



***Practical Significance* | Episode 35: ASA Around the World**

Donna LaLonde: Well, welcome everyone. We're back at it again. So, another month has passed and today on *Practical Significance*, we are thinking globally. And so, we have two wonderful folks with us to think a little bit internationally. And so, as always, we recognize that our guests have day jobs, and so we'll start by asking them to introduce themselves and tell a little bit about their day jobs. And so, Afia, I'll start with you.

Afia Owusu-Forfie: First of all, I would like to thank Ron and Donna for the opportunity to be on the *Practical*

Significance podcast. It is an honor. I am a recent senior data analytics consultant and alumnus of Deloitte US firms where I served for almost five years, across two tenures. I belonged to the strategy and analytics offering portfolio. And within the artificial intelligence and data engineering wing in this capacity. I worked with the Department of Justice's Office of Justice Programs as a senior analyst within the Program Assessment Division (PAD) and the Enterprise Risks Management Team (ERM)

Some highlights of my contributions include developing a stratified random sampling scheme for PAD and helping to respond to the Freedom of Information Act request. Deloitte always believed in firm and marketplace initiatives, and so I contributed to the "Women in Data Initiative" as the first woman Chief Data Officer of the government and public sector. I also participated in CDX Explore, a soft skills training by senior managers and senior consultants to help consultants navigate the firm, and in particular partnered with a nonprofit committee called Step Up DC, which helped develop a strategic communications plan for my nonprofit Coders Who Travel.

I'm currently planning my next career move and, in the meantime, I'm giving back through my nonprofit, Coders Who Travel. My duties include planning agendas and leading monthly board member meetings, finding and bringing together seasoned experts, particularly data scientists and leading technology analysts from reputable institutions like the Federal Reserve Board, U.S. Census Bureau, and SAS Institute, to teach Python programming SAS via our programming skills. My duties also include partnering with three women, Angela, Auka, and Nah-Abiah, who are co-directors of Women Who Code Accra, a chapter of a global nonprofit organization in San Francisco, California, which I founded in November 2015 in Accra, Ghana.

Donna LaLonde: And we will dig into Coders Who Travel in a moment, but first we want Ingrid to tell us about your day job.

Ingrid Van Keilegom: Thanks. I'm Ingrid Van Keilegom. And so, Ron and Donna, thank you for this invitation. So, I did my PhD in 1998 at the University of Hasselt, which is in Belgium. Currently, I am a professor of statistics at KU Leuven in Belgium, and I'm also a part-time professor at UC Louvain, which is another university in Belgium. I researched many aspects of survival analysis. That's my main research area. But I also work in areas like non- and semi-parametric regression, instrumental variable methods to do causal inference, measurement error problems, quantile regression, goodness of fit tests, and related topics. My work is mostly methodological, but I also work on applied projects in medicine and

economics. All this is together with about ten Ph.D. students whom I currently supervise at my university. I'm also responsible for the Master of Statistics and Data Science, and this master attracts many students from all over the world. In a nutshell, these are my daily activities.

Ron Wasserstein: Thanks very much for those responses. You're both doing fascinating things, and we're going to drill down a little bit on some of them. So, Afia. You mentioned Coders Who travel. Could you tell us a bit about why you started it? And also, are there opportunities for listeners, for ASA members to get involved?

Afia Owusu-Forfie: Thank you for both questions, Ron. Coders Who Travel Incorporated is a 501 nonprofit organization that I founded in December 2016 with a mission to inspire and advance the careers of coders that is, computer, mathematical, and statistical programmers, in emerging markets like Ghana and in underserved communities in advanced countries like the United States. My motivation for starting Coders Who Travel, Incorporated was to find coders like me who are willing to drop everything and go overseas for two to three weeks to give back to students, early career professionals, faculty, and C-suite executives by nurturing coding, hubs, coding boot camps, and other technology initiatives.

However, when the pandemic dawned on humanity, we realized that virtual meetings got some of the job done. For instance, we launched virtual coding bootcamps in Python SaaS, SaaS View, and R for us. Military veterans, Deloitte practitioners, and students at the University of Ghana, which is still underway. Even still, we wanted to host conferences that brought together our members, particularly the core active volunteers, together with bridge builders and experts. With the help of an attorney called Julian, I became aware that a great gap exists in funding from sponsors and budgets of companies in developing countries when compared to sponsors and company budgets in advanced countries.

