not have it be so much based on this international travel?

Evan

I certainly hope so. I mean I hope that we as a global community will learn lessons from Covid-19. I'm worried that some of the existing reactions in the donor community and in the implementation Community is actually compounding the underlying problems or previously had, and I'll give you an example. We work just like, Green Empowerment, particularly in the wash sector Water Sanitation and hygiene and is 2020 and there still a billion people in the world who don't have access to Safe Water. There are 2 billion people in the world that don't have safe sanitation. In the arid regions of Ethiopia and Kenya where we have a particular programming and work that we're conducting, there are huge gaps in access to basic water and sanitation services. In Kenya for example 35% of rural hand pumps are broken right before the drought hits in 2016. And during the drought this increased over half of the water pumps that were broken (either because the pumps broke or the groundwater was depleted). So you're in the middle of a drought, in a region of the world that is seeing drought almost every year now because of climate change, not a condition created by East African Communities who use

almost no energy use at all, but they're the first to be impacted (or they are among the first to be impacted by climate change). And only 10% of those same communities have access to soap in their homes. In Ethiopia its only 4% of people who have access to soap in their homes. The WHO and the CDC are saying that the best way to minimize the spread of covid-19 is to wash your hands with soap and water, and yet in 2020 only 4% of rural Ethiopians have soap. Only 10% of rural Kenyans have soap. So we could have solved these problems a long time ago. So I do worry that you know all of this newfound emphasis around reducing the impact of this pandemic, all the money that's going into this, the hundreds of millions of dollars (even billions of dollars) that are being committed to trying to address this pandemic, including among low and middle-income settings, I'm worried that in some ways it's another shiny object and we're not solving the underlying problems.

So our team proposed a project to the MacArthur *hundred and change*. This is a hundred-million-dollar grant opportunity. We proposed DRIP (the Drought Resilience Impact Platform) where we propose alongside in the living water line dance and the *National Job Management Authority* in Kenya and the *Ministry of Water and Irrigation Energy* in Ethiopia that we can end drought Emergencies in the Arid regions of Ethiopia, Kenya, and Somalia. And address is not the drug for say the drought is being caused in part by climate change, decreasing water availability, increasing Reliance on groundwater. The Drought emergency happens when the drought conspires with the Limited Community capacity and limited prioritization by national governments and International donors to prevent the emergency from happening. The emergency happens with people run out of water. And we can help reduce and end drought emergencies by guaranteeing water availability at strategic points. At groundwater boreholes. It's actually really simple: we've just got to keep those running, and we dont right now. We as International Community, we as our partners in the Kenyan Ethiopian government and as local communities, have not prioritized operation maintenance of basic water supply that can turn into an emergency situation. So we put forward DRIP (the Drought Resilience Impact Platform) to the MacArthur *Hundred and Change* proces. We've currently made it to the top hundred of that process in a few months ago, about a month ago, on MacArthur Foundation sent out a notice saying we're pushing off the competition decisions for about a year. So instead of finding out in August whose finalists and who is the winner, they're going to push off the competition until next May. They also asked all of the top hundred finalists to revise their proposals based on covid-19. Of course, some organizations' operations have changed because of COVID some organizations are really well-positioned to directly address covid, and so I'm sure many of our competitors have proposed adjustments to their proposal that is directly responsive to Covid. When we looked at this, and we discussed with the Millennium water lies we discuss with their government Partners whether or not we wanted to do some major pivot to try to be about Covid, we realized that addressing basic water security is a fundamental issue that not only is relevant to COVID, but is relevant to climate resilience and climate change resilience, it is relevant to Poverty reduction, and is relevant economic growth and instead of trying to jump from being a WASH project to being a covid-19 project, we said, you know, "this still matters. It still matters that only 60% of people in Kenya and Ethiopia have reliable water access especially during times of drought and we need to actually solve that problem."

Andrea

I think what you're really highlighting is in a lot of ways philanthropy's response to covid has been immense and it's very encouraging because it's about the global philanthropy Community coming together, but I think we, at Green Empowerment, feel similarly that these are underlying basic infrastructure problems that should have been solved a long time ago and then communities will be better prepared to sustain (not just this this pandemic). So are you seeing anything encouraging about that and in terms of the conversation that you've been able to have? Are there openings with philanthropy to say, "Okay we understand that this is an immediate response, but also we need to also do this long-term investment work"? Or do you feel like it's just getting pushed off?

