

UNESCO World Virtual Indigenous Circle on Open Science and the Decolonization of Knowledge, November 12, 2020

Agenda, speakers and support team

Opening

STOLꞤEŁ John Elliott, Tsartlip First Nation
Katsi Cook, Wolf Clan Mohawk Akwesasne

Why we are gathering

Lorna Wanostsa'7 Williams, Lil'wat First Nation, Professor Emerita, University of Victoria, Canada

Moderator

Laurie Robinson, Mahingan Sagaigan Nation, Executive Director, Indigenous Advanced Education and Skills Council, Ontario, Canada

Remarks

Sebastien Goupil, Secretary-General, Canadian Commission for UNESCO
Keiki Kawai'ae'a, World Indigenous Nations Higher Education Consortium
Carrie Bourassa, Canadian Institutes of Health Research
Dominique Bérubé and David Newhouse, Social Sciences and Humanities Research Council, Canada
Kevin Fitzgibbons, National Science and Engineering Research Council, Canada

Speakers

Leroy Little Bear, Blackfoot First Nation, Professor Emeritus, University of Lethbridge, Canada
Gregory Cajete, Tewa, Santa Clara Pueblo, Professor, University of New Mexico
Wangoola Wangoola Nduwala, Nabyama, MPAMBO African Multiversity, Busoga, Uganda
Zanisah Man, Orang Asli Professor, Universiti Kebangsaan Malaysia
Sonajharia Minz, Vice-Chancellor Sido Kanhu Murmu University, Dumka, India
Jazmin Romero Epiayu, Wayuu activist, Colombia
Ed Connors, Kahnawake First Nation, Psychologist
Manulani Aluli Meyer, University of Hawai'i, West O'ahu

Summation

José Barreiro, Taino, Cuba; Emeritus Smithsonian Institute, USA
Kevin Lowe, Gubbi Gubbi, Scientia Indigenous Fellow, University of New South Wales, Australia

Closing

Song from Hawai'i by Manulani Aluli Meyer

Rapporteurs

Dorothea Harris, Indigenous Initiatives Coordinator, University of Victoria
Patti Ryan, President, Southside Communications Inc.

Support team

Suriani Dzulkipli, UNESCO Chair in Community Based Research and Social Responsibility in Higher Education, University of Victoria
Nathan Creighton Kelly, Canadian Commission for UNESCO
Ellie Haine-Bennett, Canadian Commission for UNESCO

Note: Words spoken in traditional languages have not been transcribed in this document. They are noted as: "words spoken in traditional language."

Moderator remarks

Laurie Robinson

Thank you, everyone. Thank you all so much for joining us here today. It is a pleasure to be with you all. I'm really appreciating all of you finding some time to be with us from your homelands, from your offices and in many places across the world today.

This session is hosting Indigenous speakers from across the world. And we have 300 registrants for today's circle. So good afternoon. It is 12 o'clock here in the territory where I'm sitting, 12:00 noon, and I'm sure you all want to say welcome to the World Virtual Indigenous Circle, Open Science and the Decolonization of Knowledge. Today's webinar is organized by the Canadian Commission for the United Nations Educational, Scientific and Cultural Organization, also known as UNESCO, and it's co-hosted by the World Indigenous Nations Higher Education Consortium. The discussions and expertise shared today will help UNESCO in their development of a recommendation on open science and the decolonization of knowledge.

My name is Laurie Robinson, and I have the honour of moderating the circle. I am an Anishinaabekwe and my homeland is in the territory of the Wolf Lake Peoples. I am the executive director of the very first Quality Assurance Organization for Indigenous Institutes. It is called the Indigenous Advanced Educational Skills Council in Ontario, Canada.

For some of us, when Indigenous Peoples gather to share knowledge and understandings, we do so in a circle and particular protocols and approaches are taken to help facilitate sharing information. For example, for some, this may mean the passing of an eagle feather or another sacred item to the speaker.

Today, our circle is a virtual one and is online, and as best I can, I will facilitate our discussion honouring those protocols. We will have an opening from the western part of the lands where I sit today and an opening song from the East, remarks from a few organizations, presentations by speakers from many parts of the world, and open dialogue with all of the participants who are joining us here today. Summations by two scholars and a closing song as we prepare to get the circle underway.

I have a few housekeeping items to share with you all, and this will help to ensure the best experience for all participants and attendees. Please keep your microphone on mute on your device until you are invited to speak. I'm asking everyone to turn their cameras and microphones off unless they are speaking. If you choose to keep your video on, that is quite all right as well. When you are speaking, please sit or stand close to the microphone and ensure as best you can that there are no obstructions to your microphone. Exit all unnecessary applications on your device. And finally I want to let you know that the event today is being recorded. The recorded session will be posted to the UNESCO YouTube channel in the coming days. In addition to that, a transcript of the discussions, presentations and all of the dialogue will be prepared.

For all of those who are sharing information on social media today for this event, I invite you to use the following hashtags: #decolonizedknowledge and #openscience. The handle for CCUNESCO is @CCUNESCO for Twitter and Facebook.

Miigwech, everyone, for your cooperation. We will begin today's circle with an opening from Mr. John Elliott of Saanich First Nation. John is a respected Elder of his First Nation and has taught at ŁÁU, WELNEW Tribal School in Saanich, British Columbia for over 30 years.

Openings

John Elliott

[Greetings in traditional language.]

Just a few words I'm saying in the homeland language of the WSÁNEĆ People.

First of all, I wanted to thank Lorna, my dear friend, respected friend for asking me to join you all today. I feel very humbled by this opportunity to be able to be here with you today and say an opening prayer. I was saying that my [speaker uses words spoken in traditional language] name is J'SINTEN. It's an old name that goes back quite a ways into the 1700s here in this area. I was given that name when I was given an honorary education degree from University of Victoria. They changed my name from [unclear] to J'SINTEN, which means "he's going up to people."

I've worked in language for so long and the survival of our homeland language. Forty years went by so fast! But I was saying that all of our languages are a God-given right and that the wellness of our language is very connected to the wellness of the Earth. And so I wanted to keep that in mind as I do this opening prayer and song. And I'll do the prayer in my language and then I'll do the song. And the song that I will use today is a song that was gifted to us as we were in a little prayer circle many years ago, 40-something years ago. And the ancestor ladies came in our circle and gave us this song, and they said, "When you want your language to survive and you want to pray for the languages, use this song." So I'll use that one today. With that, I begin my prayer.

[Speaker uses words spoken in traditional language.]

That's my prayer and my song. And that song we've been singing for the last 40 years, since the ancestors passed it along to us. And I use it every day and I pray that our languages will survive, that our people and our children have a dignified life and find a life of peace and harmony once again in this world. [Speaker uses words spoken in traditional language.]

Thank you so much for gathering together and speaking about these important issues. Thank you very much. That's all I have to say. [Speaker uses words spoken in traditional language].

Laurie Robinson: Miigwech, John. I now invite Katsi Cook. She is an Akwesasne Mohawk, respected Elder and traditional Aboriginal midwife. She's a lifelong advocate of women's health and well-being. She is the director of the Spirit Aligned Leadership Program, a program that exists to elevate the lives, dreams and voices of North American Indigenous women Elders.

Katsi Cook

[Speaker uses words spoken in traditional language].

The song I'm going to share is a call to the four beings at the four directions of the universe to ask for their support, their help in helping our people, our families like that.

[Speaker sings in traditional language].

Laurie Robinson: Thank you both so much for that beautiful opening, and what a wonderful way to start our circle today. It is my honour and my pleasure to introduce you now to Dr. Lorna Williams. Dr. Williams is an associate professor emerita of Indigenous education at the University of Victoria. She is also the chair of the First People's Cultural Foundation in British Columbia. Dr. Williams will set the stage for our virtual circle today by speaking on why we are all gathered here today and what we hope to accomplish. Dr. Williams?

Why we are gathering

Dr. Lorna Williams

[Speaker uses words spoken in traditional language].

Thank you for setting us in a good way, for starting us off in a good way. Thank you to each of you for coming to join us. And for coming to work together on this important topic. I want to thank the lands and the people whose lands I am on. The [speaker uses words spoken in traditional language] speaking people and the [speaker uses words spoken in traditional language] speaking people. Lil'wat7ul, that's where my ancestors are, my family, my community, and it's a real honour for me to be a part of this gathering.

Nathan, I had asked you to add for me the frogs that were on our — can you do that now? Thank you. I want to acknowledge the artist who created this and to thank Dorothea for letting us use it.

[Shares frog illustration.]

This is an important image. It's an image of the frogs that at this time of year announce ceremonial gatherings. They announce these gatherings that are used for transformation. Because it's a time for us to revisit who we are, where we are, who our ancestors are, where our teachings come from, to help us to continue in a good way.

So in a sense, that is what we're doing today. We're gathered today, to gather in a circle and we are here to shape what is in the middle. The bundle of knowledge that will guide the way in which Indigenous Peoples' knowledge is continued and created from all over the world. Our knowledge systems, our languages, our identities have been under assault for generations and generations. And it was in a prophecy that the time would come when we would join together to ensure that our knowledge will continue.

As Indigenous People, we have been working with our ancestors and with the lands, with all our relatives to [inaudible] continue and that our knowledge systems continue to be used and known and to be gifted to us by our descendants. So we're here to add our knowledge to the world.

And each of us who speaks today will shape what that looks like. We will share so that that knowledge is used in a respectful way. And so that it doesn't become distorted, that it's honest and full of integrity and so that it's protected, but it is a part of the world. We're coming out from the shadows and I want to thank each of you for contributing to that knowledge system. Each of you will add and shape that knowledge. So that it can be remembered. So that it can be a guide for all of us continuing forward in education and in research, in studies and in the reshaping of institutions to protect and to uphold our mother, the Earth, our father, the Sun and all of our relatives.

So thank you very much, each of you, for being a part of this and adding your voice and to breaking the silence of Indigenous knowledge. It's time to decolonize and to help all of our brothers and sisters around the world to be able to do this. [Speaks in traditional language.]

I would now like to open the way because we don't have much time. And I want to first acknowledge Sebastien Goupil. It's really important to know that when work needs to be done, that people come forward, people step up to do the work that needs to be done and I just want to acknowledge Sebastien, the head of the Canadian Commission for UNESCO, for stepping up and offering his support to make sure this circle would happen. I want to thank his team and for all the help that they've provided to be able to bring everybody together. So, Sebastien, I'd like you to say the first words to open this session.

Opening remarks

Sebastien Goupil

I would like to thank Dr. Williams for her good words. Thank you also, Elder Elliott and Elder Cook.

Welcome everyone. I would like to acknowledge that I am speaking from the unceded territory of the Algonquin People on Turtle Island, which is known today as Canada.

Advancing reconciliation between Indigenous and non-Indigenous peoples is extremely important to us at the Canadian Commission for UNESCO, and this is why I'm very happy to be participating in and supporting this important conversation. I've been working hard with my team, our members and networks to position our Commission as a strong ally of Indigenous Peoples. And it is a real honour to be invited to say a few words today.

As you know, UNESCO, as a specialized agency of the UN system, plays an important role in setting standards and norms on a variety of priorities, especially those relating to the protection and promotion of all forms of rights, culture and heritage. UNESCO is currently working toward producing a new recommendation on open science, and new international standard-setting instruments will soon be adopted. This means that UNESCO will invite its member states to take whatever legislative or other steps may be required to apply those principles and norms at the national level.

This is why it is so vitally important that this new recommendation contributes to efforts underway to decolonize knowledge, as Dr. Williams was saying. It needs to accurately reflect a diverse knowledge system, especially the views and experiences of Indigenous Peoples around the world.

