

Beauty + Justice Podcast

Ep 13 Part 1: + The Path Forward with Marissa Chan and Lissah Johnson

LISSAH JOHNSON

You're listening to the Beauty + Justice Podcast where we talk with folks from a variety of fields about what it will take to create a more clean and equitable future beauty for everyone. These conversations are led by Dr. Tamarra James-Todd, a trailblazer at Harvard TH Chan School of Public Health and head of the Environmental Reproductive Justice Lab. I'm your host, Lissah Johnson, a PhD candidate at Harvard Chan.

Hey listeners, I can't believe that we're at the beginning of the end of our limited series podcast. Thanks so much for tuning in to part one of our finale episode. We're a small but devoted team, some might say a dynamic duo, that have worked to put this podcast out into the world for the past six months. And for this episode, I'm going to do something new and step into the interviewees chair along with my amazing colleague and fellow PhD candidate Marissa Chan. She's not only been the producer of the podcast putting together the wonderful audio you hear every other week, but she's also been a lot of the brains behind the pre-production work, organizing the interviews, conducting pre-episode interviews, and researching to help put together questions and content that have been so rich and informative over the last 12 episodes. Today we're both going to be joining Dr. Tamarra James-Todd to talk about our perspectives on the beauty justice movement and how our dissertation research fits into that. Now without further ado, here's Dr. James-Todd to get the conversation started.

TAMARRA JAMES-TODD

I couldn't have done that without you all, so, I just want to introduce amazing students, future scientists, current scientists, I should say, that are really the vision and the, you know, the motivators and the movers and shakers that are making this podcast possible—soon to be Dr. Marissa Chan and Lissah Johnson, who really brought this vision into being and we just want to have a conversation today about beauty plus justice and what it means to us, what we've resonated with over the past, I don't know, we've been doing this for what feels like the better part of a year, right, and also, just highlight what you all are doing as trailblazers in this field and what your hopes are for the future. So, let's get to it and I guess I'll start with maybe you guys would introduce yourselves, I know you gave a little bit of an intro, but you want to say more about who you are and why you decided that you wanted to spend your, let's be honest, we were spending weekends, doing this, why on Earth would you do this on top of all the school work, thesis work and so on. I don't know, Lissah, do you want to start us off?

LISSAH JOHNSON

And my name is Lissah Johnson, I'm a third year PhD candidate in the laboratory of Kristopher Sarosiek at Harvard TH Chan School of Public Health and my thesis research is broadly on how program cell death gets dysregulated in ovarian cancer and I was really interested in working on this project because it feels very personal to me just being a Black woman growing up dealing with hair care and different products to use, going through straightening my hair and being very cognizant of chemical exposures from those different products and just sort of the perceptions about beauty and professionalism and hair. And so yeah, coming to grad school this was sort of always a project or a topic that I really wanted to be involved in and focus on and bring more awareness to. So, definitely working on this podcast with you all has been well worth the weekend spent.

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TAMARRA JAMES-TODD

Indeed, I appreciate all the time you've committed to being the narrator and really describing the story arc of this entire series. So, thank you so much and Marissa, why don't you introduce yourself to our listeners?

MARISSA CHAN

Of course, hi everyone—my name is Marissa Chan, I'm a PhD candidate here at Harvard Chan working with Tamarra and my work surrounds environmental justice and beauty justice, really focusing in on the community and neighborhood-level drivers of safer hair product accessibility as well as use patterns and I was really excited to join on this team and work on this podcast—I think it is a really unique way to communicate our science in ways that I have not conducted before and also personally I really resonate with Lissah's story that she just shared. I also used hair relaxers growing up and have just navigated my hair texture and growing into my hair texture, so I've really appreciated this space to also grow in that avenue personally. So, it's been really exciting work and I have just really been appreciative of both of you throughout this process.

TAMARRA JAMES-TODD

You know that I really appreciate you all. We started on this journey because we felt very strongly that the story needed to be told in a way that doesn't really deal with and keep things in our scientific journals with a lot of scientific jargon but to make it real for people, the people that need to hear this and potentially stand the most to gain and be impacted by the science and the work that we're all doing. So, we're really grateful for that and so because we did this in a way where we were telling a story and in this case in focusing in on beauty plus justice, there are many different beauty injustices. Much of this series kind of was dedicated to telling a single story because it is a way to frame, you know, what in this case, is a really I think challenging area—we've heard about the role of individuals and these chemicals that have really complicated names like phthalates and parabens and other chemicals. We've heard from toxicologists, community leaders, cosmetologists and in the context of this, I'm curious, as we listened, were there any ideas or parts of stories that really resonated with you all that, you know, leaving this journey, you'll maybe take forward and continue to kind of process and think about?