Evan

I think among the funders that support Water Sanitation there's a recognition that these remain critical issues. And USAID, and the World Bank and other donors, agree that we need to continue to invest in water security, and sanitation, and hygiene, in order to mitigate covid. I think on a bigger level this also is highlighting some of the economic inequalities that perpetuate Global poverty. Often times things are overly simplified into being optimistic about development (or pessimistic about development). You know the Bill Esterly versus Jeff Sachs debate, and it's actually not quite that simple. When we are practicing global development we're within a technocratic world. There's donors, and there's social impact investors, and there's social entrepreneurs, and there's nonprofits and there's governments and there's communities but that's always been a sub sector that often doesn't really have much visibility to the global economic inequalities that are actually perpetuating poverty. And in our team at University of Colorado Boulder we, over the past couple years, have completely revamped our organization and our mission from focusing on projects and programs and thinking that poverty can be solved in the village, to try to address (and identify firstly and then try to address) root causes of poverty. And you know this might sound grander than our actual capacity is, but it just changes the level at which were trying to operate.

We were called the Morrison Center in Engineering for developing communities the idea being that village-level interventions or Technologies are products could have dressed symptoms of poverty in a community. We've recently renamed ourselves the *Morton Center of Global Engineering*. And Global Engineering to our team is a complimentary field to global health and to development economics is still Technical and technocratic but it positions our contribution as Engineers toward identifying and addressing root causes of poverty, not symptoms of poverty. What does that actually need what means that we need to know something about the economics of a country not just a village it means that we need to work on technology solutions that can be broadly scalable or the insights of the technologies generate (such as data from remote sensing instruments) can be actionable on a regional scale, not just a community scale. It means professionalizing basic services, actually developing and supporting utilities for water supply (not asking the village to maintain only a water pump on their own). So trying to elevate our area of influence at a higher level. And I think this is increasingly apparent during this pandemic where you have eight people in the entire world that own more wealth, that have

more wealth than the poorest half of the entire world, and while the proportion of people in poverty globally has been decreasing over the past 30 years, almost all of that credit is due to India and China. They have growing populations and their own National Investments have resulted in growing middle classes. But the absolute number of people in poverty has not changed in thirty years and most of those people are in sub-Saharan Africa. And 2/3 of least developed countries are sub-Saharan African countries. And if you take all of the financial inputs to Africa every year (meaning foreign aid, foreign investments, remittances which is people from those countries sending money back home) and subtract from it all of the money leaving sub-Saharan Africa which is debt interest payments, debt accrued back in the 80s by autocrats that is still being paid off (just the interest on it paid off), or tax avoidance and trade Mis-invoicing, the net Financial flow to Africa is about $20 per person per year. $20! That is not moving the needle on global development. That's not moving the needle on development in sub-Saharan Africa. If you take those same calculations and you stand into including all low and middle-income countries the actual net Financial flow is negative. The high-income countries, even today, are extracting wealth from low and middle-income countries every single year. So you have eventually Davos where all the billionaires in the world get together and they talk about how these new Innovations (technology Innovations, these entrepreneurial Innovations) are going to solve Global poverty. Well, the economic system is actually precluding low and middle-income countries from having substantial tax basis to provide basic services for their population, and no microfinance scheme or new water filter is actually going to address that underlying economic problem. This, to us, is what Global Engineering is.

Andrea
Can we dive into this a little bit more for people who might not be familiar with this kind of distribution of wealth problem as it relates directly to extraction vs. inputs? Because I think that now that's mean that I follow very closely but I think it might be shocking for some people. So could you just give a more specific example of what we're talking about where, you know, we are putting in aid, money is going to support the development of the country, but in fact there's so much extraction from that economy back to the US and Europe. Do you have an example that comes to mind that you feel like helps people really understand this concept?