I strongly believe that our gathering today and the work we have proactively advanced with partners from all around the globe will enable us not only to influence but I think shape how Indigenous and

other forms of traditional knowledge are reflected in this new recommendation. In fact, I find that we have a moral obligation to ensure that they become central to how we understand the world in which we live.

Science can no longer ignore the knowledge and wisdom that comes from these knowledge systems that have been around since time immemorial and can continue to benefit future generations.

We were very happy as a Commission to work with two exceptional allies and leaders, Dr. Williams and Dr. Hall, on a paper to this effect. It calls for science to be a dialogue between knowledges rather than a knowledge that exists only insofar as it silences or eliminates other knowledges. And this conversation, the circle today, is one of a series of 11 webinars that discuss this important paper and that seeks to influence this UNESCO recommendation. The webinars are helping create the right ethical space to advance this much-needed dialogue.

Moving forward, we need to ensure that science is open to local and place-based knowledge, as well as to previously excluded knowledge systems, including Indigenous ones. We need to ensure that science is a practice that is conducted with and for communities.

In closing, I want to extend a special thanks to Dr. Williams for the outstanding work she has done to mobilize partners to organize the circle today. We are very fortunate, Dr. Williams, so thank you, a friend of our commission. Thank you for your outstanding support.

Special thanks as well to our co-host, the World Indigenous Nations Higher Education Council (WINHEC) and the UNESCO Chair in Community-Based Research and Social Responsibility in Higher Education at the University of Victoria. And to the members of my team who have made this conversation possible. I'm very much looking forward to these discussions and to see how we can work together as allies to shape a much more open and equitable future for science. Merci, thank you, chi-miigwech.

Laurie Robinson: Miigwech, Mr. Goupil, miigwech Dr. Williams, for the opening remarks. We will now continue hearing from other organizations that have been invited here today to share with us what they are doing.

We will start with the co-host of today's Circle, Dr. Kei'ki Kawai'ae'a from the World Indigenous Nations Higher Education Consortium. She is a Native Hawaiian from Keaukaha, Hawaii. She serves as the Accreditation Co-chair for the World Indigenous Nations Higher Education Consortium, and she is also the Director of Ka Haka 'Ula O Ke'elikōlani College of Hawaiian Language at the University of Hawai'i at Hilo. WINHEC [the World Indigenous Nations Higher Education Consortium] seeks to provide an international forum and support for Indigenous Peoples to pursue common goals through Indigenous education.

Joining Dr. Kawai'ae'a here today is a student. Her name is Kealani Makaiwi, and she will be providing an opening and a chant. She is part of one of WINHEC's organizations, the World Indigenous Nations University, Hawaii Pacifica Region.

Dr. Kei'ki Kawai'ae'a

Slide: 'Ano'Ai

Hi, can you hear me? Aloha? Mahalo nui. [Speaker uses words sung in traditional language].

[Slide text:] *We are grateful to be here in your presence. We are honored and filled with aloha. As we meet together, let us all be in tune as we share our thoughts and learn from each other.* – Kealani Makaiwi, WINU Hawai'i Pasifica

[Kealani Makaiwi sings in traditional language.]

Dr. Kei'ki Kawai'ae'a

Mahalo nui, Laurie. [Speaker uses words spoken in traditional language].

We pay respect to the Indigenous Elders and traditional owners, present and past, of the Lekwungen Territory. And we bring greetings from member institutions across the globe, Indigenous Elders and knowledge holders who have been the inspirational foundations of WINHEC as an international Indigenous higher education consortium. On behalf of the executive committee and members, we extend an appreciation and respect to the Secretary General, Canadian Commission and members of UNESCO Canada, members of the Open Sciences organizing committee. Especially to you, Dr. Williams, for your leadership and to the Indigenous committee and colleagues for the opportunity to participate in this historic global webinar.

Established at the World Indigenous Peoples Conference on Education in 2002, WINHEC has a membership that represents many Indigenous nations and educational institutions in eight countries, including Alaska, Aotearoa, Australia, Canada, Hawaii, Norway, Taiwan and the US working to address our collective concerns for the rights of Indigenous People to access all levels of education and to address the barriers that impede respectful engagement of Indigenous Peoples in teaching, research and other endeavors in education.

The founding members determined that the goals and objectives of WINHEC must align with the goals and objectives of international instruments. These include the United Nations Declaration on the Rights of Indigenous People, the International Covenant on Economic, Social and Cultural Rights, the International Declaration on Human Rights and other international documents of note designated to protect and promote the sovereign rights of Indigenous Peoples. We are pleased to share that WINHEC members [inaudible] documented record of addressing the educational anomalies experienced by Indigenous Peoples in higher education with their respective nation states. These accomplishments have enhanced the work of the WINHEC Executive Committee through the establishment of a number of international working parties.

Through these global activities, WINHEC has promoted the right of all Indigenous People to enjoy full access and participation across all levels of education. Action has been taken to develop a set of principles and policies to encourage the protection and revitalization of Indigenous languages and language systems.

Further to this, WINHEC has developed the Indigenous International Research Standards, the World Indigenous Education and Research Alliance, an International Board of Accreditation, the Global Indigenous Elders and Youth Alliance and the World Indigenous Nations University (of which Kealani is a student) of the Hawaii Pasifica region.

All of these initiatives are seen as an integral part of the protection and longevity of Indigenous cultures. WINHEC shares a commitment to protecting and promoting the unique scholarship that underpins the rich engagement of Indigenous Peoples in teaching research and other education-based endeavors. We applaud and support, in principle, the open science proposal as it pertains to validating, legitimizing and recognizing Indigenous ways of knowing science as a gift that has been passed down to the generations since time immemorial.

We humbly encourage the forum to establish an international working party to develop a set of international cultural standards that promote the principles of respectful engagement of Indigenous Peoples in education and recognize the scholarship of Indigenous knowledge and knowledge systems, research methodologies and theoretical frameworks. To this end, WINHEC has prepared a position paper with six recommendations that it will support. [Speaks in Hawaiian.] Our humble gratitude to all of the efforts of today's webinar. Aloha.

Laurie Robinson: Thank you so much for your remarks. It is my pleasure now to introduce to you Dr. Carrie Bourassa from the Canadian Institutes of Health Research. Dr. Bourassa is the scientific director of the CIHR Institute of Indigenous People's Health. She is also a professor of community health and epidemiology at the University of Saskatchewan. She's also part of the Canadian Foundation for Innovation Funded Morning Star Lodge. Her remarks will be shared through a video now.

Dr. Carrie Bourassa

[Shared a number of Institute for Indigenous Peoples' Health slides on screen.]

Good afternoon, everyone, my name is Carrie Bourassa. I'm the scientific director of the Institute of Indigenous People's Health at the Canadian Institutes for Health Research. I want to thank you for inviting me to the World Virtual Indigenous Circle on Open Science and the Decolonization of Knowledge hosted by UNESCO. I want to talk about Indigenous knowledge, and I'm very honoured to be here, to speak to you very briefly.

Indigenous knowledge is science. And we look to our Elders and I think about ancestral knowledge. This is something that I think is really indisputable. Our Elders, our Knowledge Keepers, they are our PhDs.

When I first became the scientific director, the first thing that we did was engage with First Nation, Métis, Inuit and urban peoples to help us to define what our priorities were going to be for the next four years to help us to understand what the priorities were for Indigenous Peoples. It is not up to me as a scientific director or the institute to define what those priorities are.

If we really want to walk the talk and be in alignment with the TRC [Truth and Reconciliation Commission of Canada] and with RCAP [Royal Commission on Aboriginal Peoples] and UNDRIP [United Nations Declaration on the Rights of Indigenous Peoples], then we have to ensure that it is the communities that are driving the Indigenous health research agenda in Canada. Our vision was crafted by the Elders. We created an Elders advisory circle, and we'll share that a little bit later. We also, of course, went across Canada and developed a strategy to engage communities and leadership and Indigenous health organizations who are working in this space to ensure that we had a very comprehensive engagement strategy.

The vision is really to improve the health and well-being of First Nations, Inuit and Métis peoples through supportive, innovative research programs based on scientific excellence and Indigenous community collaborations that respect communities and the right to self-determination. In terms of our strategic plan overview, we are committed to community-based research that is led by Indigenous communities in a culturally safe way and that builds capacity at their direction.

So with the guidance from our institute advisory board, Indigenous communities, Elders, knowledge holders and keepers, we developed a strategic plan that we see as an evergreen plan. So it's not something that will end. We had community engagement sessions again that were very vital in

establishing this plan, this vision, and we wanted to make sure that it was the community's voice that will address their community health and wellbeing needs. And this plan incorporates Indigenous voices while aligning with the United Nations Declaration on the Rights of Indigenous Peoples, as I said before, as well as the TRC and I also believe, of course, the Royal Commission on Aboriginal Peoples.

We did not hear a laundry list of issues. We took a very strength-based approach and what we did hear were four very key themes. And what we heard, which was no surprise, was self-determination. It is about having sustainable funding, about Indigenous communities, the communities being able to hold their own funds. And we've been working on this diligently for the past four years to enhance the capacity, development and infrastructure and acknowledging, honouring and respecting Indigenous health research and histories in an equitable way that promotes wellness, strength and resilience.

This includes, of course, ensuring that Indigenous knowledge is prioritized. We also, of course, announced the return of the CIHR Network Environment for Indigenous Health Research, the NEIHR model, and that was loud and clear from the communities, including Elders and village keepers. Priorities from 2019 to 2024 — and again, this is in alignment with the CIHR Health Research Roadmap — but of course we have a new strategic plan that will be announced very soon. This is to promote excellence, creativity and knowledge translation, to mobilize health research for transformation and impact and achieve organizational excellence.

We prioritized incorporating Indigenous ways of knowing, as well as Western and other non-Indigenous epistemological approaches. But again, it really is about prioritizing Indigenous knowledge. If you ever have heard me speak, we always say Indigenous knowledge is science. We are the original scientists, and this is our ancestral knowledge that is inherently within us and this must be acknowledged.

So it is vitally important that our Elders, our Knowledge Keepers, are acknowledged and honoured. At IIPH [the Institute of Indigenous People's Health at CIHR], we work toward contributing to closing the existing gap in the health status between Indigenous and non-Indigenous Canadians and that must include acknowledging and honouring and prioritizing Indigenous knowledges.

So I just want to again reinforce and acknowledge the incredible contribution and guidance of Indigenous Elders and knowledge holders and the grassroots Indigenous communities that must drive the Indigenous health research agenda in Canada. You can see we have our IAB [Institute Advisory Board] and our Elders council that guide us and how important that spirituality is in research as well. So I want to, again, just thank you very much for this limited time and I wish you all the best in your workshop. Chi-miigwech.

Laurie Robinson: OK, thank you so much, Dr. Bourassa. We now have two speakers from the Social Sciences and Humanities Research Council, Dominique Bérubé and David Newhouse. Dominique Bérubé is vice-president of research and has been in that role since 2015. She is responsible for developing the long-term vision and future direction for SSHRC's research funding programs. And she oversees the strategic direction of the tri-agency programs. She is also responsible for the agency's implementation of the Indigenous Strategic Plan, called "Setting New Directions to Support Indigenous Research and Research Training in Canada."

Dominique Bérubé

Thank you so much for this kind introduction. As you just mentioned, I will share my time with David Newhouse, who is the co-chair of our SSHRC Advisory Circle. But I'm sure you'll be able to introduce him more completely after that. I'll keep my notes very short, because mostly I wanted to thank Lorna Williams for allowing and inviting me to participate.

My organization is a funding agency in social sciences and humanities, sort of a sister agency to the CIHR. And SSHRC has really benefited from the last 10 years of advice and guidance from our Indigenous advisory circle. It really allowed SSHRC to develop its new Indigenous research guideline that we published in 2015, and which recognized at that point the importance of the Indigenous knowledge system.

