



Episode Seven Transcript

Bonus Episode: Phil Weilerstein in Conversation with Rob Lemelson

Intro:

The entrepreneurial journey is rarely straightforward. It's unpredictable.

Challenging.

Collaborative.

Risky.

Transformative.

And often deeply personal.

The VentureWell Voices Podcast offers an inside look at the change makers using science and technology to solve the world's greatest challenges. Hear their stories of the messy, meaningful path from idea to impact.

Phil Weilerstein: I'm pleased to welcome everyone back to VentureWell Voices for a special bonus episode honoring National Inventors Month and VentureWell's 30th anniversary.

I'm Phil Weilerstein, President and CEO of VentureWell, and I'm thrilled to be joined today by Professor Robert Lemelson, a board member of the Lemelson Foundation.

In addition to leading his family's foundation, Rob is a professor of anthropology and a research scientist at the Semmel Institute of Neuroscience at UCLA.

In 2007, he founded Elemental Productions, an ethnographic documentary film production company dedicated to producing films that focus on culture, psychology, and personal experience.

Rob also founded the Foundation for Psychocultural Research and the Robert Lemelson Foundation, a philanthropic effort dedicated to improving global mental health and well-being through education and knowledge. Welcome, Rob.

Robert Lemelson: Hello!

Phil Weilerstein: So, at VentureWell, we focus on innovators who don't just build gadgets, but who solve the world's most difficult problems. And we do this going back 30 years ago to the founding of what was then called National Collegiate Inventors and Innovators Alliance, based on a vision that your father, Jerry Lemelson, put forward.

And I'd love to hear a little bit about where that idea came from, and how the vision evolved as you moved from this idea about philanthropy to actually being one of the leading philanthropies in invention, science, and technology.

Robert Lemelson: Yeah, so my dad, Jerry Lemelson, was an independent inventor, one of, I wouldn't say one of the last, but he was of the kind of tradition of, you know, Edison and Bell, and they have 19th-century inventors. In fact, they were his ideals when he was growing up, those are the things that really, really fascinated him.

And when I say he was, one of that, kind of, that continuum, it's that he would go up into his attic. We grew up in New Jersey, and he would invent in his attic, and then write up his patents himself, and submit them. And, and then produce some products or, license

others. So, he was in the 20th century. Depending on who's doing the counting, he was, the second, you know, after Edison, probably the second most prolific inventor. He had over 650 patents on a very wide range of technologies from toys to robotics to lasers to aviation systems. He was an aeronautical, industrial, and mechanical engineer.

Robert Lemelson: And, he had a very productive career, both inventing and licensing, a number of his patents to the world's largest corporations.

So, the idea... so when we were growing up, he would sit around the table, and he would, you know, often kind of bemoan the fact that young people are kind of moving away from these vocations that he felt were enormously valuable, but also, you know, personally gratifying. Like, it's... invention, at, innovation as, as a vocation is, is, is one of the, like, the most exciting things you can do. And, but, you know, he struggled for... for many years. And it was only really... I mean, he... So, just a brief, brief history. So, he, he invented industrial, robot systems, industrial factories. Some of the earliest, mechanized factories, were, were, in some of his early patents from the 50s.

And then he created the first magnetic tape head that was in every Sony Walkman in the 80s. He licensed... he had the, he had some of the earliest patents on, combining a, CPU with a video monitor, and a keyboard input and a typewriter output, or some sort of printing output that could sit on a desk. Now, it's obvious, like, that's a desktop computer, but, in, that was... those patents dated from the early 50s, and when it was all EMIAC and, you know, room-sized computers, and he licensed that to IBM in the late 70s, so he did... he did well, but it was really only in the 90s that,

Robert Lemelson: His licensing program took off, and he created what he called machine vision, which is the ability of computers, and the integration of computers and optical scanning and data processing and retrieval to change, items on an industrial assembly line. And also, machine vision, which was early, early, visual analysis of materials. And using both optical scanners and computers to analyze products on an industrial production line.

