



Dr Judi Brown Clarke

In this podcast, **Dr Judi Brown Clarke** discusses the different ways in which Indigenous communities and western scientists view the world. She also explains the importance of diversity and inclusion in science and education, and shares her experiences as an elite athlete.

Break the **podcast** down:

01:04: Your project looks at combining traditional Indigenous knowledge into the field of geoscience. I wonder if you could give a quick overview of the differences between traditional Indigenous knowledge and a more western view of science.

Western science is looking at understanding. So it's a different relationship when you think about actually living within your science. If I'm looking at it from a traditional perspective, my understanding of a plant determines if I eat. Understanding the animals, if the water quality is changing the salmon run and we don't have an abundance of salmon, then that impacts the health and wellness of my community.

There's a very different level of investment and curiosity and depth in it than 'I have a research question and I'm trying to answer it'. That's very narrow and I may throw out a lot of information that I don't think is relevant because it's not answering the question that I'm interested in. My agenda is to just understand, get my data, collect my samples, have an understanding of it. My curiosity stays in my head vs. my heart and my soul.

02:17: Do you look at ways that traditional knowledge can change or improve western science?

Absolutely. How do we create pathways and open doors? Because the way that you change thinking is you have to look at the table where discovery and decisions are made and make that more inclusive, equitable and diverse. That's how you start to change science.

As science diversifies – and there are considerations even when you're doing data collection. Sometimes in field research, there may be a research team that goes into Indigenous communities and does collection of samples, it may be animals, plants, soil or water. Number one, did you ask permission? Because Indigenous communities are connected to their land and water. So if you take from the land or water, you're taking from that community. That level of respect, letting the community know, not just saying 'my funder allowed me

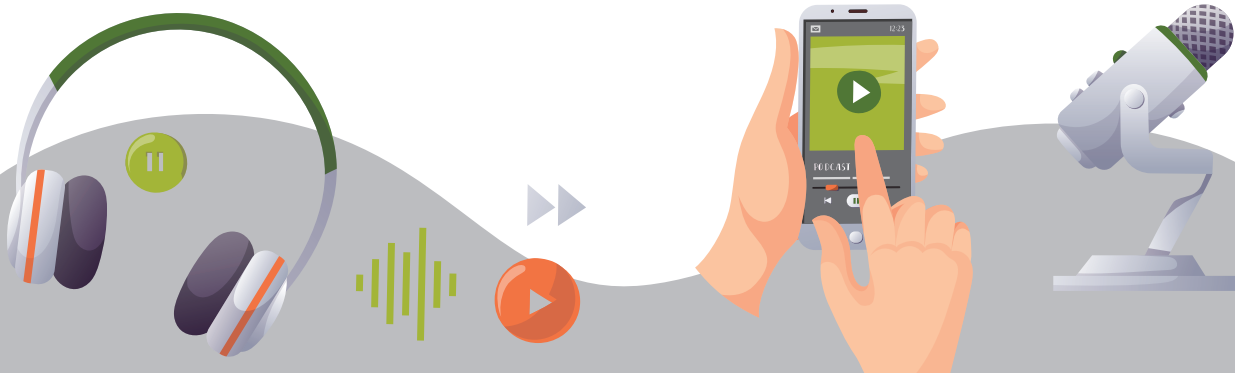
to come here and I've talked to the state or the country to have permission'. The only person that can give you permission in Indigenous land is Indigenous communities.

03:37: I think the way that we grow science to be the very best science that we can possibly be putting forward, is you have to think about: Whose voice is not in this conversation? If I'm going into an Indigenous community or land, who did I talk to? What permissions did I get? How can I help that community? Is there something I can provide for them in a way that they'll reciprocate and provide data and resources for me? And it doesn't even mean that you're going into the community. You can be going to a border of a community because Indigenous communities don't have a line where their community ends and another begins. It's really kind of 'that tree', 'that river', 'that area'. Quite frankly, the Indigenous community is Mother Earth.

Indigenous communities tend to view – rightfully so – that we are guests on this planet. So any researcher, it doesn't really matter where you go, you should educate yourself on the culture and considerations and just be a compassionate researcher. It's better research!