But since then, the Truth and Reconciliation Commission (following, of course, the Royal Commission) added 94 calls to action and one of them called upon SSHRC to put in place a multi-year program to better understand reconciliation. We started to work on that in 2015 and 2016, just after we published our new guidelines. Re-engagement with our First Nation, Métis and Inuit researchers, Elders and communities in Canada demonstrated the importance to renew our relationship and try to not see it in silos between the different funding agencies, such as CIHR [Canadian Institutes of Health Research], SSHRC and NSERC [Natural Sciences and Engineering Research Council], whose representative is going to be speaking a bit later in the circle.

So since 20XX [inaudible], we've been redefining the agencies. Through a two-year process of engagement and co-construction, we developed the new Indigenous strategic plan that we released in January 2020. During this pandemic year, we started to develop our implementation plan. This strategy presents four objectives that promote the leadership of the First Nation, Métis and Inuit in research.

I'm happy to provide the link to the strategy if the panel is interested. It will also create the Indigenous leadership circle and research to be launched in the upcoming days, and that will oversee implementation of the strategy. Recently the SSHRC Advisory Circle reviewed the strategy and made some important comments, including some very thoughtful comments from Lorna about the recognition of the Indigenous knowledge systems, their value and the importance of their dissemination.

So thank you again for including us in this circle so that we can listen and learn and continue on our path. And I will stop immediately here to leave David Newhouse to continue and share his perspective on that path.

Laurie Robinson: Thank you so much. I would like to introduce David Newhouse to you. He is Onondaga from the Six Nations of the Grand River near Brantford, Ontario. He is professor of Indigenous Studies and Director of the Chanie Wenjack School for Indigenous Studies at Trent University and a professor in the School of Business Administration. His research interests focus on the development of modern Aboriginal society. He is co-chair of the SSHRC Indigenous Advisory Council and the Science Officer for the CIHR Indigenous People's Health Research Competitions.

David Newhouse

Thanks, Laurie. I want to first of all thank Dominique. We decided to share the time to demonstrate the spirit of collaboration that has existed with SSHRC for the last quarter century or so. I also want to thank John and Katsi for their openings. And I also want to thank UNESCO, Lorna and Sebastien and the organizers, for this important symposium. And like Dominique, I'm honoured to be part of the webinar. I am constantly amazed at what we're able to do during the pandemic and I think what we're seeing is a bit of science at work as well. I think this pandemic is something that none of us have ever experienced, that humankind has ever experienced.

I'm originally from Six Nations of the Grand River. I'm the Director of the Chanie Wenjack School. I've also been co-chair of the SSHRC Indigenous Advisory Circle for the last five years or so. And also the science officer for CIHR Aboriginal Peoples' Health Competition for the last 15 years or so.

Over the last 20 years, I've had a front row seat in watching Indigenous knowledge become part of the social science and natural science research enterprise in Canada. And I've seen it come from the margins in the unknown and then become part of the work that we do as social scientists, Indigenous researchers and natural science researchers. I call colonization, as it is practiced in this part of the world, the "long assault." It's a 500-year-long assault on our territories, our cultures, our languages and our knowledges.

We often don't think about colonization as having an impact upon our knowledge. But one of the most insidious aspects of colonization, or the long assault, has been its attempt to take the knowledge that we gained from living in our various places for millennia and systematically deride it and move it to the side and not allow it to be included in state institutions, such as education. It has been an absolutely insidious attempt that I think that we don't bring to the forefront enough.

Since the surge of research undertaken by the Royal Commission on Aboriginal People in the early 1990s in Canada, there has been a concerted effort to bring Indigenous knowledge into our educational institutions and as well as a very strong desire to use Indigenous Circle of Experts to inform what I call the structures and processes of everyday life.

And at a tertiary level, what that means is bringing ICAE into the research and knowledge-producing enterprise. Not as an object of anthropological gaze, but as a key informing aspect of research. It also means creating the research climate that accepts Indigenous knowledge. Over the past quarter century, we've worked to create what I call [speaker uses word spoken in traditional language] space, an ethical space that is based upon respect, friendliness and collaboration. Indigenous knowledge can be used to frame research to determine the object of research, to determine research methodologies and methods, to interpret and make meaning of the results, and to help develop solutions to the challenges that we face within our own communities.

And this means that granting councils had to become open to including research, including Indigenous knowledge and Indigenous Elders in research applications. Over the last two decades, through a process of collaboration with Indigenous academics, Indigenous Elders and Knowledge Keepers, public servants and non-Indigenous academics, the recent architecture of NSERC, SSHRC and CIHR has been adjusted to ensure that ICAE can be included in research projects.

And this adjustment has included changes to ethics and the ethics review process. It includes the creation of a definition of Indigenous research and the expansion of those who are eligible to hold research grants. New criteria for the review of research and new research support programs that are designed to encourage and support new Indigenous researchers. And all of this has been done

through a collaborative process that required a willingness to take risks, to listen, to experiment and to learn from mistakes and above all, to trust. And it also requires a continual willingness to learn and to adjust.

And my strong belief is that if we do not bring our knowledge into one of the most powerful institutions that we have created as human beings — and universities are not going to disappear — that if we don't bring our knowledge into these places, we will continue the work of Indian residential schools here in Canada. And universities then become just an extension of universities. So what we've been trying to do is trying very hard to ensure that Indigenous knowledge can become part of the institution and that these institutions work alongside the development of Indigenous institutions as well.

Thank you for allowing me to speak today.

Laurie Robinson: Thank you, David. Thank you very much. We will now proceed and hear from Mr. Kevin Fitzgibbons. Kevin is from the National Science and Engineering Research Council, also known as NSERC in Canada. Kevin joined NSERC in 2013 to support its role in federal science, technology and innovation policy. He has 30 years of experience, including as Director of Innovation and Science at Global Affairs Canada, as Executive Director in the Office of National Science Advisor and as a policy advisor with the National Research Council. NSERC is the federal agency responsible for funding natural sciences and engineering research in Canada. Mr. Fitzgibbons, please.

Kevin Fitzgibbons

Good day, bonjour and aloha. I want to thank you, Laurie, for the introduction and also Lorna for her great leadership in pulling together with UNESCO and others, as this very important event for us. NSERC, as you have described, Laurie, is about nature, natural sciences and engineering. And I am speaking to you here from Ottawa, which is on the unceded territory of the Algonquin Anishinaabe people, and I'd like to acknowledge their history, their heritage, their importance to our society, and more importantly for today, the value of their knowledge.

NSERC is all about understanding the underpinnings of nature in all its forms. And I think that what we're hearing today, and what we hope to go forward with, is a better appreciation of the value of Indigenous knowledge and traditional knowledge more generally the scientific endeavors that we have.

One thing that struck us over the past several months and years of looking at and engaging with Indigenous communities is the inextricable link of the people with nature, with wildlife, with the land and the waters. And we feel that that is such an important rethink, that we as an organization need to understand better in the way that we fund science, in the way that we engage with Indigenous communities across Canada, and in the way that we conduct our research.

Very much of what Dominique, David and Carrie have said today is part and parcel of our overall objectives and goals. We are definitely part and parcel of the tri-agency strategy for Indigenous research in Canada. We feel that we have a very important role, but we also have a long way to go. I realize that your time is very short, but I want to say first and foremost that our job here is to listen and to engage and to implement. And I think that I would like to do very much today is to hear what others have to say and to see where it is that we can translate those insights into actions that NSERC can apply in its own programming and its evaluation of science.

So with that, miigwech, thank you.

Laurie Robinson: Thank you very much, Mr. Fitzgibbons, and I really appreciate especially your parting comments. It's a beautiful segue into the next portion of our agenda today, and that is we will now hear from some speakers, from people who've been involved in this work for a very long time. They are now invited to share their work, their findings.

It's my pleasure to introduce you today to Dr. Leroy Little Bear. Dr. Leroy Little Bear is from the Blackfoot First Nation. He is a professor emeritus and the founder of the Native American Studies Department at the University of Lethbridge in Alberta, Canada. He also went on to become the founding director of Harvard University's Native American program. Dr. Little Bear, please.

Main speakers

Dr. Leroy Little Bear

[Speaker uses words spoken in traditional language]

I'm very honoured to be amongst all of you today to speak about something that's very, very important, and that is the whole area of science. I want to congratulate Lorna and her people and all those people that have made this gathering possible. And I want to acknowledge our Elders for their opening prayers and the songs that I heard that are very important part of our science.

What I want to say about science is this: let me very quickly compare it to a house. When we're talking about a house, a house usually has a foundation, and depending on what type of a foundation you have, you can then plan your floor plan and the kind of rooms you are going to have. And then once you've got the floor plan, then you can make plans about decorating, furnishing your house and so on. A lot of times when we're talking about science and so on, we usually end up talking at the furnishing level, not so much at the floor plan level and less so at the foundational level. I want to talk about the foundational level.

In science, there are three major areas of science, and that is the science of being and that is the cosmos, astrophysics and so on, there's the science of the local and that is the reality that we live in an everyday world. It's Newtonian or classical physics and so on. It's about what we touch, what we can hear and so on. And then there's the science of the small. That's the subatomic world. That's where things like quantum physics come into the picture. But what is science? Well, science is a search for reality, it's not technology. Technology is application of what is already known. Science is about searching for reality. It pushes the envelope into the unknown, okay? So if science is a search for reality, then I as a Blackfoot have been a scientist long before it was cool. How is that so?

Well, it's so because of the foundational basis. That foundational basis, the paradigms that the metaphysics upon which Blackfoot thinking is based. Let me quickly go through those foundational bases. The Blackfoot paradigm is based on the notion of constant flux. Compare that to Western thought, which is a stagnant world. Greg, who's going to be talking too, is defining the notion of flux very well in his book, *Native Science*.

Science is about searching for reality. We even tell the same jokes, so everybody knows the punchlines, but we still all have a good time with them.

Whereas in Western thought it's been there, done, let's move onto something new. In Blackfoot thought, everything is related to place, it's space-oriented. Why? Because land is something that's going to change because of the flux, but it doesn't change as fast as other things. So place is something that we can hang our hat on for at least the time being. That's why land is very sacred. And language is, of course, a repository of knowledge and it's process-oriented as opposed to stagnant or noun-oriented. When we're talking about Blackfoot science, science is about energy and it's galactically, it's cosmically based. It looks at the big picture.

That's why we have star stories. We have Scarface in our Blackfoot stories. And we have medicinal wheels that are all about that. So the goal of Blackfoot science is sustainability to sustain our existence, whereas Western science is about measurement. If you can't measure it, it's not scientific. We can say, if it's not about relationships, it's not science from a Blackfoot thought. So when you apply these notions, you come up with a very different science, which is the foundation of Blackfoot thought. Thank you.

Laurie Robinson: Miigwech, Dr. Little Bear. I see lots of hands up and clapping. Thank you so much. It's an honour to be the moderator, but I'm just a little starstruck and I can't wait to hear more.

Our next speaker is Dr. Gregory Cajete. He's an Indigenous teacher from Santa Clara, Pueblo, New Mexico. Dr. Cajete is a professor of Native American Studies and language, literacy and sociocultural studies at the University of New Mexico. He has also lectured at colleges and universities around the world, including Canada, Mexico, New Zealand, England, Italy, Japan and Russia. It's a pleasure to have you join us today. Dr Cajete, over to you, please.

Dr. Gregory Cajete

Thank you so much, Laurie, for that very kind introduction and thank you to all of the organizers. Thank you, Lorna. Thank you, UNESCO Canada. And greetings from the Southwest. As we say [speaks Indigenous language] in my language, which means good day to all of you. It's really a pleasure to have some opportunities here, to present some thoughts and perspectives.