And he licensed those, you know, to every car company in the world, and most electronics companies in the world in the early 90s, and that's when, really, the origin of the foundation, began, we, we, he had spent his whole life talking about wanting to kind of, orient young people, to careers of invention, engineering, and science, and so we started the, foundation in 93 or 94. We approached, first we approached MIT, and we created, what became known as the Lemelson MIT Prize, which was the largest prize for invention in

the country. It's a half-million dollar prize, and there was an award for the best inventor of the year, and for Lifetime Achievement, and for, there was a, there's a part on sustainable development, and that went on for about 25 years. We also set up the first nationwide, and what's become the largest nationwide, program, historical program documenting inventors and innovation. It's, it's at the Smithsonian National Museum of American History.

Robert Lemelson: And they do yearly lecture series, and archival work, and exhibits. If you go to the National Museum of American History, there's a whole wing devoted to American inventors, and I think the latest exhibit is on invention and sports, but we've done invention in environment, invention in color, a range of places of invention, sites of invention. And then... but then, relevant to this discussion, I had my wife at the time, Susan Morse, and I went to Hampshire College. Which was a very innovative college in western Massachusetts.

And there we met Gregory Prince, who is the president of Hampshire, and we had the idea for doing a program on invention and innovation, at a liberal arts college, which we did for a number of years in Hampshire. But, most salient here is that, he introduces to you, to Phil, while our seat. And that was in, I think, 1994, 1995?

Phil Weilerstein: -5, yeah.

Robert Lemelson: '95, yeah.

Phil Weilerstein: Yeah, and the origins of this at Hampshire College were really interesting and actually pretty important to what emerged. In particular, the integration of that experiential learning and belief in becoming an inventor by being an inventor, and unleashing the creative and inventive capabilities that so many people have but never get in touch with in ways that are integrated into an educational experience in other things as well.

So, one of the things that really impressed me when I first heard about this, and started talking with Greg about the opportunity to figure out a way to take what was happening in Hampshire College and turn it into something that could become a national, maybe international, program that would change higher education by integrating both the experience and pathways to be inventive, and also doing it with serious intent to actually solve real-world problems and make the world a better place. And I could see in the early, early examples of this that happen on the campus of Hampshire College, which is... Was it liberal arts?

Phil Weilerstein: Liberal Arts college, four-year college, but had students doing engineering projects, inventing all sorts of really interesting technologies. And the potential was there to take this into the world in a way that would actually integrate with the engineering curriculum, integrate with the science curriculum, and from Greg Prince's point of view, create an opportunity to export that experiential learning to the world. Now, Hampshire College has closed down, but we continue to carry on that legacy and that inventive experiential learning approach really around the world.

We work with hundreds of universities in the U.S. The curriculum that was supported through the Foundation's efforts has taken hold and really has grown from sort of convincing people that this was a valid idea and not crazy, to now being something that you probably won't find an engineering dean who doesn't insist that they provide this opportunity for their students. So, you know, the Foundation's work has really been incredibly transformational, and it's been a joy and a real honor to be able to work on carrying forward Jerry's vision. It really, really was...I think something that was an invention that has transformed higher education.

And I'm interested in the... one of the core elements of this, and I'd love to get your perspective on this, is the E-Team, which was an invention that Jerry brought to the table in the early stage of this as kind of a core construct for how this might work. I'd love to hear sort of where that came from, and how that actually became part of the program.

Robert Lemelson: Yeah, so, you know, my dad was a struggling, independent inventor his whole life, was very aware of the challenges faced by young inventors, not least of which, challenges of getting funding for their ideas. But also, you know, a lack of interest on the part of some universities to engage in an educational project like this. And also lack of skills in certain areas. So he... he came up with this idea of e-teams, or these entrepreneurial teams, that you wouldn't just have an independent inventor, but you'd have a design person and a business person forming a team, and for, for students who did not have access to capital, or, we would fund them in their college experience. And it's typically a couple-year funding.