MARISSA CHAN

I think something that came from each of the individual episodes that I really appreciated was highlighting these folk stories. It's really interesting to hear how folks ended up in this field and their personal connections to this space, and I think that is what makes their work even richer. So just in from that sense, I've really appreciated digging into not only the guest's work, but also their experiences and their path to this field. In terms of some of the ideas that have been interwoven throughout the podcast, I think that the importance of collaborative and interdisciplinary work came up a few times and really focusing in on working with folks from diverse backgrounds. It came up in almost every episode, most recently being Dr. Ami Zota's, but I really think the idea that it will take all of us working together with different backgrounds and experiences really resonated with me. And the focus as you kind of discussed on the shift from the individual to more upstream drivers, specifically being community and neighborhood level as well as the societal level drivers of personal care product use patterns really was important for me as well, because there's a tendency to really hear personal care products and think

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solely an individual level behavior, since typically product use happens like in our own bathrooms by ourselves but product use really is a product of different systems.

TAMARRA JAMES-TODD

Yeah, yeah, I hear you, lots of conversation right around the community and collaborative nature of building solutions. Lissah, is there anything that really resonated with you in the context of the storytelling? I mean, as a narrator, you were able to really weave the stories together and I'm curious like how even experiencing the storytelling from kind of weaving very diverse ideas, perspectives together might have struck you?

LISSAH JOHNSON

Yeah, yeah, there's a lot of a lot of things that really resonated with me, like on a personal and a professional level, I think like Marissa highlighted something that just kept coming up over and over again throughout the episodes was this idea of collaborative interdisciplinary work. That was something that just continually I could pull out from each episode and was really highlighted and that resonated with me too, especially as a basic scientist. I think particularly I remember in Dr. Ami Zota and Dr. Dede Tete's episodes, just this idea of like bridging basic science and population health science, social science and not being, as a basic scientist trying to find my place in this movement and wanting to be able to do the science that I want to do really involves, I feel like working closely with population health scientists and social scientists in the community, and so it's just really inspiring to see ways that this is happening and just to sort of affirm that that it is a need, and there's a place for basic scientists who also think like that, and how helpful that is for the beauty justice movement and then on a personal level, I think, Tamara Gilkes Borr's episode, the idea of the cost of beauty, yeah, I never like thought about explicitly, like the time costs or the personal costs, and that was an early episode and I think it really gave me the push I needed to like, make changes in my own life, like going from having straight hair to getting my hair locked and just sort of thinking about the sacrifices I'm making and what I want to change to sort of more deeply invest in the beauty justice movement on a personal level.

TAMARRA JAMES-TODD

That's powerful because Lissah I think we've each gone through a transformation, right as we've done these episodes and listened and I I you know, both this idea of like how we show up in the world but also like being more aware of the cost and that we, well because we are at a school of public health we think oftentimes about the health costs but also thinking about the financial cost and the psychological cost in in kind of navigating and dealing with this and then time and one of the things that struck me in one of our more recent episodes was when Susan Peterkin mentioned as a cosmetologist that they're not taught how to work with natural hair, you know, that is Afro hair at like in cosmetology school? And I'm blown away by the fact that how are people like, how is that even designed? Like you know, it gets back to this issue, Marissa, that you're bringing up about these upstream factors, but like what structures, what systems were put in place where we said we don't need to learn this? This is not an important lesson for people. And then what does that mean downstream for what folks are exposed to and impacts on, you know, health time, money, resources, all of that. So, I I just that's not something I'd ever really thought about and that was new for me too. I am also curious that I kind of want to circle back to, you know, a point that Lissah, you just brought up as a basic scientist, you know, as a part of doing this, this podcast, we represent different, you know, sub disciplines within, you know, our field of