And I'm going to basically just segue from Leroy's eloquent words about Blackfoot physics and really just to emphasize and underline the fact that what he is saying is really the Indigenous science, the Native science. Different tribes will explain it and describe it and reflect on different aspects of it. But it's essentially the same paradigm that we all operate from, and I think that's why as Indigenous Peoples, no matter where you are from around the world, you are able to relate to other Indigenous People because we have a similar way of understanding ourselves in the world.

What I really want to reflect on in my segment, because I think so much has been said, I want to thank you, David Newhouse for your great analysis of what is going on and what needs to be going on in the context of higher education. I just retired from the University of New Mexico in June and really in a lot of ways, I was very happy to retire, but was also struck by the fact that so little has changed in higher education, particularly here in the United States. Many of the things that you've mentioned in going on in Canada in terms of the initiatives related to Indigenous thought, Indigenous Peoples, Indigenous education as a whole, and now Indigenous science, are things we would like to do in the United States.

And certainly, we've attempted to do that in our own context. But it's because of the politics, and I'm sure you watch the television enough from the United States to know what I'm talking about when I say the politics of the day here in the United States has prevented us from doing a lot of things. But regardless of that, Indigenous scholars here in the United States, Indigenous studies

programs, the work of the Hawaiian movement that Manulani will probably speak about later on, all of these things give us hope to continue this work.

What I want to emphasize in my time is really some of the major issues that I see with regard to Native science and its integration with Western science. In many ways, Leroy alluded to this in his description of Blackfoot metaphysics in the way that Indigenous Peoples view and understand themselves in the world, what we call epistemology, how we come to knowledge, how we come to understand ourselves.

And that is very much in contrast with the Western ways of knowing, Western education, Western forms of research and on Western forms of economics, Western forms of politics. And one could say, you know, Western everything. It is a very important issue that I think this particular forum is tackling in the sense that we're beginning to sort of put in place an infrastructure for thinking about this and creating strategies.

And of course, this is what I've been doing for 46 years, basically since 1974, when I first started teaching science here in Santa Fe, New Mexico. And I saw even at that time just a tremendous challenge, first of all, to re-engage Indigenous students in their own histories and the lives, of which science happens to be one, of many kinds of histories that we've lost as a result of colonization.

So even before the terms decolonized were being used, I started a decolonized science curriculum initiative at the Institute of American Indian Arts, combining science with the cultural histories of the students. I was teaching with Native science, with Native knowledge and finding ways to creatively weave them together using the arts, using creative writing, using the abilities of our many talented Indigenous students to be able to describe their thoughts and their perspectives on the thoughts of their peoples in ways that were very reflective of them as contemporary people, but also help them to explore their own histories.

One of the things that I'm going to read is a real quick quote from the work of Dr. Rayna Green. She was a Cherokee who was head of cultural knowledge and perspectives in the American Association for the Advancement of Science back in the late 70s and early 80s. And she says, "The lack of Indian participation in science is as much due to an alienation from the traditions of Western science as from a lack of success or access to science education, bad training in science or any other reasons conventionally given for minority exclusion from science professionalism. Contrary to the insistence of Western scientists that science is not culture bound, that it produces good, is that many Native people feel that science and scientists are thoroughly Western rather than universal, and that science is negative."

Now, that was a statement that was put out in the late 70s, early 80s. Much of that, unfortunately, is still true in the context of the issues that I have seen, and I have worked with my students here in New Mexico with regard to their access to science and science knowledge. It's a kind of intellectual colonization that I think we have to really begin to take a very, very serious stand and very serious look at through research and through other kinds of strategic political strategies that we might entertain, because it's the meme, as we would call it, the meme in the system. It's systemic racism. It's the systemic exclusion, systematic exclusion of Indigenous thought, Indigenous ways of knowing and Indigenous Peoples, from the practice of science, even though we have long traditions of science that we are now beginning to rediscover and reimplement, we haven't been able to make much inroads into the world of Western science.

And I think if nothing else, if this form can really begin to really put forward these strategies and these criticisms, because I think these criticisms are still not only valid, but they have to be brought

forward in ways that allow us to work and to build bridges from, towards a better future for our students, for ourselves and for our communities, because we do need science to help us sustain ourselves into the 21st century in all areas.

We do need more Native students in science-related fields. And hopefully, with these kinds of strategies, we will be able to accomplish more rapidly within the next decade. So that's all I have to say for right now. Thank you again for your time. And I look forward to the thoughts and perspectives of the other speakers.

Laurie Robinson: Thank you so much Dr. Cajete. I really appreciate your contributions and most especially your callout for more students. They wholeheartedly support that.

I'm really honoured now, very happy to introduce you all to Professor Wangoola Wangoola. He is the founder and the president of the MPAMBO African Multiversity located in Busoga, Uganda.

Professor Wangoola Wangoola Nduwala

[Speaker uses words spoken in traditional language].

I have brief remarks, but I speak from a background where we experience bareknuckle colonialism and bareknuckle oppression. And in such circumstances, if you are very conscious, we tend to use strong terms. But I will address myself with the issue of knowledge. Where are the sources? What are the sources of knowledge?

In our experience, these sources are from institutions which arise out of man and woman being a social animal, and these are family, neighbourhood, community engagement in the production of requirements of material sustenance. They are an education system. But in our case, a lot of missed education. Other sources are class struggles within countries whereby a small set of people oppresses the rest. And then global struggle. Global class struggle. Then lastly, we mention the struggle between the countries, which allows a small set of countries oppressing the rest of the countries. And it's out of this which really makes decolonization an issue.

And hence, therefore, the talk of what is called mainstream knowledge and the conventional knowledge in our country. That is, we are weary of talking about Western knowledge, talking about knowledge in terms of compass directions, Western knowledge, for example. And this being this term, being used side-by-side with Indian knowledge, African knowledge, Chinese knowledge. I think we need at this moment in time to start being consistent by calling a spade a spade.

We need to really be consistent if we talk about Chinese knowledge, African knowledge, Indian knowledge. Then we should not be talking about Western knowledge. We should be consistent and call it European knowledge. But in its extended form, maybe we call it "Ameripean" knowledge. Then, if we talk about knowledge, people's knowledge, we should remember that it is the reality. The euphemism of Western knowledge, instead of using that euphemism, we should really categorize knowledge and worldviews between dominative or hegemonic knowledge and knowledge which seeks coexistence with other knowledges. Then in reality, in our experience here in Uganda and in Africa, in general, we find that it is not possible to decolonize knowledge when the people are colonized. So the point, therefore, is that first and foremost, you need to decolonize countries, nations and peoples and their languages. A colonized people cannot have a decolonized knowledge.

The point, therefore, in this respect is not so much for all of us to open ourselves up to all, but rather for all of us to be open learning from others. We are of the view that the real feast of knowledge will come when there is a sort of Marshall Plan to support the languages, the knowledges, which have been “othered” and handicapped for the last hundreds of years. And at that time, we shall need collaboration between knowledges which are anchored in the existence of a multiplicity of knowledge, because each knowledge brings some new ones to the global basket of knowledge. So those are our views based on experience in Uganda and in Africa.

Laurie Robinson: Thank you very much Wangoola. Thank you, everyone. I noticed that there's lots of folks typing in the chat, please keep those comments coming. We have a few more speakers ahead and really going to try and make time to hear from at least one or two comments from during the open mic time. So just again, please continue using the chat line for now.

There is a professor who we'll be hearing from in a pre-recorded message, and that is Dr. Zanisah. Dr. Zanisah is a professor of anthropology and sociology program in the faculty of Social Sciences and Humanities at the Universiti Kebangsaan Malaysia. She completed her Ph.D. in 2018 in the field of Indigenous epistemology from the Universiti Malaya. She is Orang Asli from the Semelai sub-group in Malaysia.

Dr. Zanisah Man

Hi everyone, my name is Zanisah Man, and I am Indigenous from Malaysia. I'm also an anthropologist working as a lecturer in Kebangsaan Malaysia. I would like to say thank you to Budd Hall and Suriani for giving me a chance to talk in this Indigenous circle for a few minutes. And also thank you to my nephew [inaudible] for helping me send in this video. I honestly have no idea what to do and what to expect when I first received email or call from Dr. [inaudible] about this Indigenous circle. But she convinced me to join the circle just to gain some knowledge. So it's the reason here I am today to talk to you about what I understand [inaudible]. When I receive email from Professor Hall I read into Indigenous knowledge and I really like the idea. And I also pointed out one important point in the Thirteen Key Considerations I read from UNESCO, and in this key point I point to the importance for the time support offered, what I mean here is the support given by the university for the committee when they receive the grant. The thing is, when you work as a lecturer with a grant, the time we have is really limited. It's really based on the grant and the time we need to finish within the time frame. So it's really important because when we can't finish it, we have to have a report to say why you couldn't finish it in time.

These things are not really fair for the community. For example, the community I work with in Teman Negara, they are the hunter and gatherers society. In consideration number one, the goal is to regain knowledge for autonomy and self-governance. The problem is it is not easy to actually have self-government when the community itself could not talk with the outsiders and could not express who they are and even to have face-to-face communication with the outsiders. So it's not that easy.

When I went first time back in the 1990s to meet with the community in Teman Negara, I was so surprised because as an Indigenous, I think they would accept me. They did not. They accepted me because my friend is a Malay. The important point here is to build trust with the community. And so, if you have that trust you be able to work with the community you will be able to understand the community needs.

And when I came back after I received permission, and all permission from the community I work with. This community, his name is ..[inaudible].. and he's the leader of the community now. I worked

with him. I worked as a coordinator for the Native Mobility Program. So we work together, and we have a different setting as compared with when I first met him.

It takes time. When I first met them back in the 1990s and when I came back, this is in 2018, my point here is it's not about the grant, but it's about developing trust, developing contact with the community you work with. It's not about the study. It's not about what you are, who you are as an interpreter, but it's about who you want to be, who you want to work with and what the community thinks of you. With limited grants, with limited time, you need patience. You really need to work with the community.

The second important point in consideration that I really want to look into is I think it's quite difficult for me to actually maintain the university [inaudible] needs of me and actually work with the community. Yes, I want to work but I'm also blessed with the courage and also the support given by my supervisor, my PhD supervisor, Dr. Edo, who is now Director General in the Orang Asli Department. And also Dr. Chanti [unclear] who helped me along with my PhD. [inaudible] We cannot run away from [inaudible], but I find that the universities are running away from their main objective because of this [inaudible]. For example, a project I'm working on now, translating the Indigenous stories from two communities, the Jackun from Malaysia in the [inaudible] and also the Bribri from Costa Rica in [inaudible] in Talamanca. This community wrote their own stories, I translated stories by the Jackun community from English language to Malay language and also from English to Malay language for the Bribri story.

When I work with the Jackun community in [inaudible], I think it's really difficult because I have to convince them to write the story in writing. To translate it and mince it into words, I have to work with the children and convince children the importance of drawing imaginary stories into picture. I have worked with this Jackun community since 2003, so I built that trust. And that's the reason I can convince the Elders.

This also, again, needs time and things like this in the academic world is quantified by popular publishing. But a book that you did publish is not a high-ranking publisher. It's a simple publisher. But the value we have, the knowledge and the hope from the community, from the children that I work with is really important. To me, this is not easy. You cannot quantify the value we have with the community and the hope that you insert the children that they actually contribute in the book. This is very important to me.

So, in this Indigenous circle. I don't know how it will move from here, but to me certain contexts, this Indigenous open access is really interesting, and it gives hope to people to work on something that really thinks it's very valuable to them. And to me as long as there is hope, although it's very small, although the journey is really far but I think that we work on it. And this I think it's all for me now. Thank you for listening.

Laurie Robinson: Thank you very much for that presentation. Our next speaker is Dr. Sonajharia Minz. Dr. Minz is an Adivasi activist and Vice-Chancellor Sido Kanhu Murmu University in Dumka, India. Dr. Minz is only the second tribeswoman to be elected as a vice-chancellor.