We provided, initially funding for both the curricular development and also the development of the idea. And I actually have, so... so, I actually have, one of the first inventions. I was cleaning out my closet, and I found it, and I'm gonna... this is a little prop.

But it's kind of a cool prop. This... this was one of the first funded inventions, came out of Cooper Union in New York. It's called the Cooper Cooler, and what it... what it is, is, the... the E-Team at Cooper Union was sitting in their dorm, and they didn't have cold beer, you know, as a college student, so... Yeah. And so one of the guys... one of the, the students, I think, was in, like, fluid dynamics of physics. And, came up with this idea that you would... you would put a bottle of beer or wine, and then you have this, you have these, these, what are they, grommets, or And it would sit... it would sit here, you put... you put ice and water in here, and then this would rotate rapidly, this, this unit, and then rotate very quickly, and then pour ice-cold water over the beer, and you'd get a cold, You'd get a cold beer in one minute.

Robert Lemelson: It was, like, remarkable. And so they went, they developed it as an E-Team at Cooper Union, and, went into business, and I don't know if they're still in business, but it's, like, to this day, I used it, last night, you know, to cool a bottle of wine. Yeah, so it's... 30 years later, it's still functioning, well-built, well designed, but that's just one of... Literally.

Phil Weilerstein: sort of the quintessential, you know, sort of college dorm room, couple of dudes sitting around, inventing based on a need that they were experiencing. And I think that really was a kind of a core construct of this collaborative spirit of invention, and the support that was provided to it.

Making it something that was really differentiated from, kind of, your traditional curriculum, where you're learning about things to actually learning by creating things, and creating a need to learn the technical skills to build that device. Everything from understanding the fluid dynamics to understanding the business and purchasing and everything involved with putting together a consumer product and figuring out how to get people to buy it.

That's been, I think, a really successful model, and in fact, you know, beyond the work that we've done at VentureWell, which is what NCIIA, or the National Collegiate Inventors and Innovators, which was the name when it started, rebranded about 12 years ago. We've been able to take that approach and disseminate it very widely, going well beyond students.

Phil Weilerstein: It's now sort of a core construct that's built into the way that innovators are trained in the National Science Foundation I-Corps program, where you have a

collaborative team of innovators. And bring not just problems that are near at hand for young people, but actually inspiring people to take on big challenges and really deep problems that face society. And the Foundation has embraced this from the outset. I wonder if you could talk a little bit about the Foundation's sort of broader work, and focus on things like, climate crisis, addressing, access to innovation, and some of the ways that that has actually grown and transformed over time.

Robert Lemelson: Yeah, so in the early years, I mean, my dad passed away in '97, so he was really only, around for the first few years of the Foundation, but, it was his belief at the time, and to the day, it still remains, I think, somewhat of a core principle of Foundation. That, you know, invention spurs economic development. And we've seen this certainly through VentureWell, with hundreds or... I don't know what the current number of businesses... I mean, so Jerry's idea was thousands.

Phil Weilerstein: Thousands of businesses and billions of dollars in capital raised.

Robert Lemelson: So his idea... and so 30 years on, his original idea that innovation and invention spur economic development is a valid one, so it's been... it's been, it's proven the test of time. So the idea was you give young people these opportunities, you give them this education, you give them some funding, and somewhat later in the process with NCIIA and then later VentureWell is creating a network of angel investors or venture capitalists who would invest in these businesses that these E-Teams would, would develop. So that... that basic idea has held up pretty well. So my dad died in '97, and then it was, the board, it was... was my mom, who passed away a few years ago, and, my brother and ourselves and our ex-wives.

And now, now it's actually one, two, it's a third generation. My, my kids and my brother's son are, are also members of the board. So it's, it's a very much a family foundation. But, so, my dad died in '97, and then a few years went by, and then we kind of professionalized the, the foundation, it was kind of what they call, like, a left-drawer foundation, where my dad would just, like, sign checks in the early years, and then we created an institutional structure, but my brother and I were talking about this model of invention and innovation, and looking at... now, I'm an anthropologist, I work in Southeast Asia, you know, I've been working in communities that, you know, are at the bottom of the pyramid, making, and they used to say, a dollar a day, maybe they're making \$4 a day.