Similarly, a gap existed in operations since bridge builders, that is, people who know both the context of developing and advanced countries were needed to bridge the gap in technology education alongside experts in advanced countries. This is what we call the bridge builder framework at Coders Who Travel. So that is the hope of Coders Who Travel... to close the financial and operational gaps for individuals and organizations seeking to make an impact via the bridge-builder framework in emerging markets like Ghana and underserved communities in advanced countries like the United States.

And yes, there are many opportunities for ASA members to become involved. As core volunteers and staff, bridge builders, experts, and even monthly sponsors, we frequently need office space advantage points to reach our beneficiaries during in-person events. We need core volunteers to be trained to deploy solutions to meet the demands of our clients. We need professionals with exposure to both developing and developed countries to be bridge builders who give insights into what works and also lead the boots-on-the-ground approaches needed to make a difference. We need experts serving as our board members, advisors, curriculum developers for various programming languages, monitoring and evaluation specialists, and business development managers. We also need more heartfelt connectors who help spread the word about the work that we do every month.

Ron Wasserstein: That is fabulous, Afia, thank you. And we'll make sure that we have contact information for you in the show notes so that people can reach out to you. Ingrid, you mentioned that you were doing a lot of things. Somewhere in there, you find time to be the international rep to the ASA Board of Directors. So, we wanted to ask you if you'd like to share a bit from your perspective about some initiatives you think are important for our international members.

Ingrid Van Keilegom: Yes, thanks Ron, for this question. Let me start with existing initiatives and activities for our international members. So first of all, many of the webinars and podcasts are of course open to everyone, including our international members. ASA also has an important accreditation program, which can also be very interesting for international members. And then there are also smaller initiatives, but not less important, especially for young people, like DataFest, which is a great initiative. And then also there are existing initiatives particularly for our international members, like the recent reduction in the membership fees for developing countries, as well as the Educational Ambassador program, which I think is also a nice initiative for the international members. And then the mentoring program. It's also open to everyone, including international members.

Maybe things that could be thought of to make the ASA even more attractive for international members are more online opportunities like courses for Ph.D. students or young faculty members about how to set up research programs or research groups. This could also be interesting for developing countries or how to write grants. These are things that are, of course, becoming more and more important.

And some conferences outside the U.S. could be extremely useful for our international members.

Ron Wasserstein: Thank you, Ingrid. I'll throw in that for low- and middle-income countries, the rate to join the ASA for a year is just \$10. Also, this seems like a good point to acknowledge that as we're recording this, there is a tremendous amount of suffering going on in Israel and Palestine and also continued suffering in Ukraine and elsewhere. And so, our hearts go out to the people there, and especially to those who are members of our profession from those areas.

Donna LaLonde: So, our wonderful podcast producer, Kim is responsible for this really interesting feature in *Amstat News* called My ASA Story, and we thought it would be really fun to hear both of your ASA stories today. And so, we would like you to give us a brief history of how you became involved in the ASA. And Ingrid, I'll start with you.

Ingrid Van Keilegom: So, my ASA story, or ASA adventure, started in 1998. So, it's exactly 25 years ago. After finishing my PhD at Hasselt University in Belgium, I was hired as an assistant professor at Penn State University. And so, at that moment, I immediately decided to become a member of the ASA. My first JSM was in 1999 in Baltimore, and since then I've attended many JSMS. Not all of them, but most of them. For the ASA, I have been chair-elect and chair of the Section on Non-Parametric Statistics. That was in 2017 and 2018.

Actually, throughout these 25 years that I have been a member of ASA, I always felt that being a member of ASA allows you to connect with many statisticians in the U.S. and Canada, which is, given the distance, a little bit harder if you are in Europe. I also went to many excellent conferences, and now I'm not only talking about JSM but also smaller conferences of the sections. And then I'm particularly thinking of the Section on Non-Parametric Statistics and Lifetime Data Analysis interest group, of which I'm a huge fan. So, yes, I always had the feeling that there is something for everyone at ASA, depending on your research area, your needs, your objectives, and your career path. I love to be part of this big family. For the moment. I'm giving back a little bit by being associate editor of *JASA* and of course, as an international representative of the board. So, yes, that's my ASA story. So far.

Donna LaLonde: That's really fantastic. And Afia will turn to you for your ASA story.

Afia Owusu-Forfie: Thanks, Donna. My American Statistical Association story began in 2005 when I met a statistics professor called Dr. Baidoo while studying in my junior year, or Level 300, as we call it, in Ghana, at the University of Ghana (Ghana's first university). I had decided that I was going to quit my statistics major that I was pursuing along with my computer science major and opt for either psychology or geology because of a couple of bad grades.

