

Science Spotlight

Name: Kiri Reihana Spraggs

Tribal Affiliations: Ngā Puhi, Whakatōhea and Ngāi Tūhoe

Ethnicity: Māori

Country: Aotearoa, New Zealand ~ South Pacific

Occupation: Kairangahau (Māori scientist)

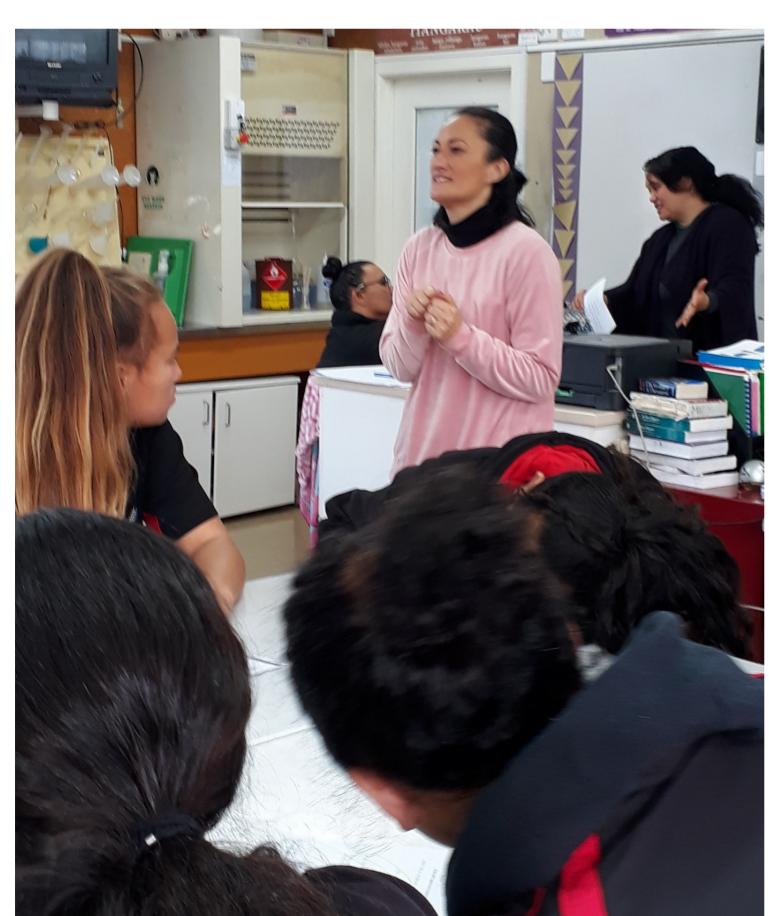
Education: Diploma of Architectural technology, Bachelor of Architecture, Bachelor Of Environmental studies, Masters in Biological Science

Field of Science: Marine microbiologist

What inspired you to enter into this particular field of Science?

My father's best friend, Te Whata. He encouraged me to do the environmental studies course at Te Whare Wananga O Awanuiarangi (Māori university). My first lesson was to collect 20 bugs and name them in Latin, Māori and English. I had a weta (insect) crawl in to my kitchen bench at home and died, then a cockroach dropped on my hand as I walked into an office, so I said ok Io (God) stop throwing bugs at me I'll do the course. But then a light went off in my heart and I knew that I had discovered where I was supposed to be. I did night classes to get my degree while I worked during the day, then once I completed my degree, I quit my job as an architect and went on to get my master's in biology. From there I landed my dream job, the one I have now, working with iwi (Māori tribes) to support and build capacity in kaitiakitanga (environmental guardians/stewards).

Who was your mentor or inspiration?



My first teachers are my father, my mother and their friends. My father still gardens today, he has crops of taro and riwai (potato) and a backyard of fruit trees, he fishes, eels and has taught my sons to garden, fish, gather food and lay hangi. My mother can tell you what the weather will do at every part of the day so she can get her washing dry, she still knows to the hour if it will be raining, sunny or cloudy. I was introduced to my environmental studies degree by my father's best friend Te Whata Paul, who I spent four years learning off on our course. Then there have been many who have contributed to my learning since that journey began, too many to list here...



How do you think Indigenous Knowledge can help to advance Science and Technology?



I think the biggest contribution indigenous knowledge can make to science and technology is reveal the limitations of European knowledge. European or white people's knowledge is 2 dimensional whereas Indigenous knowledge is seen and experienced in 3 dimensions and four dimensions, even 5 dimensions depending on the expertise held by an elder. Our ability to experience nature as an integral part of nature's living cycles provides us with insights into a fuller picture of living with our environment.

So I believe it is our responsibility to enlighten those narrow perspectives to reveal a more multi-dimensional perspective on existing with the environment, and the earth's life cycles.

Māori have a saying: "Whatungarongaro te tangata, toitū te whenua"
"As man disappears from sight, the land will remain"

For me this reflects the holistic values indigenous people have and the utmost respect for Papatūānuku, our mother earth and how our time here is but a breath in comparison to the earth so we must respect our mother earth and teach all we meet to do the same.



How do you incorporate Indigenous Knowledge in the work you do?

All my work is based in promoting Mātauranga (indigenous knowledge) in the science realm here in Aotearoa. So we actively promote how this complements the picture science presents



on the environment. I am part of a team who design Mātauranga frameworks which sit along science techniques and models to promote holistic environmental views. Also, being educated in design, I have been working to get these frameworks and models into digital platforms. Our people are very visionary in their ways, so like our ancestors we are using the best tools to translate our knowledge into contemporary practices. Sharing our knowledge from generation to generation ensures our practices will never die out and our ability to kaitiaki (Stewardship, guardianship) remains for generations to come.

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