Robert Lemelson: But the basic human needs problems in what used to be called the Third World, or the developing world, or the Global South, those issues could be addressed in some very significant ways around issues of water, health, agriculture, biodiversity, climate, they could be addressed through, educating, students about innovation and building businesses, taking this model that was obviously created in the United States, but applying it, to the Global South. And so, we began working, I think in 2001, and we kind of split... this is in the evolution of the foundation. We kind of split the programs, half in the United States. My dad, I would consider him, even though this term is horribly abused, I would consider him a patriot. He wanted America to succeed; he believed in these forms of American exceptionalism, and I don't think he was off on that. But we wanted to put also the generous spirit that used to apply to the United States, he, he very much believed in. So, we... we started programs in Latin America, Sub-Saharan Africa, South and Southeast Asia, looking for the next inventor in, like, rural India.

I remember we met, and there are lots of challenges there. We organized a symposium where we invited engineers and inventors from all over the Global South for a three-day event to kind of get their ideas, their buy-in of, you know, how this program could be instantiated in their own societies. And one of the guys we met was this, Neil Gupta, I don't know if you've ever met him, Phil.

Phil Weilerstein: Sure.

Robert Lemelson: Yeah, he was, head of this, the Honeybee Network, and so he spent a year walking from village to village in rural India, looking for inventors. And in every village, he found one or two people who were these village-level inventors. I remember one of the examples was this man's son had climbed a palm tree in southern India to get coconuts, and had fallen and died. And so he had this real driving need to kind of solve this problem. So he created a set of kind of strap-on, ratcheted, spiked tree climbers that you could... that... that worked. It was a great invention, except as a villain, you know, he invented it one time with few design modifications and no plan for... for turning it into some sort of business. Yeah, yeah.

So, the Foundation's goal was to find and support, you know, the next, Steve Jobs or Thomas Edison in... in the Global South. I don't think we found that yet, but we've certainly supported... we've... we've been in... in the initial variation of the program, we had what we called recognition and mentoring programs that were modeled on, like, the MIT Prize program, you know, recognizing creating a different kind of cultural zeitgeist around

invention, innovation. Then we had these direct development grants where we would, we would, with, with a team of experts, would, would pick certain technologies.

Robert Lemelson: Both of those programs, you know, foundations evolve over time, so those are no longer evident, but we've gone on to lots of different programs. We're working primarily now in Kenya and in India.: But we've, we've done... we've, we've worked in Senegal, and Peru, and Vietnam, and in the Philippines, I mean, all over. So...

Phil Weilerstein: Yeah, I'd really encourage listeners to check out the Foundation's website at lemelson.org to read more about these programs. It really has been inspirational to us to be able to be part of the Foundation's work, and to get to know the leaders that you've engaged in developing these programs, and to be able to collaborate with them in some cases, to try to share what we've learned and to learn from them about how to, bring invention and affordability and invention and access to the invention process forward in ways that are not resource intensive, and that are really focused on solving problems in addressing human needs, and one of the things that I found inspiring about this...

I mean, I got involved with this because I was involved in a tech startup as a university student, and, you know, joined the company as a founder and had this experience which was wonderful and transformational, but really, really difficult in certain ways, and sort of figuring out, how do we remove the barriers? How do we make the educational process one that not only teaches you about the process of creating a technical solution, but as you pointed out earlier, where you understand how to take it to scale, what are the ways to actually leverage other people's interests and create demand for something that can solve a really significant problem?

And although, you know, the example you had in your closet was a beer can or wine cooler, we've got lots of examples that are really transformational approaches to, you know, detecting cancer, to creating solutions for clean water. And we've worked to, to try and bring those, ideas forward, both by supporting the inventors, but also supporting the ecosystems that need to be there for them to succeed, and your work internationally at the Foundation has really recognized that, and I wonder if you want to talk a little bit to the approach and the importance of the context in which the inventor is working, that ecosystem.

