## VIEW to the U transcribed Season 7: Without Further Ado; Episode #2 Professor Kristen Bos Department of Historical Studies U of T Mississauga

[intro music fades in and out]

Kristen Bos (KB): Seed beads, bead work and beading become a kind of coded knowledge.

My name is Kristen Bos, and I am an assistant professor of Indigenous Science and Technology Studies in the Historical Studies Department at UTM. And I've got a graduate appointment in the Women and Gender Studies Institute, and I'm also the co-director of the Technoscience Research Unit, which is an indigenous-led environmental data justice lab. And I'm Metis from northern Alberta in Treaty 8 territory.

In indigenous art activations, where we really see seed beads as understood as much more than just a material culture, as much more than just currency or for their role in the establishment of settler colonial states, but of historical records in and of themselves.

Other really significant and interesting uses of seed beads and wampum that are specific to where UTM is, is that the founding of the league of five nations for examples, their treaties are made out of wampum.

[theme music fades in]

Carla DeMarco (CD): The Small but mighty seed bead

Hello and welcome to *VIEW to the U*: An eye on UTM research.

I'm Carla DeMarco at U of T Mississauga. *VIEW to the U* is a monthly podcast that will feature UTM faculty members from a range of disciplines who will illuminate some of the inner workings of the science labs and enlighten the social sciences and humanities hubs at UTM.

On this episode of *VIEW to the U*, my guest is **Professor Kristen Bos** from UTM's Department of Historical Studies.

On the new season called "Without further ado," I will introduce you to some of the new people from UTM's vibrant and ever-growing research community.

Over the course of today's interview, Kristen talks about her research on Indigenous feminisms, with among other things, considers the past, present, and future of seed beads.

These little beads that have been used by Indigenous communities for thousands of years, vary in size but usually measure no more than 5 mm - or for a sense of scale, a bit smaller than a sesame seed – they tell stories, govern lands, and they have even been used as currencies, and on this edition of the podcast, Kristen covers all of this in fine detail, including how seed bead creations can be likened to a virus, how they help frame history, and how seed beads are "a visual reference to colonization," but also to Indigenous futures.

[theme music fades out]

Kristen Bos is Assistant Professor of Indigenous Science and Technology Studies in the Department of Historical Studies at UofT Mississauga. She has a graduate appointment in Women and Gender Studies Institute, and she is also the Co-Director of the Technoscience Research Unit, an Indigenous-led environmental justice lab at the University of Toronto.

Kristen did a Master of Studies at Oxford University and a PhD in Anthropology at UofT. She has a forthcoming book: *what the seed beads saw: Indigenous Feminist Disruptions of Colonial, Gendered and Environmental Violence.* 

Kristen joined the faculty at UTM in 2020.

- KB: So, I have two research projects, which I sum up as indigenous feminisms, beads and technology. And both projects share methods grounded in indigenous feminisms, which we'll talk a little bit about today, but crucially take a reframing of their research goals and research objectives towards indigenous sovereignty and land protection. And my first project is about glass seed beads. And so you might recognize them from museums or galleries from art fairs or powwows, or maybe even Instagram. Over the pandemic, Vogue actually started writing about these kind of now infamous bead drops in which indigenous artists sell out of their collections in seconds online. And so there's a bit of a moment with indigenous art and seed beads in particular. And then my second project, which I'll share a little bit about today, it's focused on the history, operations and pollution activities of the Imperial oil refinery. It's one of the oldest operating refineries in the world, and it's the largest polluter in Canada's chemical valley, which is about two and a half hours south of Toronto, and located in and around Aamjiwnaang First Nation.
- CD: Thank you, that is so interesting. Even just you giving that brief overview, there's all these questions that come up and I'll try to stick to the ones that I have.

But so again, I am very interested in your bead related research. I know you've described it as beads as research subject, and I understand that you have an upcoming book, what the seed beads saw. So, I wondered if you could talk a little bit more about this and what do beads tell us about indigenous narratives and storytelling and if there's some sort of piece that you've come across that really stayed with you in your research. But also, just because you mentioned about the beads and that there's been more of an interest in them, I'm also curious now that you've mentioned that is just, I know that we've got indigenous artists on campus, Maria Hupfield, but she deals with the jingle bells. And so, I wonder, are those similar to the beads that you're working with?