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environmental health and public health more broadly in that, Marissa, you're looking at macro level factors oftentimes place-based factors, how might historic policies impact, you know, place, factors, for example, what's available in certain neighborhoods as with regards to safer products, a lot of the work that you're doing is centered on that. And Lissah, on the, the, the other side of this, you know kind of honing in you're thinking about what's happening inside the body okay, so how does being exposed to some of these chemicals and environmental factors really affect, health through the actual cell level, like what's happening, our cells die, how might that, you know, really put people at risk of things like cancer and so on. We even have a lawsuit that we can talk a bit more about down the line. So, really you know, thinking about the impacts of things across the trajectory, whether you're talking about like really, you know, things around us and the policies that affect us to the biological level. So, I have a question for each of you or or for both of you and Marissa. I'm just curious, you know, in doing the place based, how have you found, and can you tell us a bit more about the work you're doing in the space of beauty justice as it relates to these place based factors and then what do you see for potential solutions in that.

MARISSA CHAN

So as I kind of talked through and as you had introduced, my work really sits in this space of examining the community and neighborhood level factors that are related to both product use as well as product availability and some of our preliminary work, which is kind of a part of my dissertation, has been examining these differences in hair product safety between neighborhoods in Boston, MA. And so, we have been going out, going to stores, taking photos of the hair products sections and entering data and so, we've collected data from these photos and we've also used Environmental Working Group Skin Deep Database hazard score, EWG just as a brief note, is a organization that really sits in the consumer safety space they work in water, consumer products as well as personal care products and food. And they have this publicly available data set database that allows folks to look up a hair product and see an associated hazard score and that was our use of, our way to evaluate product safety. And so we collected data on more than 14,000 hair products across the city of Boston, which is an ongoing feat, we're we're actually expanding that work, but first off, just huge shout out to all the folks who've helped out with data collection and data entry this project would be nowhere without them. But really, from that work what we found is that low income communities and communities of color, most notably Mission Hill and Roxbury, had more than a 2-fold higher risk of finding these high hazard hair products compared to Beacon Hill, which is a predominantly non-Hispanic white and higher SES or socioeconomic status community. So, this is really building the narrative surrounding a lack of access to safe products experienced by certain communities. And for me it really supports this idea that we cannot shop our way out of this issue. It should not be on communities and individuals to try to navigate these complex chemical ingredient labels as you talked through, like parabens and phthalates, it's like what does that all really mean? And so, there are really broader drivers of both product accessibility as well as potentially safety. So that's a little bit of background to that work, we're really expanding that right now, really starting up my dissertation project, which is titled RESTYLE that stands for Retail Environment and Hair Styling Exposure Study. And that piece is really shifting towards identifying community driven solutions. So really not only documenting these differences, but what can we actually do about it moving forward.

TAMARRA JAMES-TODD

One thing that I just want to also bring attention to, and as you were doing this work, is the importance of where we could find information and where we couldn't. So again, in this context of like the individual level like, I love that you are thinking about place-based factors and really thinking about the community but sometimes we expect, as you said, like the individual to be able to make their decision and they have potential availability or accessibility to these apps that might be able to help in decision making, but can you say a little bit more about what you found in, say, Chinatown for example? So, among the Asian community, there were some differences in what you know, information was available and wasn't available there.

MARISSA CHAN

Yeah, I think that was a really interesting finding and it unfortunately adds to this idea that there's not only a lack of access to safe products, but also information about products used by certain communities. So, one community that we had selected based on the fact that they had the highest percentage of Asian residents was Chinatown in Boston, which is a Boston neighborhood, and we unfortunately could not include Chinatown in our analysis based on the fact that it had such a high percentage of missing data. In fact, there were only nine out of the 159 products that we found in Chinatown that had EWG or Environmental Working Group hazard scores and that also played out in other neighborhoods, so the communities with the most missing data were found to be communities of color.

TAMARRA JAMES-TODD

Really, really powerful and important points. And you know, Lissah, I don't know that if you know, there's my, my background is molecular biology. So, prior to my yeah, I tell people that are like, really and I'm like, yeah, I once upon a time spent my time doing lab and bench based work and so I definitely have a strong appreciation for better understanding how higher exposures to things that we really believe and have evidence for being harmful can have even more extreme or severe effects on our health. And I'm curious if you can say more about some of the work that you're doing, you know, regarding molecular mechanisms, thinking about some of these environmental exposures, but also if you could speak a bit more to what you think the role of toxicologists or other basic scientists are in the beauty justice movement.