Dr. Sonajharia Minz

At the outset, I would like to thank all of you, especially the organizers, the virtual Indigenous Circle on Open Science and Decolonization of Knowledge. This webinar...to be patient with my non-response to numerous emails I would like to place on record I guess the patience of Budd Hall, his counterpart, Asia counterpart had had a word with me, and I had given consent to be a speaker and

to be participating in the webinar today. I would like to greet you... [speaker uses words spoken in traditional language]. That is how we greet people from my part of the world. And this is in the heartland of India. I am here in India. Here, the Indigenous Peoples, the nomenclature or the word that is used is [speaker uses words spoken in traditional language] and I come from an Oraon tribe.

I'm second-generation literate. So as far as education or modern education is concerned. I would actually like to say that it's past midnight on the other side of the globe from most of you but it is such a pleasure to feel the unity of spirit, because I couldn't agree more with all that has been spoken earlier.

Being trained as a computer scientist, I have done my masters in mathematics and went on to do my PhD in computer science. And I've been teaching computer science for about 30 years. And only recently, five months ago, I was selected to be the head of this university, which is again in the tribal heartland of India. But it is a liberal science and arts university.

A little bit about Indigenous Peoples in India. There are, as far as numbers are concerned, it is popularly said there are over 700 distinct tribes in India and the population that there is in India now amidst more than 1.3 billion. It is said that 105 million is Indigenous population here. Besides this, the dividing line of [connection breaks] and the non-Indigenous, we have multiple other layers in the Indian society and therefore the word colonization or decolonization, besides that, I think we have had at least the Indigenous populations in India have had another layer or another, almost an onslaught of mainstreaming of knowledge systems as well as society, even prior to the British colonization.

Although being a trained scientist and agreeing with all that was presented earlier from the perspective of open science, I would like to make my intervention in the area of decolonization of knowledge. Because I know it's been roughly 50 years that I have witnessed efforts that have been made in my part of India towards teaching, learning in the languages of the Indigenous Peoples. And what I have noticed, although I have not been part of it because I have not been doing the teaching and learning of languages of the tribes on Indigenous population here, but being external from that, what I have noticed is not much has happened because the kind of systematic marginalization and systematic deprivation towards not the people as well as their identity in India has been going on and on for thousands of years.

As I mentioned, the teaching, learning of the tribal languages or Indigenous populations, or languages that is in central India started in mid-70s when the language teaching in the university or in higher education started. But it has still remained at a very sketchy level because the study of Indigenous People in India has not gone beyond, let's say, the study of anthropology or language in a compartmental manner. And there has rarely been any effort and genuine effort to do the culture studies of Indigenous Peoples in India. And so what I have noticed for a good 40 years, is just the language teaching and study of languages that's been kept as a language level, but never language and cultural studies.

And now that I have this opportunity to head a liberal arts and science university, I am making efforts that in my university I'm going to have few language and culture study programs still to be started, which would make a new headway here, because as I was mentioning earlier, prior to the British colonizers, the mainstreaming of society in India has done so much marginalization of the people. Now through these programs, what I see not being a trained social scientist, but what I see is this is going to be an effort towards claiming the space. In this landmass, claiming the space by the Indigenous populations, claiming dignity and also thereafter trying to claim what our Constitution, great Constitution also tries to promise is equality, justice, fraternity and liberty.

I see higher education spaces like universities and colleges. If the language and culture studies and various other studies are brought to the university space, besides, I think the next step could be in making interventions into science because of the kind of lifestyle we have. It is time and again claimed in India, if there were not no Indigenous population in India, probably by now the entire place could be something else, because sustainability, the term sustainability can only be understood, at least in India from how the Indigenous populations have continued to live out. So therefore, I feel in the short time span that I may have again in the university.

I'm trying to do my efforts to do this and now to have language and culture studies which would bring a platform on which would establish a platform to go to the next levels of making, formalizing the culture studies which have so far. I mean, in India, it's not only decolonization, that word that should be there, but also, you know, in order to undo the mainstreaming and say therefore in India, the term that is used time and again is "subaltern."

But I would also not fully agree with that term because it is not the ultimate, but it is an equal alternate. And therefore, I do agree with these terms that were being used earlier, that Native be the adjective used for the knowledge systems, etc. because it's so very important to bring out the richness of the Indigenous or what we call in India tribal knowledge systems, which are opened up for more studies, maybe scientific way of doing the studies, and to bring out what has been kept in the margins and even outside the margins for thousands of thousands of years.

So as a head of a university, I would like to place before this forum I feel so blessed and enriched this evening by afternoon and morning for some of you to be part of the circle, I would really look forward to seeing opportunities to collaborate with some of you who are in certain universities and especially even Indigenous universities. And it was so heartening to hear a brother from Uganda using the term multiversity rather than university. So thank you, brother, for that. So the first thing is, I would look for an opportunity to collaborate.

And second, also, if there are going to be possibilities, because the kind of society now and the system we have is, if there could be possibility of, fund support, which could do by not only unilateral not only Indian study, but then will have other partners on the other side.

And the third thing I would like to place for the consideration of the circle is, if in areas such as Asia and our part of the world, if they can be a focus to mentor leadership of these regional circles so that we can have a closer bonding in our regions and also be collaborating with others, such as all of you on the global level.

So with these few words of my intervention, I would like to once again thank you all for the opportunity that I could be part of the circle this today. And I look forward to being a part of this in future and to get more active with this, because I do have my commitment towards bringing the tribal or Adivasi knowledge systems to the formal platforms of higher education in India. Thank you very much.

Laurie Robinson: Thank you very much, Dr. Minz. We have the next speaker coming on, I will introduce her in a moment, just want to let all of you know we do have three more speakers. We want to make a little bit of time for comments during the open mic session, and we will have the summation in the closing. So I'm just saying that because we did book 120 minutes, and we will most definitely be going over time. So perhaps you've already all noticed that as well and refreshed your coffee or whatever it is and are enjoying the presentations, the very thoughtful contributions.

It's my pleasure, friends, to introduce our next speaker. She is a Wayuu activist from Columbia. Her name is Jazmin Romero Epiayu. Buenos dias, Jazmin. Jazmin's remarks will be interpreted into English by Andrés Mejia.

From the age of 12, Jazmin began on the path of leadership. She was born in the Department of La Guajira, located in the northern part of Colombia. Belonging to the Millennial Ethnic Group of Wayuu origin, it proclaims itself as the daughter of the Great Mother Earth. She is the daughter of one of the most emblematic women in the conservation and practices of ancestral fabric that is transmitted from generation to generation by the wisest inheritances of grandmother [speaker uses words spoken in traditional language].

Andrés Mejia is an associate professor at the Faculty of Education at the University De Los Andes and has researched issues related to education, critical thinking, emotions and citizenship. Welcome.

Jazmin Romero Epiayu

(Translated by Andrés Mejia)

Thank you very much. Jazmin. [Speaker speaks in Spanish]. I'm sorry, I don't know what happened to Jazmin, I'm going to try and phone her—

Jazmin Romero Epiayu [speaker uses words spoken in traditional language] [speaker speaks in Spanish]

Well, firstly, Jazmin introduced herself in her native language, which I don't understand anyway. And then she said—I think it was basically what Laurie already said in the introduction. And then she said that she would like to say hi to everybody and to thank all the organizers of this very important meeting. She's also very pleased to be here. And despite the heartache that she has, because she has recently, because her community, the Wayuu community has recently lost many wise people due to the pandemic, due to COVID-19. In fact, in her own family, two wise people just died very recently, so she's really sad because of that.

She's very pleased to be here. She wants to say that she and the rest of her community will continue to work to try to keep the ideas and the work of those who have passed away. Jazmin has just said that since she was 12 years old, she has been leading a just cause in her hometown. she's an activist and feminist for many years.

She has also been defending Mother Nature and she has struggled for the defense of rights of Wayuu women, especially girls and women adolescents. And she's actually right now in the middle of a campaign in that respect. But she wants to talk today about the importance of ancestral knowledges and the importance of keeping the ancestral tongue, which doesn't have a written form, but it is constitutive of Wayuu spirituality and can be seen in their fabrics.

And what she has in the background is an example of the fabrics that the Wayuu people make. It's also in their blood and in their culture in general, it's transmitted through generations and much of the world that she and others in her community have done is to try to keep it going from generation to generation. And in the face of all the impact that neoliberalism and extractivism have had on their culture.

She wants to talk about what it is that they do in order to strengthen and to have more strength and struggle for the survival of their peoples. What she does mostly is basically about the resistance in defense of their territories and the rights of women. More generally, the Wayuu community has also

started to create some alliances with some other peoples, especially the Arhuacos, Kogis, Wiwas, and Kankuamos, in order to get together, to become stronger and to talk about the spirituality of these ancestral peoples, so that they have created what they call a great spiritual pact, for the defense of the territory.

And what they want to do is to safeguard and clean their territories in order to try to put aside and recover territories from the capitalist system and liberalism in order to look for strength from their ancestors and to retake spirituality as a main force. It's a strong fight, and a very strong struggle.

But in Sierra Nevada de Santa Marta, which is actually the mountain range where these four peoples, the Arhuacos, Kogis, Wiwas, and Kankuamos, live. And they got together there in order to create this great pact. But now they have to do it again in the mountain range called Macuira, which is a sacred site for the Wayuu people. They are going to go there and they're going to invoke the spirits in order to talk to them and to get some guidance from them so they can know how to better safeguard their territories, which at present is mostly in the hands of multinational corporations.

She would like to perhaps pass on this project so that everybody can have access to it and can see it. And she would like to call the scientific community and UNESCO to join in this project, because in it we all come together to help save the richness of these ancestral peoples who are presently at risk. In this project, they want to put these people, the wise men in, especially in the Sierra Nevada [inaudible] should be together in order to make it diagnose the situation of their territories and to decide on what is the path to follow. And it is surely a path of spirituality.

And when we talk about spirituality, we talk about equilibrium. We talk about saving the planet because the planet right now is presently in a crisis climate it's the middle of a rubbish or a garbage crisis [unclear]. So the scientific community should be beside this ancestral scientific community. And because she considers herself a researcher in scientific research, because she does research with their own ancestral knowledges, which goes in the defense of [speaker uses words spoken in traditional language]. I'm not sure I pronounced it right, but it's Mother Earth. Because La Guajira is the region of Colombia in which presently many children are dying of starvation and thirst. It's also a very rich territory, however it's been being exploited by these multinational corporations.

OK now just some closing words. She would like to thank everybody, but she also wanted to mention that she was once in Paris for a UNESCO meeting and she had a kind of scholarship to study something about climate change and community resilience. And she would like to, again, extend the invitation to get together and join all our efforts to save these communities, which are really, really in danger presently. So that is it. Thank you all.

Laurie Robinson: Muchas gracias, Jazmin. Muchas gracias, Andrés. Thank you very much for your presentation and the invitation to collaborate.

I'm really pleased now, friends, to welcome Dr. Ed Connors to provide his remarks. Dr. Connors is a psychologist from Kahnawake in Ontario or Canada...I think it's over by Quebec, actually. Dr. Connors has worked with First Nations communities across Canada since 1982 in both urban and rural centres. His work over this time has included clinical director for an infant mental health centre in the city of Regina and director for the Sacred Circle, a suicide prevention program developed to serve First Nations communities in northwestern Ontario. Dr. Connors, please.

Dr. Ed Connors

Thank you. I greatly appreciate the honour that you bestowed upon me to be able to share with you. I'm going to attempt to bring up something to share with you on your screen, which hopefully I can

do, I think. Again, I want to give my thanks to the committee and especially to Lorna for her efforts to bring this group together. Oh, it's not coming up for some reason. I'll see if I can bring it up through the conversation.