These two major options would require that I complete all courses in the prior sophomore year in addition to the junior year. Even with those daunting tasks and prospects, I believed I had come to the end of my limits with statistics. Thank God. A course advisor who is a Ghanaian American, my statistics professor, Dr. Baidoo, introduced me to the ASA when he learned that my mother was already living in the United States. So, I called my mother, who lived in Alexandria, Virginia, at the time, and she said, "Wow. While sitting on a bus, I saw an office of the ASA, the headquarters." So, knowing that this was a very credible organization, my mother sent me money, and I gave the membership fee money to my course advisor who got me enrolled in the ASA.

So, I'm very delighted that the fee for developing countries is now around \$10. That will be great to help other students also get involved in the ASA. After a couple of months or so, my dad came home to Ghana with some ASA magazines, and I went to my room and began perusing the pages. I remember seeing the impact of statisticians and their involvement in the world that would come, and I resolved to continue with my statistics major. And so, you can see how blessed I was to have been connected to ASA at a very crucial time in my life. In December 2007, I attended my first ASA conference in Atlantic City, New Jersey. It was the 63rd Conference Statistical Practice, and I still have my certificate in my home office because it's that special to me.

At the conference, I renewed my commitment to pursue an advanced degree in statistical science and operations research at George Mason University because I ran into people in academia and people who were working at organizations like Rand Corporation, and I knew they were some very sharp people. And that, again, renewed my commitment to complete an advanced degree. And happy to say, that about three years later, I will have the distinguished honor of completing both of my degrees and becoming the first woman to do so at George Mason University in those two particular disciplines. Another key touch point with the ASA was when I served as a registrant teaching assistant in one of the statistics training workshops during the 2017 Joint Statistical Meetings at the Baltimore Convention Center. I was given free course materials, and a whole binder for my effort, and they were relevant to my applied statistics education while working at both Deloitte and Mathematical Policy Research.

Ron Wasserstein: Wow, those are great stories. And those stories and the things that people share in *Amstat News* in my ASA story feature are part of the reason it's so fun for me to go to work every day. You both are the perfect people to ask this next question, and we'll just go ahead and start with Afia this time. Why should someone who lives outside the U.S. become a member of the ASA?

Afia Owusu-Forfie: So Ron, folks outside the US should become members of the ASA, particularly those in developing countries, because a lot of the emphasis when you are studying in the mathematical sciences in my experience is on heavily theoretical concepts and not much on an applied emphasis. And most developing countries lack the needed funding to purchase the software, the computer laboratories, and other costs that should ensure that the degrees are run to the world-class level.

The real value of joining ASA is to gain the applied emphasis of statistics and data science via the various conferences, educational sessions, recommended textbooks, meeting new people in the industry and being aware of what is involved in the industry, and of course, to also gain access to internship and employment opportunities. Just like how the ASA magazines inspired me to not give up on pursuing my statistics degree, the ASA, I honestly believe, can foster the academic dreams of people outside the U.S. in emerging markets. There is a real opportunity for a key block of people like U.S. military veterans who are planning their transitions to return to the civilian workforce. Programming and statistics offer very lucrative careers in very demanding fields.

And so, I believe, around the world, these veterans who are preparing to transition into the civilian workforce can tap into the rich resources of the vast network of the ASA, particularly those outside the U.S. to know what is still in demand in data science. I'm speaking from the experience of running the Veterans Can Code program at Coders Who Travel, where we met some veterans on their way from the military to the civilian workforce, and also who had gotten jobs at Deloitte. And after going through the Python programming boot camp, they had wonderful things to say about how valuable these statistical programming skills will help them in their next endeavors. And so, I strongly believe that the ASA can replicate that model too.

Ron Wasserstein: Thank you so much, Afia. Ingrid, what say you as to why folks who live outside the country should consider becoming ASA members?

Ingrid Van Keilegom: There are many reasons. First, I would like to mention the fact that you will be part of a vast network of statisticians and data scientists. And that network, yes, you get part of it by the many activities that ASA is organizing. As I said earlier, these are not only physical activities that take place in the U.S., but also online activities and magazines. You can be part of this network in many, many ways.

There is of course the JSM, which attracts many people, but there is much more than just the JSM. So, depending on your area, whether you're working in the public sector or academia or industry, you will always find something that is interesting for you depending on your objectives, your career path, whatever. I mentioned the online activities, but also the podcast, the webinars, there is the educational program, ambassador program and we should not forget the awards which are open to everyone.

Of course, as an international member, it takes a bit more effort if a conference in the U.S. But I always found it very worthwhile traveling to go to these conferences. And as I said, there are sections and for me, the sections are sometimes even more interesting because they focus on your own research area and these kinds of sections are hard to find in other parts of the world.