LISSAH JOHNSON

Yeah, so my work is sort of tangentially related to beauty justice, like I said, I'm studying ovarian cancer and particularly looking at a specific program cell death pathway. So, our body needs to get rid of damaged or excess or malfunctioning cells just to maintain health and proper tissue function and so this mechanism, apoptosis, is the way that the body does that and so when this process gets dysregulated, if you have too much apoptosis, then that can lead to diseases like neurodegenerative diseases, where you're losing valuable cells that your body needs to function. And then if you have too little apoptosis, then that can lead to diseases like cancer where cells that should be cleared remain and can continue to grow and divide and take over the body and so in addition to kind of understanding how this gets dysregulated in the process of forming ovarian cancer, I'm also interested in understanding kind of what other exogenous or outside factors contribute to the development or could contribute to the development of ovarian cancer. I'm mostly in the cancer field, and so there's been and especially with

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some types of cancer, there's been sort of a difficulty in connecting environmental exposures to that cancer type, just because thinking about routes of exposure or the complexity of chemical mixtures that we're exposed to, figuring out how to model that in the lab can be difficult, because we often work with like, reductionist models so that we can very clearly determine or demonstrate that this, this component, this factor causes this outcome so there is a challenge in connecting those things, but I'm interested in sort of exploring new models, for example, like follicular fluid, which is the fluid that surrounds the growing egg or follicle in the ovaries. There's been some interesting research coming out actually looking at different environmental chemicals that are found in the follicular fluid, which would come in direct contact with ovarian cells or fallopian tube cells. And so, looking at those chemicals and being able to, some of which are endocrine disrupting chemicals like they found PFOS chemicals in follicular fluids, so being able to connect those chemicals to different outcomes that they produce in relevant cell types is something that I'm interested in and focusing on and in terms of how I think basic scientists and toxicologists can be involved in the beauty justice movement. I really think that, and I think this is getting better but I've noticed that there's kind of a siloing of basic scientists and population health scientists, or the community. And as we've all discussed, beauty justice work is very interdisciplinary it requires us to work across disciplines and I think really necessitates working with the community to understand like what are the relevant exposures, what are the things that people in the community, the ones who are directly affected, what are, what do they care about. And so, I think being able to for basic scientists to integrate or interface more with community members and population health scientists, I think, is a good way to sort of help us tailor like our laboratory experiments to what people are seeing in the real world and what people are concerned about.

TAMARRA JAMES-TODD

What I'm hearing you say is that there is a place for basic scientists to really join the environmental justice or in this case, beauty justice movement in kind of not just, you know, being at the bench, but also really getting out to the community, hearing the concerns and being able to design studies that are community relevant.

LISSAH JOHNSON

Yeah, definitely and I think also like it's important to, I mean, for better or for worse, I think policymakers or other folks like to see the demonstration of like how this chemical is connected to this outcome. And so, I think that data that basic scientists can provide can also bolster arguments for why like these chemicals are bad or they have negative impacts on health. So yeah, I think that's another important role that basic scientists can play and like you said, definitely think that basic scientists should be involved in the beauty justice movement and have a role there.

TAMARRA JAMES-TODD

I'm an epidemiologist, so I'm somewhere in between the two of you in the type of work that I do, both looking at individual level risk factors, what people might say they use and then, you know, looking at on average what you know risk might be for a particular disease. We look a lot in our lab at cardiovascular related risk factors, pregnancy outcomes and so on. What you are doing Lissah is really setting up experiments that help to say how does that work and when you use the term reductionist models, it's taking out all the other noise that's happening in people's lives, people eat certain foods they, you know, exercise or not, they, you know, may work in a certain industry or not. And so, there's all these other

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things that can be impacting health and you take, you know, a particular experiment and you design it in a way where you can say, OK, I just want to know, does you know this particular exposure impact, you know, a particular biological outcome that's related to these diseases. And I think that's really powerful in our ability to design experiments that get at the exposure differences in populations that really could be attributed to the things that Marissa is looking at around place-based factors. So, if I don't have safer products available to me, so I'm exposed to higher levels of certain chemicals, what impact might that have on my health? And so, I love that collectively we're kind of looking at this across the continuum of health. I just want to also you know, see if you all could say a bit more, the truth is that I guess I'm in mid-career these days, I didn't know that I was there until now and I think the next generation of scientists are interested in having these conversations about how beauty justice, and more broadly, environmental justice, not only exist, but what we can do about it, these ideas of really being able to design and have solution really come to be and I'm curious, you know what you all think about in the context of the future of beauty justice and the clean beauty movement in the context of your peers and what your peers are talking about thinking about, what do you think the future of science in this area might look like with respect to beauty justice?