Evan
Yeah, in Rwanda (I've been working in Rwanda for the past Seventeen years) and Rwanda when we first started working there no development practitioners were around. After the 1994 genocide there is a huge influx of investment by International donors and multilaterals but everybody left in 2001 to go to Afghanistan, and then go to Iraq. And so when we started working there in 2003, there was almost no development practicioners around. Over the past couple of decades there has been more and more investment by NGOs, by multilaterals, and by companies in Rwanda. And Rwanda has had some of the strongest development indicators of any country, in the world. The fastest decline in child mortality, the fastest GDP growth in sub-saharan Africa. But often when you come in, especially as an engineer, there has been a model that's called "appropriate technology" where you try to develop technology solutions that can be locally produced, locally maintained, require local labor and materials. The idea being

that something that is local is therefore more sustainable or more appropriate. Of course this model neglects that even the United States we don't make most of our consumer products and if you want an effective water filter or a cook stove or a cell phone chances are it's made in China and the business model in the United States or in Rwanda is probably around distribution. Plus the economic benefits that improved health or more time affords you.

But if you're only looking in the development context, in the kind of technocratic development mode, you might look at something like the textile industry in Rwanda, and say, "Well, these local textile manufacturers who are making clothes, who are making other textile goods, can be supported. We should build factories, we should build hand powered looms, we should build hydro powered looms, we should improve on the technical and product level solutions that support this manufacturing base". That's what a development practitioner or an appropriate technology engineer might think, and might write a grant for, and might get a grant from USAID, or from the World Bank to go and try to implement in Rwanda.

Well the Rwandan government looked at the same issue, and the same opportunity and said we need to support our local textile manufacturers better. So two years ago the Rwandan government put a tariff on the importation of free hand-me-down clothing from the United States. This is all the clothing that you donate at Goodwill that eventually ends up in Africa, or the clothing from the losing Super Bowl team, or the losing World Series teams (so new clothes out of a manufacturer because you know we need instant gratification around those kinds of products and they don't use them) so they ship them off to Africa. Rwanda put a tariff saying, "Instead of having all of these free clothing just dumped onto the Rwandan Market, we're going to add a tax to this (an import tax) so that we can try to protect our local textile manufacturers. Rwanda is a country of 12 million people. It's a small country that is trying to develop its own economy. The Trump administration put a reciprocal retaliatory tariff on the export of Rwandan coffee. Because the Rwandan government would not allow the United States to dump its free clothing into the Rwandan market.

This was entirely legal. This was done under the *Africa Growth and Opportunity Act,* signed by President Obama, and designed (in theory) to support economic growth in Africa. But it actually precludes African countries from engaging in trade protectionism the same way that we engage in trade protectionism now. And in the same way that trade protectionism supports local industry and local economic growth. So when the United States can legally penalize Rwanda for not wanting free clothing, no project-level activity supported by a grant to support the product or technological side of textile manufacturing in Rwanda is going to make any kind of difference. So, to me that's one strong example of how as engineers, as development practitioners, we have to care about these higher-level problems. And we have to participate in trying to address them. Now ordinarily an engineer doesn't like to mess outside of their field. They say, "that's for the Economists, that's for the lawyers, that's for the activists. And yet the lawyers don't constrain themselves to not talking about technology The Economist, dont constrain themselves to not talking about policy or politics. The activist certainly doesnt say "I'm going to stay only in my area of expertise and not try to draw attention to global problems". So to us Global Engineering is still engineering but is concerned with the higher-level underlying causes of poverty.

Andrea

What is that going to look like then as you start to potentially get into situations or where you might be against or confronting some of our largest philanthropy donors in our sector? So USAID is still an agency (for example) of the US government, right? A lot of the big funding for this type of work comes from European government agencies. So do you feel like that's going to kind of put you or your Center at risk? How are you going to navigate that as you really want to try to push those root causes (which I think everybody would applaud you for in theory) but in practice I could actually create some real friction with philanthropy and the donors?

Evan

I think somebody who studies activism like my friend Ananya Roy at UCLA could probably speak to this a little bit more both philosophically and with better arguments. But on a practical level it's just a balance between pushing the envelope and participating inside the system and trying to change from within. So I think a good example of that is USAID, in the past couple years, has downplayed the terminology of climate change, under this Administration, and up-played the terminology of community resilience. And they have a slogan called the *journey to self reliance* the idea being that countries and communities should ultimately be self-reliant. That's not an argument anybody could really take offense to, the question is on what timeline, and with what resource, and with what responsibility? So you can always find the opportunities between the lines. USAID cares about climate change, and cares about investing in countries and communities. The best way to make that argument right now is to talk about global resilience. Even before COVID-19, but especially now, how are all of our communities going to be more resilient. Now it is true that an organization like USAID as big as they are, much much bigger than us ($20 billion a year budget) they are still not guiding the economic policy of ythe United States. They are still an agent of our foreign policy. So as academics, as practitioners, we have the priviledge (and the opportunity) of being outside of those democracies, and actually being about to speak often with perhaps a louder voice than the people… in order to influence the people who themselves have influence.