Robert Lemelson: Yeah, great question. I'll give two examples. One example of failure, but failure is sometimes necessary to create change, and one an example of success. So the

example of failure, which is kind of somewhat well-known if you're... if you're, you know, aware of these kind of developments, was one of our first grants, and it was a failure of, planning and imagination and approach. And this was... but, I mean, addressing a major issue.

So, in, Southern Africa, in Mozambique, in Angola, Malawi, that part of the world, women have to walk sometimes for multiple hours a day in semi-arid environments to get water. And, there was, I think he was Dutch, there was an engineer who came up with this idea, kind of a good idea, or we, they thought, which was in, to install playground equipment, and particularly the roundabout play pump, which is, you know, like, on every playground in the world. And, it would be combined so that... so kids would go around... go around, around the roundabout. It would be combined with a pump that would pump water from the water table to a cistern on the top of the school, and then the women wouldn't have to walk for hours a day, and the children would have water. Okay, and so they raised all this money, but from both the Foundation and from the Gates, and other, other, NGOs, and installed hundreds of these in Southern Africa, but they didn't do their work, so the hydrology, it turns out the water table is much deeper than this was able to pump to through mechanical uses, so some of the pumps didn't work for that reason. The kids very rapidly figured out that they are no longer playing, they are being used as mules for the roundabout play pump, and they stopped doing it.

Robert Lemelson: And then, I think very significantly, it turned out that, and as an anthropologist, this obviously makes sense, that women walking to water was something they enjoyed, even though it was a lot of work every day, because they were able to socialize and, you know, affiliate with other women. So, even though we...like, millions were spent on this. It was installed at all these schools. Very few of them are functional today. So this was... this was a failure. And so, the failure was, from an international development perspective, was an old model of development, that you create problems in the West, and you drop them on these societies to solve their problem doesn't work.

So, another project that I would say was a success was we were working with, an organization that used to be called East Meets West Organization. I think it's called the Thrive Network now. It was founded by, a close friend of mine, Peter Singer, who was a surgeon during the Vietnam War, and he went back to Vietnam, in the 80s and set up the first clinic, first American Clinic in Da Nang, with his wife, Margie Kagawa Singer, and then that developed into this large foundation. They got a lot of funding, because they knew what they were doing, and so one of the issues was that they were addressing was in

northern Vietnam, kids, babies who were born, preterm, like 7 months, had a mortality rate off the charts, because they would, they would be born early, and they would be still in the villages, and by the time they were brought to the hospital, they would pass away.

Robert Lemelson: Like, 80 or 90% of them will die, so it's a major, major issue and... but they would... they would pass away from very addressable issues of, like, thermoregulation, of, of lung development, pulmonary development, being inadequate, of... of infantile jaundice. These are all things that are just easily corrected through technology, but so, for example, the infantile jaundice, so typically, you know, my son had jaundice when he was born. It's a very common condition.

And if kids don't get treated with it, they can either die or develop, lifelong neurological impairments, like cerebral palsy. So, the way that they're treated, I'm sure as many of the listeners know, is through phototherapy, to put them under full-spectrum light, so kind of the environment of evolutionary adaptation. On the savannas of Africa, they were exposed to them. And it would create this biological change where the bilirubin produced by the liver would be conjugated and not pass the blood brain barrier, okay.

But they... going back to the roundabout plate pump example, they... I... I was... the first time I went to Hanoi, I went to Hanoi Central Hospital with Peter, and in the courtyard, in the middle of the hospital, was all these medical technologies out in the rain. And I asked the physician who was escorting us, I was like, why are you storing medical equipment in the rain? It's like, well, the government has a policy that when something is donated, we can't throw it out. But the fact that it was in the rain, rusting, and not being used to save lives was, I thought, significant.