04:58: So these principles of respect, reciprocity and compassion are really beneficial for research and also beneficial for people in general, just to live your life by those principles.

You know, the more you live these as core values, really and truly the better researcher you are. You have a level of authenticity. If this is a part of your core values and who you are as a researcher and person, then your authentic self gives off energy and you start to live that. That's what you do in the field. But it shouldn't be 'when I'm in the field I should act like this', no, how you act in the field is how you should act at all times. So it really should become your persona and the core of who you are as a compassionate and effective researcher, scientist, educator, mentor and so on. ➔



05:58: I'm interested in your journey as a researcher and educator. How did you get involved in this project?

I've always done some level of breaking down barriers. When Wendy and I first started working together, she had been doing a lot of work within her community in Alaska, so it just aligned. That's how I started working with the Alaska Native communities, as well as Indian Nations across the US. I'm not formally affiliated with a tribe, but I do have Cherokee and Choctaw in my blood. So some of this, I have to say, is my responsibility. I've been blessed with a lot of gifts and those gifts require and demand responsibility. On Earth, I think we all are charged with something, and that seems to be what the Creator placed on me. I'm a convener and also someone that breaks down barriers. Maybe that's why I was a hurdler!

07:13: You don't just break barriers, you used to jump over them as well. How did that experience of competing at such a high level and winning silver at the Olympics, how has that impacted your approach to your professional life and also your personal life?

One of the things about track and field is it's a low-cost sport, which means that any country can have a track team. Growing up, I always loved travel and culture. And of course, I grew up poor and didn't have an opportunity to do that. But I always thought if I ever had an opportunity, that I would travel all over the world.

Well, because of track I was able to travel all over the world and the very first thing I would do when I would go into a different country, is I would immediately throw my stuff into my room and go either to the market or the museum or the aquarium or the zoo. Those are the four places I always went and I would know what the culture was. I would know the foods, the spices, how people would barter...

I've always been a hoarder of culture and experiences. I just love that. I maybe have an old soul but I just love culture, I love history and I love how the past, present and future are so interconnected. And from a very young age I've always understood that. Where I am now is I'm just doing it without my tracksuit on.

08:55: Having travelled all around the world and met different people and seen these different cultures, has that affected the way you lead life and how you approach life?

In my life, this beautiful Earth is very small. Really, there's nothing that happens, good, bad or indifferent, there's nothing that happens that doesn't directly or indirectly affect us. That's a level of stewardship and responsibility that makes anyone that can embrace this very different in the way that you make decisions.

It doesn't really matter how hard one person's working if we're not working in a level of concert. One thing I appreciate about technology is, as we go back and we're looking at technologies and carbon-dating things, we are realising 'what if we're not the smartest species?' Can you wrap your mind around the fact that your ancestors may have been smarter than you? If our ancestors were smarter than us, then we have to embrace Indigenous knowledge, right? So what if we're not the smartest species or our generation is not as clever as our ancestors? How humbling! How exciting!

10:23: I think there's definitely loads we can still learn from the people that came before us and these Indigenous communities and the knowledge that they have. I wonder if you have any tips for students, particularly Indigenous students, who might be wanting to venture into the field of science as a career path?

Absolutely. One of the things that we found in our research is that it's really important, particularly for Indigenous young students, if you don't see yourself, then it feels like where you want to be isn't welcoming. So look for where you can find a researcher or someone that is in education or policy and just interview them. Just start with someone who you think 'I really love what this person is doing and they remind me of me, but I don't know how to get where they are.' And understand that there's no straight path. You can absolutely make big, huge mistakes and still get there. It doesn't matter if it takes you four years or six years, because six years from now you're going to be that age anyway, so you might as well do something that's going to be fulfilling.

The other piece of that is it's so incredibly important that Indigenous voices are driving science, research, medicine and our understanding of the world. It's so important that Indigenous voices are strong within that ecosystem of what we call research or education. So I would say that for young children and students there is a path, there is a way. I think we all have a role in there, but what's most important is getting people to the table, breaking down those barriers, opening doors, and keeping young people affirmed on their pathway. That's what's most important.