Andrea

That's a good answer.

For me, alot of this conversation is exciting and interesting, but it seems like these conversations should have been happening, whether there is COVID or not. I think that's one of the challenges I am seeing right now in our sector there seems to be attention around some of these challenges because of COVID. But it seems like these discussions should have been happening, and it sounds like you at the Mortensen Center were having those discussions before. So what do you hope for post-covid? We are all in this immediate response mode, but what do you hope for beyond COVID in terms of our sector (philanthropy). What would be your best case scenario for the other side of this?

Evan

I hope that we are more willing to invest in finally solving underlying root causes of poverty. As well as symptoms of poverty. I hope that in 2020 and in the next 10 years that we have to try and achieve the sustainable development goals, that we actually invest finally in actually solving the underlying issues. COVID will hopefully pass soon, and the economic recovery may take a long time. But climate change has not stopped. These past couple of months of reduced emissions is not going to make any dent in global warming, or in the impacts of global warming that are already being found globally. When you look at some of the development optimists out there that say, "look at the world! The economic growth has led to higher life expectancy, has led to fewer proportions of people in poverty globally"... It misses the fact that those stubborn million people that live on less than a dollar a day is not budging. And in fact the number of people in poverty in Africa is expected to increase even before covid-19 hit. So we need to actually try and address these underlying issues. We need to invest in climate resilience, we need to invest in carbon mitigation. We need to invest in mitigating the impacts of climate change globally, especially among the countries that are the least prepared and are the least responsible for global warming. It's not just the changing rainfall patterns that lead to droughts in some areas and floods in others. It's also changing disease patterns.

Malaria has killed way more people than covid, it's killed way more people than war. It's killed more people than cancer. It's killed more people in human history than any other cause. And malaria was starting to die off. It also couldnt live about 5,000 feet because it was too cold for the parasite. Now places like Nirobi have Malaria year-round for the first time in...ever! We also have changing crop yields. The changing rainfall patterns and extreme weather events... crops can't keep up with this. And for the billions of people in the world that are subsistence Farmers (let alone agricultural producers, let alone the rest of us that eat food every day) we are having increasing crop failures and increasing food insecurity globally. And these are climate change-related. So it's certainly important to be an optimist, if you're not an optimist you're not going to be a participant and you're not going to try to be part of the solution, but I think we also need to take a hard look at some of these underlying drivers and causes, especially climate change right now, and actually make those investments where they're needed.

Andrea

So when you are talking about root causes, and you kind of refrenced to this earlier when you alluded to Davos, distribution of wealth and income inequality is probably the largest factor. And so when you're talking to other development practitioners or engineers where we might feel a little bit helpless in terms of influencing. That's a pretty big issue. What do you think about? How do you kind of continue forward or how do you imagine us being able to influence that? Or do we not? Or what resources should we be thinking about reading?

Evan

Well I think this all comes back to trying to operate on a higher level. We can't just operate on our project level anymore. Our projects are not solving poverty. We all have examples and anecdotes and success stories but we have also had 70 years of development practice that has

failed to end poverty globally. And we have to be conversant and engage in conversation about these bigger problems. Now you can still do that while maintaining your professional credibility.

For example: in East Africa our team is using satellite connected sensors to monitor the Water Supplies of 3 million people on a daily basis right now. And that data is used obstensively to try to improve the maintenance of those water pumps but who's the real audience? It's not the local operator, the local operators are well aware that the pump's broken. It's everybody else who has not been listening to her. Is it the regional utility who might have the mandate to fix water pumps but they don't have the budget. Is this a national government? Well to a certain extent the national government could make greater alocations in Ethiopia, or Kenya, or Somalia, or Rwanda to basic water services or sanitation services or Energy Services or Education Services or health services or infrastructure or Transportation... now you start seeing the problem. There are too many services that are all under budgeted because these economies are not strong enough to provide these services. So who's our real audience? Often our real audience for the data we're collecting are the international donors. The international donors that might be at USAID or the World Bank or with the Gates Foundation, who we want to influence to think about prioritizing Service delivery, and think about prioritizing long-term evidence-based impact in the community and not annual allocations for projects that are monitored based on how much money they spend or how many water pumps the install, and not how many people are guaranteed water services in the long run.