It is indeed a pleasure to be here to speak with you and to share my thoughts, especially considering that I've been given the opportunity to speak after listening to so many of my illustrious colleagues and esteemed colleagues from around the world. And I want to give thanks to all of you for being so patient to actually listen to the thoughts that are being expressed here. And given the difficulties that we have just to talk with one another in our different languages from so many places around Mother Earth and that we are able to do so during this pandemic and connect with one another and share these most important thoughts I'm just full of now. And I'm having to put them aside for the moment in order to be able to share my thoughts with you.

As I share my thoughts, I want to further introduce myself, because indeed I do come from Kahnawake Mohawk territory. That is where my mother was born and raised. And I also come from the Town of Mount Royal, which is part of Montreal, across the river. For those of you who don't know our geography in Quebec, it's a river called the St. Lawrence that divides our communities. But there is a bridge that also connects those two sides of the river. And as you now know, I've been born into two sides or from two sides of the river from, in fact, two world views. And I have been able to actually, over my lifetime, see the world through two eyes — through one, I see in the world view of my Indigenous ancestors from Kahnawake, and the other eye sees the world through my Indigenous ancestry of my father's side, which in fact originates from Ireland.

So in doing so, I've had the good fortune to be able to learn both and be able to respect both and to understand the significance and importance of both of those not only in sustaining my life, but then in understanding how to promote and support life on Earth.

So as I say that, as I've listened to all of you, I've realized as well that by and large, I represent another sector of the place from which knowledge has come. Many of you have committed yourselves in your careers to learning knowledge from within what some people refer to as institutions of higher knowledge, or higher education. Even that concept alone creates the division between the knowledges that exists in the world today. And that gulf is one that I think we have to transcend if we are truly going to achieve what you're envisioning through this talk that we're sharing today.

When I left the higher knowledge—the Tower of Higher Knowledge or the Tower often of Power—I chose to go out to learn knowledge from out in our territories across Canada (or what was once where Canada, the word Canada comes from). By the way, for those of you who don't know, it comes from our Haudenosaunee ancestry. It was actually Kanata and that means the village.

So I travelled across the country and I sat in the lodges of my ancestors and our Elders, our healers, our medicine people in order to understand better what we needed to know specifically about how to live life better. In fact, how to just live life, how to survive in the face of the difficulties that were posed to our communities of Indigenous across Turtle Island as a result of colonization. So I've realized as I've listened and by and large, my talk today speaks to it and can be titled “The Grassroots Application of Indigenous Knowledge and Science.” And so I'm going to speak to you, therefore, about what I've seen and what I've come to understand about knowledge. I understand, and I find it quite amazing.

And I also find it a great mystery that so much of the world's population has come to believe in a myth that our valued knowledge as humans has only evolved since the emergence of what has been

called civilization. And that so much of our world's population seems to believe that all of the accumulated knowledge over the thousands of years of our human existence that only the knowledge that has formed throughout this period of human existence called civilization is of value. Contrary to these beliefs, I and many others of you, and of our world's population, recognize that the accumulated knowledge that we have formed throughout human time is not only significant and of value, but it is necessary for the continued existence of humans on Aki Kwe, which is an Ojibwe term or an Anishinaabe term meaning Mother Earth.

I will give you an example now of my Indigenous colleagues and I that we have been acting to resurface our Indigenous knowledge in the fields of health care, justice and suicide prevention. Regarding suicide prevention, which I've been applying, and I've been grappling with for over 40 years within my service to our Indigenous communities. I will share this short story.

Five years ago, my colleague John Rice and I decided to rethink our approach to suicide prevention by thinking about suicide prevention through an initial lens or worldview. For many years prior to that, in my career, I was facing and dealing with the issues of suicide and attempting to help our people to live life and find hope in living as opposed to losing hope and choosing death over life. And that is a truism that it's the truth that exists around the world. I've come to learn it as I've studied the experiences of our Indigenous populations worldwide, that we have the highest rates of suicide of all peoples.

So in facing that and trying to understand that, we initially had been relying upon what we have now spoken of here in this gathering as European knowledge about suicide and suicide prevention. But what John and I decided to do, because John is an Anishinaabe speaker, he's fluent in the language, he's fluent in the culture and is a Knowledge Keeper. He was raised in the Anishinaabe culture. And when he and I, after many years working with our communities, attempting to address suicide and create a change, a positive change in our communities and the health of our communities, we came to realize that we needed to come back to the knowledge that exists within our languages.

And in so doing, we sat and began to speak about what is suicide and how do we understand that within the language from an Anishinaabe language. And as we spoke together about that, then we began to rethink our approach to suicide prevention by thinking about suicide prevention through an Anishinaabe lens or worldview.

We're beginning to have, as John spoke in the Anishinaabe language about suicide prevention and then translating those thoughts into and that knowledge back into English, we began to redefine suicide prevention in terms of life promotion. Or as it is said in Ojibwe in the language of the Ojibwe or the Anishinaabe, we began to define and redefine "mino-bimaadiziwin" or living the good life. Through Indigenous knowledge and teachings, we encourage others to explore with us how we can support each other to live long and good lives and how to avoid premature, unnatural death.

This process of rethinking with our Indigenous knowledge about life promotion has created a dialogue within our Indigenous communities and with health care systems. That is shifting the paradigm from suicide prevention to a focus on preventing death and a focus on preventing death to life promotion or supporting long and good lives.

We have over the past five years created a website which has engaged our Indigenous communities to share their knowledge about life promotion by telling their stories about life promotion from within their Indigenous communities. I was going to show you an image, actually, of Mother Earth. That's what I was trying to bring up. And that image on it has this website -- Mother Earth again in Anishinaabe we refer to Aki Kwe.

The site is wisepractices.ca — a place where you can learn more about what we are doing in terms of this Indigenous knowledge development.

This process of translating our Indigenous ancestral knowledge is informing much of what is assisting our Indigenous communities to restore health and wellness and therefore to survive. This can be seen in health care as we fight for equity and health care by introducing such concepts as cultural safety and more specifically, Indigenous cultural safety.

And in justice, where we have been redeveloping Indigenous restorative healing justice within our communities, I invite you to explore this knowledge, as we are more than eager to share it with the world, for the benefit for all of life on Aki Kwe, and for our planet, our Mother, Aki Kwe. Niá:wen, miigwech, thank you. I'll just refer you—by the way—back to another site where you can learn more about the concept of mino-bimaadiziwin, and that is 7Generations.org. Miigwech, niá:wen. All our relations.

Laurie Robinson: Miigwech, Dr. Connors. I did list in the chat the website that Dr. Connors mentioned. So please, take a look at it. Thank you so much for your presentation.

I'm really pleased now to ask you all to join me in welcoming Dr. Manulani Aluli Meyer. She is the fifth daughter of Emma Aluli and Harry Meyer. She comes from Mokapu and Hilo Kaliku, beloved places in Hawaii. Dr. Meyer is dedicated to the role Indigenous epistemology will play in worldwide awakening and sees this discussion as yet another link in this ongoing transformation. Aloha, doctor.

Dr. Manulani Aluli Meyer

[Speaker uses words spoken in traditional language] Thank you, Laurie. [Speaker uses words spoken in traditional language]. So good to have you even all the way from India and Columbia, and we've got Uganda and New Mexico. Aloha to you, Greg. Aloha to you, Uncle Leroy. Aloha, Lorna. Aloha, David. Aloha to all of you. What a blessing to have so many cousins in the house. Really, it is.

I have to say the people that have come before me, especially Jazmin — I love that your synonym for spirituality is equilibrium. That is absolutely brilliant, Jazmin. And our Professor Minz from India. I love that equal alternate is actually a synonym for Native knowledge. And of course, Uncle Leroy, you talking about how it's really easier, as we know, to take down an old house instead of just kind of...you know what I mean? But because I've been in that business of re-understanding the foundations of a house, if you really want to do it well, those old bricks really look good. The old wood, if you're really working hard. We are actually rebuilding the structure of a house that is assumed to be one formation, one dimension.

But I really want to also thank Keiki Kawai'ae'a, one of our women warriors in Hawaii, that has been dedicated to our own language, our Hawaiian language. Thank you, Keiki, for being on. To extend what Uncle Leroy was saying and what Greg has said in his whole life in Native science and what Auntie Lorna has said her whole life and in the clarity that you posit, Lorna — thank you for this opportunity — is that spirituality is at the base, spirituality is at the base, spirituality is at the base.

So let's give you some synonyms to spirituality. The implicate order, Indra's Net, isn't that beautiful? Professor Minz Indra's Net is a synonym for the hidden matrix of the universe. It's the energy that Leroy speaks of because research is ultimately renewal. Synonyms for [cuts out] .. sciences. Quality, continuity in space, the mundane empirical sciences are about quantity, control and time, do you

see the difference? So what we're heading into is the rise of the feminine, the rise of the actualization of a kind of wisdom that's based on love of land.

When you have Aloha Aina at the centre of our sciences, we're not wondering if the bottom line is money for our investors. Do you understand that science is linked to money? And that is what Jazmin made very clear. And the long assault that David Newhouse spoke about is, it's going to be over, because we are going to be over. And so the continuity of our sciences is now key. And what I've learned from my own places. Our places in Hawaii [speaks in Hawaiian] from the inside to the outside. We love our lands here. And so our land is not simply called land. Aina Aloha. We called it that which nourishes that has always loved us. So then we had to turn to Aloha Aina in the 70s.

I love that in the 70s, we created our renaissance because research is renewal. We were renewing ourselves to relationality, dynamic coherence, interdependence, mutual causality. And with the post-quantum sciences is calling complementarity. Isn't that beautiful? The ultimate sciences of the Western world are called post-quantum world complementarity. We have that in concepts [speaks in Hawaiian]. This is a form of simultaneity that isn't about reciprocity. It's about consciousness.

And when that consciousness is about serving people, that's a spiritual energy that absolutely builds a mutual emergent future for the world. And we are at that crisis because you have now asked us to the table. Mutual emergence isn't about one culture over the other [inaudible] leads to universality. That is the key. And that's the localization of knowledge. That is the honouring of our Native voices, our Native ideas. But so there are three aspects to the natural world. Absolutely. Absolutely. Absolutely. This is just absolutely key.

There's a physical aspect, and I learned that because of our word e 'ike, e 'ike means "to see." There's a mental inside aspect—subjective aspect, and I learned that from our word e'ike. E 'ike is the word for knowing, for knowledge. And then there's a trans-spatial, quantum, spiritual, for a lack of a—don't lose the idea that spirituality is religion, it's not. On a good day religion is spiritual. But religion is the bureaucracy of spirituality.

So what Uncle Leroy and Greg have been saying and Lorna has been saying their whole life — and even you, David, I appreciate your clarity — is that the idea is about flux. Energy is flux, life is flux.

And relationality is not a noun. It's a verb based on principles. And when our principles become the centre of our "knew" science (K-N-E-W), there's nothing "new." We have relationality. And the quality of what that means, we will actually understand when our subjectivity changes things. We're not going to hide behind the false veil of objectivity. The maturity of the world is on fire. And so I want to spend these last minutes to tell you how special these people have been.

Leroy, when I saw you for the first time, I think it was the second or third time we were giving a talk at UC Berkeley. And I said something stupid, like land is a metaphor for our mother. And you scolded and said, "Land is not a metaphor for our mother, land *is* our mother." That changed everything for me because when you stop viewing the external world as the external world, the Buddha says reality is not the external world, it's how we perceive it. So my work from epistemology became hermeneutics and that means those who interpret. And the interpretation now has run into a dead end. Indigenous epistemology is about continuity. That is a synonym for indigeneity. Continuity.