Donna LaLonde: And Ingrid, I can't help but mention that last month we had folks who represented the sections on the podcast and we put a challenge out that every member of the ASA should be a member of at least one section. So, I'll reiterate that challenge because I totally agree with you. Those are wonderful communities and I guess the other side of that is we have interest groups so if there's not a section or an interest group already, you could start one.

So that's pretty fantastic. Well, as listeners know, we have a couple of traditions on *Practical Significance* and one is that I like to add to my podcast, playlist, my movie watching list, and my to-be-read list by

asking our guests to share what they're watching, listening to, reading, all of the above. So Afia, I'll start with you.

Afia Owusu-Forfie: Thank you, Donna. So, for me, when it comes to entertainment, I typically leverage YouTube to listen to Christian songs and watch sermons whenever I go for a walk or during some portions of my day to build my Christian faith. However, in recent years I've become a composer of original Bible-based songs, and twenty-four of them are featured on my maiden duo music albums dubbed *The Anointing Breaks the Yoke*. And in my native language Asante from Ghana and Cha Bubo in Kenya. They were released in November 2022 and March 2023, respectively. And so that's my playlist. It's pretty cool to have your own organic playlist, but I do listen to hymns from the 18th century through the 19th century because I attended a Methodist boarding high school just for girls in my formative years, and I learned a lot of them. So, they do come back to me once in a while. And then I enjoy American contemporary gospel music that I typically hear on radio stations like WGTS 91.9 as frequently as possible.

As a result of dabbling in these music endeavors, one of my former statistics professors at George Mason, Dr. Carr, is helping me with vocal lessons to help me improve my range and pronunciation. And so, I have watched *My Fair Lady*, the movie recently. My pending assignments also include listening to Esperanza Soudan's *Chamber Music Society*, the *Spirituals* of Harry T. Berlay and Les Rice Grace.

I'm also doing vocal exercises from two books: *Vocal Power* by Joseph Arthur Samuel and *The Power of Voice* by Denise Woods. Someday I would like to publish my own two books, the *God Who Sings Over US* and *Raising the Standard of Our Charity Given*. These days, also being invited to contribute to articles, podcasts, panel discussions, and some recent partnerships have been with the *Chief Data Officer* magazine, *People Who Inspire*, obviously, Today's podcast, and very soon with the Washington, DC. Chapter of Women in Data. So that's what's happening in my life right now during my hobby ventures.

Donna LaLonde: That's fantastic. Thanks for sharing that. And Ingrid. What's on your TBR?

Ingrid Van Keilegom: Well, I like listening to music, and I usually do it when I'm driving to work in my car. And then usually I listen to classical music, all kinds of classical music. I don't have a preference, so that's in terms of music and then in terms of reading, I don't read a lot, I must say. But I definitely plan to read now about the war in Israel and Palestine because I would like to understand much better the history of the country. What are the big problems? What are the big tensions? I would like to understand it better. So, this is definitely on my to-do list, things I want to learn and read about.

Donna LaLonde: Well, those are fantastic lists. And so, we thank our guests for spending time with us. This has been so enjoyable to have this conversation with both of you. And we will conclude with the other tradition of *Practical Significance*, and that is Ron's Top Ten. So, I'll turn it over to Ron.

Ron Wasserstein: Thank you, Donna. Donna, you know that we're always trying to expand the horizon of our listeners, and so I'll do that again this month. We bring you, at *Practical Significance*, the "Top Ten Ways to Express the Number Ten":

#10. 10

#9. 1010 (for binary thinkers)

#8. $\log_{10}(10,000,000,000)$

- #7. The atomic number of neon, though you have to be bright to figure that one out.
- #6. The address on Downing Street of the British Prime Minister.
- #5. Two more than the number of times Larry King was married.
- #4. The number of *Fast and Furious* movies, not counting *Hobbes and Shaw* and *Better Luck Tomorrow*.
- #3. The number of women of have been president of ASA since I became ED in 2007 (note: that number will increase to thirteen by 2026).
- #2. One more than the number of women who were president of the ASA in the 168-year history of ASA before 2007 (no causation implied)
- #1. And the number one way to express the number 10:
 - The Roman numeral formerly known as X.

Well, thank you, *Practical Significance* podcast listeners, for joining us. We hope you'll join us next month for our end-of-the-year episode. It's hard to believe that we're already coming to the end of our third year in this podcast. Donna and I always look forward to these conversations, so we look forward to you joining us next month.