Now the other thing that is really tricky is that the billionaires out there have enormous influence. Bill Gates is an admirable person as an individual, he could be somebody that we only know from leading Microsoft and he could be hanging out on his yacht and his airplanes, but he doesn't do that. He spends his wealth and its influence on global health. But it's still uncomfortable that a white American male Tech billionaire has such personal influence over The World Health Organization, or over the World Bank, or over USAID. That Bill Gates can reach anybody on the phone at any time anywhere in the world, but most presidents of African nations probably don't have that much influence in trying to provide basic services to their own populations. So while it's uncomfortable because often they are our donors, I think it's important to openly talk about this income inequality and this increasing polarization of wealth. And there's a great book that opened my eyes to this a little bit called The Divide by Jason Hinkle and it highlighted that you know the clock didn't start in 2020, it didn't start in 2010. We've got several hundred years of exploiting the resources of low-income countries and those threads continue through today including among the billionaires who, on a personal level might empathetically care about these problems. But who have accumulated their wealth through a vastly unfair economic system that is actually quite exploitative, including among low-income populations.

Andrea
So when you're talking with... it sounds like you have a lot of relationships with local government and also helping them have access to the data to have these conversations. Do you ever piano personally as a white male in a city in the U.S. just feel like that also feels unfair? That you as

an outsider gets to have access to some of these donors? and how do you see your role in that?

Evan
A few years ago the Mandela Africa fellows came to Portland State University and I met with them and I think you did too. And this is a group of extraordinary young leaders from sub-Saharan African countries that were supported by the Mandela Fellows Foundation to travel to the United States and to meet donors and to meet other practitioners. And I had a conversation with them about what it takes to try to support your own initiatives. They all have project ideas, they all have program ideas, they all see injustices they want to try to address to their own initiative. And we were having a conversation about what it takes to write a grant to USAID, to DIFID, or to the World Bank, or to The Gates Foundation, and what meetings do you have to go to and what conferences you have to, do you need to get a TED talk, and do you need to have a theory of change and you know what does it take to support their initiatives and there is an increasing frustration in the room. And I could see a lot of discomfort on their faces and so we stopped the conversation (which is basically a tutorial) and I sort of asked what was going on. And they said, "We don't get to do this. We do not have the implicit credibility when we write and submit a grant. Nobody knows our University, nobody knows our names. Nobody really will trust these grants that we write. We're often writing through language barriers, so we get criticized on our English grammar or the completion of our grant applications and not necessarily the substance of The Proposal". Which is totally true! I get that all the time, I get criticized on my English language writing and it's the only language I speak and know how to write! We get criticized and peer reviews all the time on whether or not we're bringing the exact you know right colored Rock to the reviewer. And I'm trained to navigate exactly that system.

So it is unfair. It is unfair that the donors are... you know we're all part of a system that perpetuates our own organizations to a certain extent. Now what do we do about it? Do we just stop working, do we need to hand over jobs to other people, do we say we're not going to engage anymore? Of course not. I mean we're all still competing, we might be mission-driven but we still exist in the competitive environment so what can we do we can support our local partners and professionals and colleagues to be the Principal investigators, to be the chief of party, to be the project managers. We can elevate their voices. We, here at the University, we can recruit students from low and middle-income countries and we can figure out how to pay for their tuition. We have about 70 graduate students learning graduate degrees and wanting to be Global engineers and development practitioners. Most of them are white, American, upper middle-class students who can afford tuition at the University of Colorado. That's fine. All of those people as individuals have their hearts and their minds in the right places. But we also want to take the resources that we have and recruit students from Kenya, and Ethiopia, and the Democratic Republic of Congo, and from the countries that we are working in so that they can participate in the system that can bring resources to their countries.

Andrea

That's great, I think that also for me highlights a little bit about you know when we were first talking back in 2016 about starting Global PDX and you were such a catalyst in helping us get started. You were seeing (and we were articulating) a lot of disconnects between Academia and practitioners in between different donors, Academia, practitioners, Etc. And so what you're saying is really taking that to another level also where it's really making sure that we're engaging with our in country Partners in trying to create the opportunities and up level them in a way that allows them to participate in these systems when we can't change them. So you kind of have to do both things you're saying at once: 1) challenged system but also 2) work within it at the same time to advance what you can. I think it's a great message for our audience.