Anyway, I'm sorry, I've asked you way too many questions.

KB: Yeah. We'll take it one by one.

Yeah, my bead related research, I think about it as beads as method, beads as a research subject, beads as witnesses, and in this project, I'm thinking with seed beads. And so, I'll explain a little bit about like why beading. People are always like, why beads? And so for beads, the relationship between beading and indigenous peoples in this place extends across millennia and prior to colonization, throughout turtle island, throughout north America, pierce materials of all kinds, such as shell, copper, bone meteoric iron circulated through our communities, through our nations, through our territories, pretty much since time immemorial.

And then following colonization, our beads took on new materials in the form of glass. And these beads became known as glass seed beads, which are named in English for their varied and small sizes. And so just for reference, since we are on a podcast, but they would be beads that are under five millimeters. So really small, no more than five, rather.

KB: Also, there are indigenous words such as Anishinaabemowin for seed beads, which echo their former life forms. So, in Anishinaabemowin, the word for seed beads is *manidoominens*, which contains the words, "seed," "small," and basically "alive" as well, a "spirit."

So, seed beads are really well documented in the historical record, in colonial journals, and inventories as valuable currencies. And there's been a lot of scholarship on the production, the circulation, and the role of seed beads as trade beads, specifically during the trans-Atlantic slave trade and in the colonization of the new world, "new world". And in the popular imagination, seed beads figure in some of the most famous and really pervasive settler colonial narratives. For example, glass seed beads from Venice are listed as one of the, "gifts" that Christopher Columbus gives to the Taino peoples. When Lewis and Clark set out in a custom river boat on the Missouri river to map the lands, they note that their expedition almost starves because they didn't bring enough blue and white seed beads as trade items, as currencies.

KB: And so seed beads come up again and again as trade goods, in deeds and treaty in the US and in Canada. But while historical studies on beads have made significant contributions in the way that we might think of colonial capital, and the way that we might think about the economy, about labor practices, about technology, and governance, it's actually in indigenous feminism scholarship and in indigenous art activations where we really see seed beads speed work and beading practice as understood as much more than just a material culture, as much more than just currency or for their role in the establishment of settler colonial states, but of historical records in and of themselves. And a great example of this would be as in wampum, which are beads that were made out of different kinds of

shell, mostly Quahog, along the Eastern coast and were used in the making of treaties, right, and to establish nation-to-nation relationships.

KB: And so, in these items, which are course material items, they're so much more right. They're records, they're laws. And so, you'll see in indigenous feminisms that seed beads, bead work, and beading become a kind of coded knowledge. So, they hold language, they hold stories, they hold maps, as well as theories and in laws like in the wampum. Other really significant and interesting uses of seed beads and wampum within indigenous feminisms, within indigenous history, that are specific to where UTM is, is that the founding of the league of five nations, for examples, their treaties are made out of wampum. Wampum now will use seed beads to make them, but it's continuing in that tradition.

And so, for me, beads are storytelling devices. That's where I get my interest in them and that's where I understand them as a research subject, or rather not so much subject, I don't love that word, but I like to think of them as co-conspirators, give them a little bit more animacy, come back to that spirit that they have. And then a particular piece that has really stayed with me.

Yeah, my favorite piece of bead work is part of a series and it's by Cree artist Ruth Cuthand, and it's her trading series. And it's so beautiful. In it she beads 12 viruses, brought by Europeans and one new disease, supposedly a syphilis, that was brought back to Europe. And in these mixed media pieces, cut hand beads, the viruses as they appear under a microscope. And so seed beads work really well here, because they are so small and you do get that granular detail. And so she's beading viruses like influenza, bubonic plague, measles, small ox, and she's continued the series and even beaded COVID 19 last year, I actually got a print of that and I'm hoping to hang it in my off at UTM one day, because I started during COVID. But Cuthand says that for her, beads and viruses go hand in hand, not just on her beading table, but in history because beads are a visual reference to colonization in which furs are traded for beads. And then we see the establishment of the fur trade, the Hudson's bay post, eventually Canada, and she kind of argues and demonstrates that it couldn't have happened without beads.