And so what had happened is they had donated equipment from Japan, the United States that was calibrated on American children around... so these were phototherapy units, they were basically bassinets with lights. And one of the issues was the lights themselves were fluorescent tubes, which would provide the right spectrum of light for about 2 weeks. In the United States, they get switched out every 2 weeks at, you know, at the time was like \$400 a pop to switch these bulbs out. And, and they weren't aware of that, so they were still providing light, not the right spectrum, wasn't conjugating the bilirubin.

Robert Lemelson: Kids were still dying and getting sick at high numbers. And so, we worked with a local startup to create, I mean, around this, and also around, you know, pulmonary development, again, the same sort of issues, that they were using donated

equipment, and every time they would have to change out the masks, and this is for CPAP units, that, for... because they didn't have, access at that point to surfactant. And, they'd have to switch those out. Every time a baby is off the unit, it would be like changing out all this medical waste.

Robert Lemelson: Again, hundreds of dollars. So we worked with a local Vietnamese startup who was going into the hospitals and then redesigning these equipment, the phototherapy, the CPAP units, and also a couple others around thermal regulation. And then training the, the nursing staff and the physicians about how to use these. So, for example, for the CPAP, instead of having it thrown away, they created washing stations, and they created reusable medical material for the, for the phototherapy for, for, the jaundice, they would, they switched out the fluorescence to LEDs, they changed the switches, they made it much more logical, where people could understand... they could use and understand it. And this one program, over the course of a decade, there are probably 100,000 people alive today who would not be alive if this program hadn't been instantiated.

Robert Lemelson: And so, what's the lessons from that? It's doing international development, it's... it's local resources, local knowledge, local supply streams, and training local inventors. All the kind of... not all of those that VentureWell does, but some of those. So there's ways you can apply what I would consider anthropological principles, for, for... sorry, I should have turned off my, my beeper. There's, there's, there's... there's... the utility of anthropological principles, is, is, is really important in doing international development.

Phil Weilerstein: And that's an approach that we really have integrated, in... not just in the work that we're doing in low resource settings, but actually broadly, around both understanding who your users are, understanding who the buyer and the customer are, who aren't necessarily the same thing, and to really getting from the people who are going to use the product, whatever it is, whatever the solution is, the technical specs for how it should be designed, and using that to frame the problem. It's often said that if you can frame the problem well, that's half the way to the solution. And that's something we've really embraced and integrated into the work that we do broadly.

I'm curious, kind of, you know, with the work of the Foundation today, I know that a focus on climate and addressing the urgent need to remediate the changing climate is something that's sort of in the foreground. I wonder if you could talk a little bit about that work. I mean, we at VentureWell do a lot of invention and innovation-focused climate work. We've actually been able to build on what we've learned about supporting climate innovators to

expand that work. We actually have a program right now that's going on, which is a national program with the National Oceanic and Atmospheric Administration, to bring invention-based approaches broadly to maritime and other areas, not just focused on climate, but actually on remediating and addressing things. And I know that the Foundation is both working on supporting climate inventors, but also on addressing policies that actually will enable those inventions to succeed in scale. Can you tell us a little bit about that work?

Robert Lemelson: So yeah, my brother's, you know, a winemaker attorney, but also a climate activist. He's been involved in this for decades, really quite prescient, looking towards the future.

And so, a few years ago, we decided to segment off a section of not giving up our American program or the Global South program, but having a separate funding stream for climate innovation. And, you know, I never thought this would apply to me personally, you know, but I'm a bit of a climate refugee, because my house burned down in the Palisades Fire last year, which is almost certainly related in some ways to climate change. So I was like, wow. So this, I can see it's very, you know, and then it's... That was this horrific tragedy, but compared to, you know, Jakarta sinking, under rising sea levels, you know, 40 million people, I mean, there's real challenges.

So, we decided to... that we needed to, orient the foundation towards addressing climate change issues. Yeah, and we've done a range of policy and invention-related, activities around, around climate change. You know, maybe you can, on one of these podcasts, you can interview my brother, because he's much more,

Phil Weilerstein: Yeah, I would love to get Eric on, yeah.

Robert Lemelson: Yeah, yeah.