Evan

And education is such an important pieces at Inno becoming aware of these historical issues these structural issues becoming aware of how the current system is not necessarily conducive to solving these problems (in some ways it might be causing some of these problems), and then figuring out what your role is and not necessarily being a martyr. Thats bet that's going to lead to burn out pretty quickly. but figuring out where your skill in your interest can be part of the solution.

Andrea

So a lot of this conversation has been pretty serious and I think we're starting to really talk about some hard issues. So how, as an individual, do you focus on this theory about this and like what do you do to find the personal balance where is our heart issues we want to be disrupted we want to address root causes, but you just mentioned burnout also. So what's the balance for you and what does that look like?

Evan

I think people like you, the people who make up GlobalPDX, our team, our students, our faculty, our staff, our colleagues around the world, they're all mission-driven they all chose to work in this field cuz they want to try to address Global poverty in global resilience and and try to create a more just and Equitable world. But it's also hard to do that from behind your computer on Zoom exclusively, and if you can be kind of quickly overwhelmed by how small we are and how big the problems are. On a practical level we're all still social and we also need to see each other, and love each other, and support each other, and work with each other, to try to be a team, a team within organizations as well as a team of Global Citizens or Global engineers and for me that's what I really missed in the past couple months. Actually seeing people in person, working with people in person, supporting people benefiting from other people's expertise and their own kindness and this is what we're trying to take forward over this coming year at the University of Colorado. In fact our team is taking over a residential academic program in the dorms this fall. We have 160 freshman. So 18 year olds who it's going to be the first time on campus they're going to be trying to maintain social distancing while still living in the dorms.

They are going to be learning about some of these Global challenges sometimes for the first time. They're all going to be in their first year in engineering school which I know from experience is really really challenging. And we're also going to be doubling down by introducing them to these Global development challenges, while also trying to create Global Engineers. So some of the readings that we're going to be reviewing include The Divide by Jason Hinkle (he reviews almost 200 years of development policy and different forms including up to the present and how our current system is the left hand that the right hand doesn't know what it's up to (as development practitioners)). We're also reading Encountering Poverty by Ananya Roy and some of her colleagues which is about how young professionals can try to engage in being activists really, and not engaging in neo colonialism or white saviorism but actually being advocates and allies in addressing global poverty. And then we will also be reading a book that I am coming out with this summer called The Global Engineers and is about some of what we have been talking about on this podcast (about what it means to do global engineering) but half of the book is just profiles and interviews with amazing engineers around the world. My friend Chantal Irigabeeza who is from rwanda who is working on water pumps and became frusterated by the fact that she would install a water pump and then it would quickly break and she started to become aware of the underlying issues and so she is now a PHD student with us here in CU Boulder dedicating her career to trying and address these challenges. Or Doris Queberra who is the chief of pary of a $35,000,000 a year USAID funded effort in Kenya, who has dedicated her career to food security and agricultural resilience. Or Dan Hollander who is an american engineer and former foriegn service officer who is managing some of USAID's projects globally trying to improve sustainable access to sanitation services. So rather than the students just hearing from me, and some of these heavier problems, they also get to be introduced to successful practitioners globally who recognize these challenges and are dedicated to trying to address them.

Andrea
Well that's great, I think it's a really great message to leave with our GlobalPDX Audience as well. It's important that we take care of each other, that we collaborate when we can, maybe take some time also for yourself, and just so you know find the people that are going to help both challenge you and motivate you to move forward. So look forward to seeing that come out and we'll be sharing some of the resources that Evan mentioned in this podcast on our website for folks to reference. A friend of mine gave me a book that I would also recommend called Winner-Takes-All not the lightest read on Mother's Day this weekend, but also an important book that was highlighting some of whatever was talking about in terms of global economic inequalities and really start understanding the U.S. role in that as well.

So thank you Evan so much for participating in this for those of you who are new, GlobalPDX is Oregon's Hub for Global change makers. GlobalPDX is dedicated to keeping you connected and engaged even during this strange time. For resources on staying productive while under quarantine check out our website. If you aren't already a member please consider joining our community. Stay tuned for new episodes of our podcast and please share with fellow changemakers.