MARISSA CHAN

Yeah, I think that's a really great question, we really need to ensure that community knowledge, voices and experiences are really driving the work and I think a first step which is really important in community driven work and in a lot of these spaces is to listen when you first enter certain spaces. These folks have a lot of experiences and an understanding of the issues that are impacting them in a way that we will never understand unless we are directly from that community and directly impacted by that work. So, for folks who are getting engaged in environmental and beauty justice work, I would say that is important first step and just in general if we're speaking towards the clean beauty space. I do think that it is incredibly important for us in terms of future work to focus on not only the development of just safe products but the development of safe products that are more commonly used by Black folks and by communities of color, since that is not a focus of the current clean beauty justice movement, that did come up in one of our past episodes with Boma Brown West, and check it out for folks who haven't listened to it yet, but I do think that is a really important focus as well in terms of the beauty justice and the clean beauty movement and where a lot of this work needs to go towards.

LISSAH JOHNSON

Yeah, just echo, I agree with everything that Marissa said and also just want to, yeah, highlight that within the current clean beauty or beauty justice, well, I guess clean beauty movement there has been a focus on products that are not necessarily are not really marketed to women of color and so as we keep moving forward in the with the beauty justice movement, I think keeping a focus on equity and intersectionality and making sure that we're not recreating systems of exclusion or oppression as we seek out clean beauty is really important and really making sure that across income levels across cultures, races that everybody is able to find accessible, affordable, clean beauty products.

TAMARRA JAMES-TODD

So I have a related question for you all. One of the kind of big issues that occurred while we were in the midst of doing this podcast is the passing of the Modernization of Cosmetics Regulation Act of 2022. You know, prior to the passing of that federal laws around what was allowed in cosmetics really haven't

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changed since 1930s. And so I'm curious, you know, what your thoughts might be on the passing? Have this law and be whether you know Marissa, you kind of already spoke to this to some degree like what, what do you think both of you might policy play a role in in all of this? What might we have gained from this, the passing of this act really, as it relates to beauty justice issues?

MARISSA CHAN

I really do think policy has a huge role in beauty justice. It is kind of crazy, the fact that before this passing of MOCRA or the Modernization of Cosmetics Regulation Act the fact that there has not been any major updates since the 1930s like that is kind of insane if you think about it. This is an important step forward in terms of product safety and there are some updates, just one that comes to mind that I remember is there's a requirement to report serious events to the Food and Drug Administration or FDA. Additionally, the FDA will have increased authority to recall products on the market if they are found to contain a substance that is observed to be harmful to human health, and I do think these are important steps in the right direction, but there does need to be additional work in terms of defining safety as well as protecting the folks who are disproportionately burdened. So, this is important but there is a lot of work that needs to be done still. I think my final point is just the fact that while policy is incredibly important in this space, it is just one avenue that we need to go down towards beauty justice and so this will have to work in tangent with research, with basic scientists, with community folks. So, it will really take all of us to reach beauty justice.

LISSAH JOHNSON

Again, I agree with everything that Marissa said, there's definitely still room for improvement in terms of what do safe products look like and sort of defining what safety means. This is definitely a step forward and I think as Marissa stated previously, we can't necessarily purchase our way out of beauty injustice. So, needing regulatory boundaries I think it's necessary, goes hand in hand with needing to create also safer raw materials or safer chemicals to go with these products. An important thing that the podcast has highlighted is that sort of these cultural, societal drivers of beauty product use are not small, we want people to be able to look the way they want to look and be able to have products that work well for them and so being able to have safe products that work well for them, but also require innovation in the chemical space as well.

Thanks so much for joining us for part one of our finale episode of Beauty + Justice. The podcast may be ending, but we hope that you'll continue to revisit the episodes and to share them with friends, family, and other people in your networks. We'd also love to hear what you learned from the podcast and how it impacted you. And as always, we appreciate you leaving a rating and review wherever you listen to the podcast. Please be sure to join us next time for the last part of the finale episode where we'll get more personal and talk about how our backgrounds and life stories brought us to this work. We'll also get to hear from the next generation about what beauty and beauty justice means to them. Be well listeners and talk to you again soon.

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