Phil Weilerstein: Huh.

Robert Lemelson: If I may, you know, that Phil and I have worked together now for 30 years. Phil started VentureWell with one person, and it's now this just incredible organization, so he knows, you know, he knew my father, which is, you know, I mean, Jerry died almost 30 years ago. He knows my whole family, so, you know, and Phil's, part of the

family, so we see, kind of, VentureWell as an extension, in some, in some very significant ways of the foundation. Yeah. Thank you.

Phil Weilerstein: Yeah, it really has been a wonderful experience, and, you know, I got involved with this work thinking that, this would be fun to do for a while, a way to give back, and it's turned into a, you know, lifelong vocation, really, over 30 years anyway, and still going strong.

Robert Lemelson: A partnership with... between the two of us. For us, it's also a lifelong, vocation for my family, yeah.

Phil Weilerstein: Yeah, and it's really been a pleasure to work with you, and I, I'm really pleased, you know, we're both at our 30-year anniversary mark. I mean, you just finished celebrating your 30th year anniversary. We're coming to the close of our 30th year, as we've marked it, which is an opportunity to sort of look back on the impact. You've talked about some of the impacts and the evolution that brought you to that. I'd love to hear what you're thinking about, sort of, the next 30 years looks like, and what are the things that really give you hope and get you excited?

Robert Lemelson: Yeah, that's great. We're actually in a process of, having that discussion within the foundation itself. Having had, I think, what could be considered, very significant successes through VentureWell and other organizations. We're certainly going to continue this work, certainly, and we've also... one of the areas that evolved over time is this idea of invention education, which really didn't exist, in any, in any really structured, significant way, until we started these, these programs. And now, you know, the invention education goes from primary school through postgraduate education and beyond. And getting young people, and certainly we're going to continue to have this as a focus, young people—

When I say young, I'm not talking about college students, I'm talking about, like, elementary students, like, integrated into their education this... this very kind of, problem-solving, problem-based, practical orientation, where they're... they're using... they're not just on their screens, punching them, but they're actually dealing with things like the Cooper Cooler in the real world. So... so certainly we're going to continue that expanding invention education out, expanding the climate program out, and then drilling down. You know, it's interesting in seeing the evolution over time in some of these societies we've been working in. I mean, Southeast Asia, with a few exceptions, is this model of, like, this skyrocketing growth, and India also. And one of the discussions is, I mean, there's still hundreds and

hundreds of millions of people in dire poverty in India, but there's also been tremendous wealth generation, and so one of the areas that we want to do more work in, in addition to the adventure education and climate, is working with local leaders in these societies. So, I mean, my idea in a place like India, now that there's a significant number of wealthy people, of billionaires and an emerging kind of philanthropy is to transition so they take it on themselves, that these societies embrace this idea of the power and value of inventors and invention, innovation, and then start funding their own projects within their own societies. I think that's very much...gonna be the case. And then, you know, then we could pull back and focus on other places of similar or greater need. So, yeah. And certainly continuing the work. They're very... because without a change, and obviously our... and there are lots of great changes that we've seen over the decades in terms of climate change and technology and renewables, I mean, so continuing that work also, very much.

Phil Weilerstein: Yeah, so... We're looking forward to continuing to do this work together. The opportunity to take on those big problems, I think, really resonates with us, and I think the opportunity to scale those solutions, both by putting the opportunity and the obligation on others with the means to pursue it, and engaging other institutions and organizations in really a whole-of-ecosystem approach to invention education to entrepreneurship and to enabling innovation to drive forward solutions to the world's most pressing problems.

Looking forward to continuing the conversation as we continue to work together. Really appreciate your taking the time to talk with us today. And look forward to bringing you back on the show, maybe at some point in the future. And thank you again, Rob.

Robert Lemelson: Hey, thanks, Phil, and keep up the great work that you've done for all these decades. We, you know, my family and the foundation really, really deeply appreciate it, so...

Phil Weilerstein: Thank you.

Robert Lemelson: Okay, take care. Bye.