And in that centre of continuity is love. Love is the primal source of our collective emergence, says Lee Irwin. I call it aloha. We call it aloha here in Hawaii. And it's not a commodity. It is an energetic field of purpose, shared meaning, passion and commitment to the love of land and the service of people. [Speaker uses words spoken in traditional language]. Love of land, service of people. And

this is what Greg also confirmed in all of his writings, all of his writings, especially *Native Science*. Get that book, everybody. Hopefully you've got another publisher, Greg.

I just want to end by saying that we've said we are saying the same thing differently. Holism isn't about polemics. Holism is about interconnectivity, is about renewal. I love when Uncle Leroy said science is about energy and our goal is sustainability, and that's also our process. So... [speaker uses words spoken in traditional language]. Love always for this place that has nourished me and love always for the places that nourish and have shaped all of you. So together let's do this, gang. And I would love to collaborate with India, beloved India. Mahalo nui for being here at one o'clock in the morning. Mahalo nui, mahalo. [Speaker uses words spoken in traditional language] everyone. Thank you, Laurie. Thank you, Auntie Lorna. Mahalo.

Open mic

Laurie Robinson: Thank you so much for your passion and your energy and the emotions. I don't think I'm alone when I'm expressing my own emotions right now. Your words lift us up so much in so many ways.

Miigwech on behalf of all the guests, everyone here today. Thank you to all of the speakers. Thank you, Dr. Little Bear. Thank you, Dr. Cajete. Thank you, Dr. Minz. Thank you, Dr. Meyer. I'm going to forget people, Professor Wangoola Wangoola, Dr. Connors. Thank you so much. The presentation from Dr. Zanisah Man, so much richness shared here. Lorna, you have assembled a wonderful gathering, a wonderful day. I'm recognizing we went over time a little bit, but still providing the space for one or two guests who have joined us. If there are contributions that you would like to provide to this conversation, please signal in the chat. I would be pleased to invite you to offer a comment.

[Reads some of the shared comments from the chat]:

Maybe in the space of a minute I'm going to just turn it open and while I'm waiting for someone to send that signal, I just want to read to you some of the comments that have already been shared by people who are presenting.

“Uncle Leroy Little Bear, a good reminder that strong foundations are the point of Native community.”

In response to Wangoola Wangoola's presentation: “I have been calling this Euro-birthed knowledge institutions and systems.”

Tracy Herbert from British Columbia said, “We are investing in community-based language revitalization, creating new speakers with immersion and documenting languages where the data is curated and managed by the community.”

Those are just a couple of comments. I know that there are many, many more collected through the chat throughout the presentation. Again, I just invite you if there are links — if there are papers that any of the guests want to share — please post the links right into the chat so we can collect them. There will be an outcome document being developed out of this conversation today to inform the recommendation we spoke of so much earlier. So please do share the information.

I am going to take us now over to the next portion of our agenda, and that is the summation. It's been an honour to share this day with all of you, with so many dedicated scholars, organizations and engaged guests.

To help summarize what we have heard today and offer some additional insights, I will invite Drs. Jose Barreiro and Kevin Lowe to do that.

We'll start with Dr. Barreiro. He is a member of the Taino Nation of the Antilles. Dr. Barreiro is visible as an advocate of indigeneity on a lifelong mission to create understanding and application of an Indigenous philosophy of localized community, valuing the human-land-nature relationship and the great range of ecosystem knowledge of Native cultures. With consistent contributions in his field of vision, Dr. Barreiro is a writer, journalist, oral historian. As a field organizer of major public events, as a curator, as an activist and scholar, and as an editor-in-chief — appears through 40 years of social and human rights activism on behalf of Native Peoples. Please, Dr. Barreiro.

[Speaker] I think we've lost him—I don't see his name. Maybe we'll start with Kevin.

[Dr. Barreiro's connection is lost. Note: He provided his presentation after the event. It is included further down in the transcript.]

Laurie Robinson: Okay, please then, Kevin Lowe, who is joining Dr. Barreiro in providing a summation, is Gubbi Gubbi man from Queensland. He is now a Scientia Indigenous Research Fellow at the University of New South Wales. He has extensive educational experience, including teaching and Inspector of Aboriginal Education. He established successful programs to support language policy, curriculum and school implementation. His current work includes establishing a holistic pedagogical framework that engages Aboriginal knowledge and investigating how curriculum structurally marginalizes unique epistemology.

[Kevin Lowe has microphone issues. Note: He provided his presentation after the event. It is included further down in the transcript.]

Questions from audience

Laurie Robinson: OK, so I'll pose the question and maybe I'll ask one of the speakers if they can respond to the question. The statement reads:

"Our Indigenous knowledge survived and thrived for millennia. Now, in a period of two or three generations, our ancestral wisdom and our science is on the brink of extinction in many parts of the world. How can we build capacity among Indigenous scholars and communities? How can we help develop more scholars who bring Indigenous knowledge out to the world? How can we make collaboration among global Indigenous scholars like this a regular event?"

Dr. Gregory Cajete: Laurie, I have a few thoughts on that,. You know, I think, as I said earlier, we really have to create a strategy. Actively ... [inaudible] especially with regard to how we disseminate aspects of Indigenous knowledge, not only among Indigenous Peoples once again, but among ourselves, and of course, education is responsible for a lot of the loss of our language and culture. But it can also be on the other side of the coin, the way that we reclaim it. This is why [inaudible] particularly of Indigenous young people with regard to science and Native science and Native

knowledge, has to be a priority within the context of our higher education institutions. While they may provide a platform, they have been the single most difficult challenge, I think for many Indigenous People, the whole institution of Western education.

As a Native educator in this area for many years, and I think really it just behooves us to begin to really create a strong foundation, as Leroy has put it, that really begins to bring forward Indigenous principles and thoughts into the way that Western science is conducted and also the way in which Western education, higher education particularly, is done. I think, you know, Manu's points are right on that have to be made transformative, particularly for the Western system, you know, from the standpoint of a systemic bias that permeates throughout Western academe that's consistently faced by Indigenous scholars and also Indigenous students in all areas as they participate in Western education.

That's a serious issue that really prevents a lot of the dissemination of the knowledge that we're talking about in ways that are important for us as Indigenous Peoples. We've been doing this work certainly for a long time among ourselves within the context of our own organizations, our grassroots projects. But now I think it's time for Western academe to really take note that Indigenous thought has to be a part of this world conversation with regard to transforming ourselves into a better paradigm. That is, for life's sake. As we have said, it's about this life-sake orientation, which is a common thought among Indigenous Peoples as well. So that's what I would say in response to that particular question. Again, we just move forward with what we're doing, but do more of it and more extensively, especially with the youth.

Dr. Sonajharia Minz: Can I come in briefly on this? I would agree with what was said by Gregory just now, but then in situations such as India — where it is modernization and deprivation is an imperative and historical past — I feel it is important for us...I was looking forward to listen to Kevin Lowe because it was said that the content development they have been involved with, to me, it feels that the early years of formal education based on the Western framework, I think there [inaudible] ... And the children at the primary school level — if introduced to their cultural heritage and knowledge systems — I think they grow with the dignity of their culture. And they don't consider, or we would not consider our culture secondary to formal education. And I would like to teach this thing on. I would like to experiment and experiment with this as to what the generation who grows with the initial education, which is so cultural, including the pedagogies, be cultural, not only content, but pedagogically cultural. And so they grow with the initial cognitive framework. And then I would like to see that component also come in.

Laurie Robinson: Thank you very much, Dr. Minz. Thank you, Dr. Cajete, Dr. Little Bear, please go ahead.

Dr. Leroy Little Bear: There is a book that was written a long time ago. It's probably 100 years old now [inaudible] ... another guy named Daniel Corkery and the title of this book was *The Hidden Ireland*. And what he meant by the hidden Ireland was that we live next to the colonists in this case, which were the British, and they lived among us and next to us, but they treated us like we were non-existent. They treated us as though we weren't there. But looking back, it was a blessing in disguise because they didn't bother us, and that gave us the opportunity to continue with our literature, with our language, with our cultural practices and so on. And that's what he meant by the hidden Ireland.

And so the science, the European science and so on, is based on the notion of measurement. If it's not measurable, it's not science, see? Whereas Indigenous science, as we've heard from the presenters, is about relationships. And it's a relationship with the total environment, the land, all the

animals, the sky and so forth. And that European science is also heavily based on the notion of time, which is a human creation. There is no such thing at all. There is movement, but there's no such thing as time. And so that science is starting to run its course. And consequently, our approach should be that community-based, land-based approach. And the shortcut to that is speaking in our languages because the language is the repository of knowledge. That's the shortcut to our knowledge, to our science.

Laurie Robinson: Thank you, Dr. Little Bear, for that contribution and summation for us today. Mr. Lowe and Dr. Barreiro must have had some connection issues and I think Mr. Lowe was not able to get his mic working. So we will request their notes separately.

This has been an incredible session. This has been an incredible circle that we've all shared together. Thank you all for your contributions, your good energy, your good thoughts. For showing up for your hearts and your minds today. Thank you. It is my honour to call upon Dr. Manulani to help us close our event today with a song.

Dr. Manulani Aluli Meyer:

[Speaker sings in traditional language]

Laurie Robinson:

Miigwech. Thank you, stay safe, be well, till we all see each other again.

[Session participants say goodbye to one another.]

[End of recording]

José Barreiro summation

Taino Nation of the Antilles

Summation

Video submitted following the event

[Speaker using words spoken in traditional language]

José Barreiro [Speaker using words spoken in traditional language] Taino Nation of the Antilles.

As I promised our sister, Lorna, this will be an oral summary of the presenters at the gathering of the World Virtual Indigenous Circle on Open Science and the Decolonization of Knowledge. We were attentive to the conversations and attentive to the discussions and interventions of the different esteemed colleagues — women and men of knowledge that we witnessed through the webinar. I had technical issues connecting at times, thus my observations are not detailed but impressionistic.

At the very beginning—before the UNESCO people—John Elliott (Tsartlip First Nation) spoke about the health of our Native languages being the health of the Earth. I think he set a tone for the depth of culture that would be thought about as the prevailing thinking to be discussed. He sang precisely for the language, a song for the language itself.

Katsi Cook (Wolf Clan Mohawk Akwesasne) followed with a song to the Four Directions and the seeds, further situating the group in the actual practice: Mother Earth, Father Sun, honoring of the land.

There was an early lesson, as well, in moderator Laurie Robinson's very precise and respectful intent in properly pronouncing all the speakers' Native names. Hajom (thank you) for the level of courtesy.

Lorna Wanostsa'7 Williams, Lil'wat First Nation, next introduced the framework of the discussion, with the thought of the ancestors, the relatives, the deep connection that again is the preamble to this perception that we had before us — about the opening of scientific thinking and the de-colonization of knowledge, the de-westernization of knowledge, is what was being talked about: the localization of knowledge, the positive look again to the knowledge within the people, the practical things. Lorna remarked about Indigenous knowledge coming out from the shadows.

Immediately we heard from the Canadian Commission for UNESCO, Sébastien Goupil, speaking about the need to plan for the long term, pointing out that this is what the Indigenous People are telling him, the Native Peoples of Canada. He spoke of alliance. Alliance—a most important reminder; we forget the strategies of creating positive alliances.

Other speakers spoke of longevity, why important knowledge, including languages, lasted; about the importance of work that is truly guided, oriented, by the traditional Elders and by community perception, long-term community thinking, community culture. And how that — respected and well-employed — can be of use in the health and well-being of the people within communities.

Self-determination was a word that came up early. Self-determination: the capacity for development, the rebuilding of the infrastructures, and how to increase the potential for more sustainable funding in doing this vital task. The things that survive of the cultures of Indigenous Peoples, how to rescue them, how to remember and put them to use, because they survive as the people found them useful. They didn't disappear because the people found them useful.