- CD: Very cool. And so then is there a relation though with the beads and some of the items that Maria Hupfield has made?
- KB: I mean, so, jingles are specific to this place. Again, very placed based art form Anishnabe used in many ceremonies and traditions, especially on ribbon dresses. And as I understand jingles, I mean they're related and they aren't. The history of the jingle dress and jingle dancing, I think goes to the last pandemic in the early 1900s. And I think it was like a women's dance that was made to lift people's spirits, as their communities are kind of being ravaged by this disease. And so, I mean, they're similar in the sense that they're a kind of adornment. Beads, like jingles, are also traditionally associated with indigenous women, girls, to spirit, queer people as a kind of art form. But you know, there's lots of space in it now for others too, but yeah, I'm actually gonna be working with Maria in a

future iteration of this project that we're working on now. She's gonna help me with her indigenous artist creation studio. We're going to host some meeting sessions.

- CD: That's fantastic. You make the perfect collaboration though, that's amazing. And I think that beading, as you're talking about it, is a type of technology, but that kind of leads into the next question about, I know that technology really factors into your work. You did touch on it a little bit, because you did talk about the pollution aspect to one of your new projects, but I just wondered if you could speak a little bit more about how technology factors into your research.
- KB: Yeah, of course. So, for me, as an indigenous feminist scholar, it's important for me to do scholars like Dr. Kim TallBear have urged us to do, which is to study settler science and study white supremacy. And a focus on technology allows me to do this. Writing as la paperson in a *Third University is Possible*, which I highly highly recommend. It's just a small little book, it's open source, you can get an online. K Wayne Yang reminds us that while settler colonialism is often thought of a past event or something that happened to indigenous peoples or like a history, right? It's kind of this big overarching theory, it's a story of history, but it's also a set of technologies. So for example, it is the privatization of land, it is the creation and management of debt, it's weapons, it's knowledge institutions like universities, it's financial institutions that sustain petrochemical extraction.
- KB. And so, it's all of these processes and machinery and devices that make the field of technology and science and technology studies so desirable for me as a scholar because it gives you that entry point. It also allows us to resist more extractive research practices of the university or extractivism. So, for example, in my bead research, as in my research at the lab, I don't collect new data, which is to say I'm not necessarily going into a community and asking people to kinda share their pain and their trauma and their stories with me, that I'm then going to reanimate towards whatever purposes I think are appropriate. Instead, I kind of approach my research on technology as there's technology all around us. It's abundant, there's so much that's already been written on it. There's so much that we can see when we turn our focus to settler colonial technologies to the state itself, that it kind of allows me to be in better relation to my own ethics protocols and communities. One thing we always say at the lab, because we focus on pollution, people will often like to say that we are doing like a health study or something like this. And so we'll always say like, no, no, no, like we are indigenous researchers. We are studying a company, We are studying the state, We are studying a set of technologies instead, to make this argument. And so that's what it is for me. It's this process, this method of studying up.
- CD: I know that you're very interested in chemical contamination of some of these artifacts that you mentioned. I watched a video that you were on that was put together by the women in Gender Studies Institute. And you told a story about going to an archive, which I think was in Germany, if I'm not mistaken, but you had said, the person there was all sort of outfitted with kind of this protective gear. Which also made me think about, just the notion of research risk. Like sometimes there's people who are at risk based on what it

is that they're studying, because they might be putting themselves into sort of harmful situations. But I wondered if you could speak a little bit more about that, about how the artifacts are preserved and it can be harmful to the people who are either curating or studying them.

- KB: Yeah, definitely. Yeah, I became interested in chemicals and chemical contamination, a little unexpectedly. And so, you're right, it did happen when I was doing field work and in this particular field work, I was in mostly German cultural institutions, identifying and thinking with indigenous material culture there. And so there's a long history of many European countries, specifically Germany, coming in and extracting, taking, stealing indigenous artifacts and now they've got them all and there's often what we would call like no providence. There's no real context for where they came from. Sometimes there might be like a regional affiliation, but oftentimes the providence will go with the collector who gifted this item to the institution. And so my work there was, just going in, seeing what was there and that's actually how I got to bead specifically. So I had always been working with beaded objects, and initially when I went into the archives, I was hoping to create some kind of database to create some kind of collection that I could then say something about.
- KB: But what I found was that because there was no context, because there was no providence, it was really difficult to know for certain where something came from or who made it or where to go for more information. And so then I got just very specifically interested in the beads there, but also another thing that happened while I was doing this work in the archives was that often I would meet curators or collectors and they would be in PPE. So they would be masked up or they would just kind of be talking about symptoms that they felt. And there was an extreme case in which a curator said that she no longer visited the Indian materials because she was sure that they were making her sick. And so the history here is that indigenous, African material culture that's made out of more "natural materials" like hide, sinew, animal products, was in historic and still subject to much more invasive and toxic preservation practices and techniques.
- KB: And so, museum-study scholars will cite enumerable chemical cocktails that had been applied to the objects pretty much from the 1700s onwards to about the 1970s, where you see more regulation around chemicals like ddt for example, arsenic, which was used on material, culture being more regulated. And so, yeah, so I got thinking about chemical chemical contamination and what that meant specifically in the context of the museum environment. And so this is kind of too pronged for me. So the obvious issue here is that, you know, it's going to impact people who handle it in the immediate. So curators, it's going to have a serious effect on the possibilities of repatriation in the few example, polls of where those exist in 1995 Nara, which is the, in the states, how graves and cultural items can be returned to communities, the laws that govern that exchange.
- KB: And so, there was an amendment made to it in 1995, that kind of said, we acknowledge that some of these objects could be toxic and we'll kind of do the best of our abilities to let you know if that's the case. But, as you can imagine, museums aren't the best for record keeping, especially with things that were deemed routine maintenance, right? So

something like preservation. And so oftentimes you don't know what's on the object or how damaging it is, and how I've been thinking about it and conversation with my other work on pollution and the cumulative effects of pollution. I've been thinking a lot about how indigenous things, objects, people are subject to more extreme kinds of violence, especially from cultural institutions, and how we can think through that and how can we can strategize around it. And so in the next iteration of this project, I'm going to be thinking a little bit more deeply about chemicals and chemical contamination, and also thinking about contamination itself.

- KB: Because when we talk about contamination, it's easy to fall into this conversation about something that is pure and something that is contaminated. And in the world that we live in, which is toxic in all sorts of regards, we want to avoid that and really focus on how we make life in toxic environments. And so that's kind of what I'm up to with that, but there's going to be some neat future projects, some chemical analysis of seed beads, and again, building some tools and strategies around different kinds of contamination and how we might live with them in our communities. And it's interesting to think what people do when faced with that toxicity, how they react to it, right? So in the case of the curator saying, I just, I don't go there anymore, but she's the curator for that. And so what does that mean for the objects? What does that mean for the life cycle of the objects? Especially in German institutions, lots of sacred objects there. And how are they being dealt with? And how are they being cared for?
- CD: Yeah. It just made me think about all the bad press that the museum of human rights went through this past year with the way that they treat their staff and all that stuff, it's just museums. Like you say, there's all sorts of issues. Maybe violence is too strong of a word, but...
- KB: It's not, it's not, actually a great book. One a book that's got me through the last little bit thinking about this is Saidiya Hartman's...
- CD: She's a fantastic writer.
- KB: Yeah, I mean, she's always thinking about the violence of the archive and her latest books, Wayward Lives and Beautiful Experiments. She's actually going into archives, uncovering the intimate histories of black girls, women, and queer folks and rewriting them.
- CD: Oh, wow.
- KB: It's an archival intervention, but it's also part like speculative fiction. [crosstalk 00:19:49] And she's kind of giving them a more just reading, but it's really beautiful book. And it's definitely a text you want to think through the violence of archives and the violence of administrative systems and bureaucracy. It's definitely one to read.
- CD: That sounds fantastic. Because you did mention this book and I'll have a link to that, and I'm going to link to your website as well. So people can get more information on you but,

are there other things that you would say that people are interested in finding out more about indigenous feminisms and beadings and indigenous science? Like all the things that you touched on, were there other things that you would recommend people read?