The assault on all Indigenous knowledge, the assault on the culture of people was a point of focus. The impact of insidious policies — the insidiousness of the disrespect and the wish to do harm. The importance because of this previous damage, as we gain ground, to bring the knowledge into the educational institutions. Strengthening that process, particularly in communities, of introducing Indigenous knowledge in every front, the re-Indigenization, the looking again at what was useful, in concept and in practice.

Natural science and engineering was a focus of Kevin Fitzgibbons. He called for a better appreciation of Indigenous knowledge, and reported the current search for a connection to the natural world, a true connection to the natural world, knowledge, and the consideration of systems that emerge from a true connection to the natural world.

Prayers and song are an important part of this, the ceremonial approach and the commitment to clear thinking. For this, the foundation must be clear and strong; the Indigenous foundation. First, the floorplans, as Leroy Little Bear, Blackfoot First Nation, pointed out very succinctly and truly. "What is the floorplan? What determines the foundational level? Not the furnishings, not the furniture. The foundational. From the cosmic to the local, to the sub-atomic. Perception of a science built on the different foundation, he reminded us, a different or shifted perspective. Science as a search for reality based on what one knows and what one is standing on, not a static world, a world in flux, Little Bear oriented, as he intoned the knowledge that he had accumulated from his Elders.

Thoughts of the animate in everything, relationships, not reductionism, renewal of the knowledge, spirit as energy waves, as sound, as even emotion.

Place-based Indigeneity and place-based thinking: “the land is most constant,” and language is a repository of much of that culture of the land. So in his remarks, Gregory Cajete, Tewa, Santa Clara Pueblo, spoke of the shared paradigm by Indigenous Peoples, the shared principles, and referred to the linking of arms, which is particularly poignant as there are prophecies that speak of the linking of arms by Elders from different cultures pointing to the suffering of the Mother Earth; all this as relevance as we approach what became and what is known as prophetic tradition and is perhaps as truly, a very deep perception tradition.

Sustainability. Sustainability as it can best, perhaps only, be understood by the tribal peoples. Sustainability based on closer bondings both at the local level and at the global level. The knowing of the land, the territories, the working from place and time, historical and immemorial, is central to the foundation.

Technical issues limited my witnessing of the presentations. I can generalize this much: the emergent discussion presented, and the overlapping perception of the distinguished voices that shared their approaches to Indigenous knowledge, clearly focused the urgency and need for sustaining this precise dialogue and for helping it gather its forces and philosophical bases, so as to see it blossom at the centre of human thinking and the human condition.

None (or very little) of this approach to Indigenous knowledge has advanced into the world of Western science as we define the science of today. And yet we can see that there’s a world of knowledge among Indigenous Peoples that is being discerned and is being projected, is being defined, is being described, is being discussed. Out of which a canon of thinking is emerging. Under discussion is a multi-layered world of knowledge, interrelated and yet locally specific and eco-systemic. Following Indigenous cultural roots, in place, attachments and orientations are multi-dimensional.

One speaker in particular spoke of her people going deep into the spiritual, as guide, as orientation for other activities, especially recovery activities and political work, and in the sorting out of central values and strategies employed by Indigenous communities by conducting shared ceremonies among various Native peoples. Jazmin Romero Epiayu, Wayuu, Colombia, relative, Guajiro, particularly mentioned the work of the women. Numerous strong women speakers in this discussion. Women’s knowledge and women’s issues are central. And Jazmín has done this kind of work. Recovery. Protection. Safe spaces for the women and especially the young women, the girls. Again, she stressed the importance of language, of oral tradition, the spirituality of the various memories, tribal memories. Arahuacos, Kogis, the Wayúu, others, seeking to define and strengthen the unity to struggle together. (Taino is a relative people in that ancestral vein — as it extended to the Caribbean). Jazmin spoke of a spiritual pact, deep in the territory, that centrally still informs where they are and where they’re going. This pointed out the importance of spiritual ceremony, messaging, dreams in the sustaining of memory, and in the struggle to survive.

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It’s a privilege to be in the ranks of these people who spoke today, and to hear their enlightening words. I was sorry to miss some of the conversations, because of the technology and toward the end had a hard time getting in, unable to rejoin for stretches. So I’m glad to contribute this tape, I hope it works. It’s a little long for what was being asked for, but it’s what I have.

This work, this foundation, all of it must continue; it must stay real. The ancient, the ancestral knowledge in the present world. It's the rights of the feminine, the love of the land, spirituality at the base, local knowledge, long-term observation, empirical, practical, reality attached to cosmo-vision, to cosmo-perception, to spirit, to dreaming, to commonality as peoples; as peoples, not to be denied; as peoples, the recovery of language, orality; the recovery, the renewal of community, Indigenous community, what it will take to do that from the inside? From the deep inside, and what allies can do to help in that quest. A lot to ponder, this is just beginning.

[Speaker using words spoken in traditional language].

Saludos, abrazos, greetings, and my love to all.

Kevin Lowe summation

[Provided in writing after the webinar]

My name is Kevin Lowe. I am a Gubbi Gubbi man from Southern Queensland and I pay my respects to my Elders and their land, which never ceded. I acknowledge that the land in which I now reside, is the Country of the Gweagal Clan of Dhurwal nation who lived along the waterway that is now known as the Georges River in SE Sydney Australia.

I bring my community's thanks in inviting me you to sit in your presence. My Elders and ancestors thank you for your invitation and the welcome that allowed me to sit and listen to your words of wisdom, hope and resistance.

The following points are meant as a response to some of the many issues raised by speakers participating in this virtual world conference.

As my brief was as a respondent, I will not seek to summarise the presentations, or in fact direct my comments to any particular speaker. Instead, I have sought to pull together a series of four touchstone issues that resonated as I listened to this extraordinary three-hour conference. These issues are not in any hierarchical order, but instead represent my discursive reactions to what these short presentations evoked.

1. The first issue that resonated with me, was the issues surrounding language and knowledge, were issues of cultural survival and the assertions of identity. Presenters acknowledged the conundrum (as painted by governments) the immediacy of a community / family's economic well-being over their survival and cultural beings. For many, once this 'choice' is enacted (by being removed, or self-selecting to move to larger centres/cities), the challenge is to then to agentially seek out opportunities for self and their children's, to engage in language/knowledge work off Country. Many of the speakers spoke of people needing to keep a connection – to be focused on keeping a link to "country" that was beyond a physical presence.
 - a. The essence of being indigenous and the claims that we make concerning our indigenous identities and our capacity to situate our self both in place and space. Many of the speakers spoke of the issues related to the ongoing colonisation of communities, and it for ever presence in the physical, linguistic, economic, and cultural domains that situate dominant culture within the spaces that we live.
 - b. To a person, the presenters spoke of the daily challenges of pushing back – of keeping a space in our minds so that we can engage in the important work of cultural survival of

communities, and being actively involved in supporting cultural reclamation, as both a cognitive process and as a political statement.

- c. One of the elements that presented the opportunities for our communities to survive in this environment, relates to issues of national morality – where mainstream agencies (health, education, justice etc., need to be pushed to reflect on the requirement to develop an ethical space from which to then frame a relationship between themselves (and the state) and Indigenous Peoples. I
 - d. It was Leroy Little bear who reminded us of the moral purpose of the work we do in keeping culture strong, the obligations we have to both our own communities and also to the broader world. Instead of focusing on the negative, he opened up a conversation with us all, about the dialogue needed to be had between different knowledge systems. He asserted that currently, where there was little opportunity, or a space, for Indigenous to speak back and to push back against ‘European’ knowledge, that he claimed, sought as its foundational purpose, to modify and de-legitimate us a human, as owners of our own unique thoughts. Western knowledge and its adherents, constantly seeking to produce, promulgate in mainstream press and largely structure school such that a single unitary body of knowledge is privileged over any others.
2. The second issue centres on the question of Indigenous knowledge and its epistemic legitimacy within the eyes of the Western Academy. This is not a question of the epistemic legitimacy of the Indigenous knowledge, but rather, the way in which indigenous knowledge has been constantly positioned and monitored, within the Academy. The boundedness of western knowledge systems, and its claims to universal truths and ‘understanding’, immediately judges and positions all other systems of knowing against the standards and claims and assertions made by the academy.
 - a. The inclusion of Indigenous knowledge within the western informed curricula can only occur when it can be easily assimilated and where its inclusion is seen as evidence of the academic discipline’s overarching epistemic pervasiveness. Its inclusion can only be a happy inclusion if it proves the authority of discipline. Anything that cannot be used be so subsumed, is likely to be ignored, marginalised or inoculated so that it doesn’t infect its legitimacy.
 - b. Though this issue was not directly addressed, many of the speakers noted the struggle that we had in bringing Indigenous knowledges into the light and allowing them to sit beside or even interact with Western knowledge systems. The one place where this clearly occurs on a day-to-day basis is in schools and higher education institutions. Current practices in neo-colonial environments, has been to use an ‘integration’ approach of Indigenous knowledge, experiences and beliefs by atomising indigenous knowledges into micro moments of learning and then to juxtapose them within discipline-based curricula. In doing this, Indigenous knowledges are required to legitimate Western knowledge, settler experiences and even sometimes their laments about dispossession and displacement. the constructs. the teaching of this content in this form requires indigenous knowledge to subject itself to a process of epistemic legitimation by the degree to which it affirms Western knowledge. Indigenous knowledge that does not do this task is either removed or ignored by classroom teachers.
 3. Third issue that emanated from the presentations focuses on the development of policies that are meant to safeguard the work of the non-indigenous Academy in its acquisition and or the (mis) appropriation of indigenous knowledge. There is a concern that the development of policies and the associated practices that attempt to codify how this work is to be done, in itself cements institutional authority of institutional control over Indigenous People’s engagement. A

question is, who is being controlled, and how have the underpinning “problematizations” of Indigenous knowledge constrained and shaped by the foundational conceptualisation of ‘the problem’ of indigenous knowledge and the strategies that thus enabled through the development of such policy structures.

- a. Policy analysis has shown over it again that they can subvert the stated intention by the way in which the ‘problem’ (in this case indigenous knowledge and communities and their relationship to the academy) is actually “problematized” such that strategies are developed and that organisations (such as universities or government agencies) police those who can provide and access it.
4. A fourth issue focuses on the political space. What emanated out of many of today's presentations, was that the reclamation and use of language and the participation of people in indigenous cultural work, is in itself a political act. We need to never forget that the ongoing work of the neo-colonial state has been to deny prior occupation, sovereignty and intimate connectedness between Indigenous People, their country and knowledge systems. This process is seen enacted in our schools on a daily basis. The tightly bounded curricula that forms the basis of all privileged learning in schools becomes the vehicle through which the state looks to cement its own world views while, on a daily basis, epistemically assimilate the indigenous child. This is by no means an accident, but a deliberate and purposeful act of suppression of Indigenous sovereignty by denying the very acts of invasion and colonisation.
- a. It is little wonder then that the state provides little opportunity for Indigenous families or communities to push back against the constancy of this work, of being able to develop and implement meaningful and high-quality language and cultural programs in schools. Or, to remove the many barriers placed in the way of families and community Elders to access and/or to challenge the processes of schooling, or to challenge the central constructs of learning.
 - b. Consequently, the enactment of language and cultural practices in public spaces goes beyond the act itself, as it “doing” of it is also the manifestation of epistemic resistance. In this case, we need to understand that institutions such as schools have, and in many places continue to be intimately involved in the subjugation of Indigenous People’s aspirations. There is much work that needs to be done to free indigenous students the from the controls exerted by schools, and their agents (teachers and officials, who uphold the legitimacy of current practices. Indeed, those students who refuse to engage in these daily acts of assimilation, by large file school and are removed such that they have little opportunity to successfully complete school.

Kevin Lowe
Sunday 15 November 2020