- KB: Yeah, for sure. For folks who are new to indigenous feminisms, there is an article called, "Introduction to Native Feminist Texts" from Eve Tuck and Karen Recollet, who are both professors here at UT... They explained the specific genealogies of native feminisms over the past five decades. So it's like an incredible paper, it's like one of those papers that you want to look at the bibliography and see what's up there. For beading, there's a really beautiful catalog that you can get at the library or order it, and it's from a exhibition that showed in Toronto in 2017 called, "Beads, They're Sewn So Tight" by Lisa Myers, who's a professor over at York, as well I think in the school of environment. And I really loved this show and I love this text because it features Anishinaabe and Haudenosaunee bead work, in relation, in conversation to the environmental issues that affect the artist communities.
- KB: So, for example, there's a piece by [Gene Marshall 00:21:23], and it's titled, ["Ring of Fire Two" 00:21:25]. And in it, she has seven beaded gauntlet mittens, like just these really beautiful fluffy mittens arranged in a circle, that represent the gathering of communities affected to contend with the complexities of the economic development and the subsequent environmental degradation from the [CRO 00:21:46] might mining and smelting to developments that were proposed for her homelands in Treaty 9 territory. And so it's just that really gorgeous and evocative work that connects, like Cuthand is connecting, beads and viruses and histories of colonization, [Gene Marshalls 00:22:04], connecting beads and resource extraction, but as well as environmental justice movements against these kinds of developments. And so again, we see beads as this, just, very complex piece of material culture. And then for indigenous science and technology studies, I would recommend Dr. Kim TallBear's, *Native American DNA*.
- KB: And this is where she's studying up, in this case, she's studying genetic scientists, and she's thinking about what it means to be Native American. She's also one of the founders of indigenous STS or indigenous Science Technology in Society, which is a subfield of indigenous studies as well as science and technology studies. And she has a really cool lab, indigenous STS, and their work is always incredible to read about on Twitter or in other places. But the last book that I always recommend, it's like one of my favorite books of all time. And it is by Banu Subramaniam, and it's called, "Ghost Stories for Darwin". And she was originally trained as a plant evolutionary biologist, and so she uses her training, her experience there, and then offers an alternative and complex history of many great men of science. And it's really fascinating. It's a book you read slowly, cause it's a lot. One of the things about science and technology studies, that I love about it, is that it's such a huge feel. It's so capacious. On one hand you're studying beads, but also you're not really studying beads and so that's what I like about it. I think there's really great storytelling devices in it. So those are some texts I'd recommend.
- CD: That's fantastic. That's going to be a great list to have as an accompaniment to this podcast. And so, every season, I have a theme for the podcast and so this one I've titled

without further ado. So, it really is meant to be a way to meet some of the new faculty members, because again, not all of us are going to be back on campus. And so it'll be nice just to find out more about some of our new researchers. And so I'm just wondering, and you did touch on this, about how you got into this area in the first place. And I'm so curious because I know you did start out more so in archeology, but it just feels like you branched out in all of these different historical studies and women and gender. But I wondered if you could just give an overview of how you got into...

- KB: Yeah, so I started out as an archeologist. It's funny, I have so many other native friends and scholars who started in anthropology or archeology and we always talk about like, why did this happen? And I think the obvious answer is that's a field in which we're very well represented, not in a good way, but there is a sustained and enduring focus on us and our histories. And we all rebel from the field immediately, like never work in it again. But I started as an archeologist and I actually was pretty hell-bent on not doing indigenous studies for a while. And then I got to Oxford and I was supposed to be studying medieval sexuality and when I got there, I just got really frustrated because it turned out almost everybody was studying indigenous folks, but there were no indigenous people doing that work there.
- KB: And so, I just decided that I should do that work then, but I could do it in a better way. And so that's how I got started with material culture. And while I was at Oxford, I started working with these beaded panel bags in the collections, in the Pitt Rivers Museum, which is a old colonial ethno history museum, we might call it, in which the objects are sorted by type and form and function, very disconnected from the native context in which they were taken. And then, I was drawn to the bead work and actually did bead when I was younger, and I do bead now, I do mostly loom work. My issue, the reason I'm not an artist, is I don't have an incredible eye for color, we might say. For me, beads, when you look at a really gorgeous bead piece, the mastery of color on it is next level. There's 200 different shades of blue and they represent this particular part of Georgian bay.
- KB: And I don't have that eye unfortunately. But yeah, and so that's kind of how I got interested in beads. And then though I am newer to the field of science and technology studies, when I met my mentor, professor Michelle Murphy, and they looked at my work, it became very clear that I had always been doing science and technology studies, that even when I was in archeology, I was more interested in studying archeologists that even when I was in the archives, I was more interested in the built environment of the archives, the technologies that sustain the archives, the practices and processes of the curators, and then with the objects themselves. One thing I haven't talked about, which we can end on, because I think it's a really provocative thought, is the main work I'm doing with beads is I'm thinking about them also as earthworks. So thinking about beads as glass, and glass as silica or sand, glass as potash, or the ashes of plants, glass as limestone or the calcified remains of flora and fauna, and this really ties into other indigenous feminist scholarships such as [inaudible 00:27:18] anthropologists, so we taught work on thinking of oil petrochemicals as a kind of fossilized kin and thinking about the kind of relationships we can build with, again, these substances that weren't toxic before, but under settler

colonialism and with certain technologies become toxic. And so it makes sense to end up here, but I know folks are, can be kind of startled when I tell them I was in archeology.

- CD: I so relate to what you said about you do your own and you have done your own bead work. It's like how I feel about either art or design, in that I can appreciate the design and beautiful art. I can't do it.
- KB: The last thing that I made, I used a template and I made a baby Yoda necklace for my little sister, and it is really..., it looks great, but I did use a template. I'm very appreciative of the labor and the effort. And yeah, but maybe one day, I'm getting better.
- CD: The last thing I was just gonna ask is, if there's anything that you've been reading or books or podcasts or anything you've been listening to or watching lately again, maybe just to get a better sense of you...
- KB: Yeah sure. Yeah, I actually, I read a lot this summer, more than I have maybe in any other summer, one book that I keep coming back to, or two books. The first is a series of poems, by Natalie Diaz. It's called, "Postcolonial Love Poem". It's just a really beautiful text. Again, there's a strong link between colonial gendered and environmental violence, but also of language, and land, and lovers. It's a very romantic text, but it's an optimistic text as well. And then I always have one Dionne Brand book on the go. I just feel like she really helps me stay in the zone. And I just reread maybe for the third time, her novel theory, which hits very close to home, it's actually about academics. It's about a grad student who can't finish her PhD, she's getting wrapped up in different love affairs and different distractions and... So those are two that I would definitely recommend. I do watch a lot of TV. I watch a lot of movies, Reservation Dogs, obviously. I don't know if you've seen it, I've been streaming it. It's by Sterling Harjo and Taika Waititi. And I think it's technically a comedy, it's very funny. It's about four native kids growing up on a reservation and they start doing petty crimes to raise money, to get themselves to California. But it's such masterful and brilliant show making.
- CD: I believe it. I would watch anything Taika Waititi was involved with.
- KB: It's incredible, you've got to watch it tonight.
- CD: I'm going to look for it.
- KB: Yeah, absolutely.
- CD: That's great. I really appreciate your time so much, Kristen. I know how busy everybody is these days and especially with the start of term and everything, but I really appreciate your time. It's so nice to get a chance to chat with you.
- KB: It was nice to talk to you too. Yeah, this was pretty fun.

[outro music fades in]

## CD: We had a bit of a laugh there!

I would like to thank everyone for listening to today's show.

I would especially like to thank my guest, Professor Kristen Bos from the Department of Historical Studies at UTM for being so generous with her time and for telling me about her research at UTM and in the Women and Gender Studies Institute, as well as in the Technoscience Research Unit at UofT.

I can't thank her enough for the great recommendations, too – and I've since become a HUGE fan of the Reservation Dogs series. Highly recommend.

Thanks, Kristen!

I would like to thank the Office of the Vice-Principal, Research for their support.

If you are a new researcher at UTM, please get in touch with me! I would love to meet as many people from our campus's research community as possible.

Also, if you can take the time to rate the podcast in iTunes, it helps others find the show and hear more from our great UTM researchers.

And this year marks the 5-year anniversary for VIEW to the U! With roughly 50 tracks, over 20,000 downloads, and everyone's support, it feels very celebratory. I am eternally grateful to the researchers who participated and those who have supported me – you know who you are! – along the way. A heartfelt thank you.

Lastly, and as always, thank you to Timmy Lane for his tracks, tunes, support, and everything!

Thank you!

[theme music fades out]