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Russell Betney Hello and welcome to the University of Aberdeen podcast from the Rowett Institute. It is my great pleasure to introduce Professor Baukje de Roos. Baukje is a deputy director at the Rowett Institute, and some of her recent work has been in the area of precision nutrition. So, this is the idea that individuals respond differently to different diets and research in this area could help to inform successful dietary change across the country. So, Professor de Roos, welcome.

Professor Baukje de Roos Thank you.

Russell Betney Can you tell us when and why you first became interested in science?

Professor Baukje de Roos Well, I think as a child, I was probably interested in science, but the environment I grew up with was very non science. So, I grew up in a small village, mostly farming communities, and none of my peers would go to university nor my family had gone to university. But I do remember as a child that I would sometimes kind of prepare newspaper clippings on scientific items like I can remember kind of a long time ago that I gathered something on bacteria and ice cream, for example, so the science interest probably was there for a while, but it wasn't probably not until I went to university that I really got excited about science.

Russell Betney That's really interesting that you found a way to get into science from a different angle, when you were young.

Professor Baukje de Roos Absolutely, yes.

Russell Betney So when and where did you study? What made you choose the courses to study? How did you get into nutrition research?

Professor Baukje de Roos Yeah, so I went to Wageningen University in the Netherlands, and at that point it was still called Agricultural University, and they had to change the name because it didn't attract a lot of students and eventually they became Wageningen University. And I went there because of an open day and the research they presented at that point was really exciting and I knew I wanted to do something with nutrition so Wageningen seemed the place to go. And at that point it was, and still is, a very forward-looking university, so when I went there in the 80s and 90s, they already did research on climate issues and an alternative protein, for example. And I chose nutrition out of interest, not even realising that at that point the nutrition department in Wageningen was one of the most prominent nutrition departments in the world, really. And it was not until I went through the courses that I realised what a fantastic place Wageningen university was and as a person going there, it really shaped my thinking, my ways of doing research and importantly, it really kind of built my network of like-minded people and nutrition scientists amongst them, which I still benefit from now.

Russell Betney That's very good. So, it was almost serendipitous that you ended up there and it got you into nutrition research?

Professor Baukje de Roos Yeah, yeah. Sounds very much like it.

Russell Betney So, what type of scientist are you now and how did that bring you to work at the Rowett?

Professor Baukje de Roos So, I studied nutrition. I became a nutrition scientist. So, in one way my research is very mechanistic. I'm trying to understand how foods and diets affect health and disease outcomes. But on the other hand, nutrition is a very applied science. So, we're trying to make an impact on how people eat. And that is very much kind of the case for many people working at the Rowett, where we can really kind of cover a range from very mechanistic research to very applied research. And I think that's why I have been a very kind of good fit for the Rowett, because we have all those people working there in different, almost different disciplines, as nutrition is just such an interdisciplinary subject by itself.

Russell Betney Thank you, Baukje. Perhaps, though, I can ask about your work, what are your current research interests and what might the future hold?

Professor Baukje de Roos Yeah, so as you alluded to in your introduction, I'm very much interested in the area of precision nutrition and personalised nutrition. And this is a relatively new area for the nutrition field, and it's really about how we are all different, we know we're all different, but we respond differently to foods and diets as well. And that's actually very important to explore because in the future, we hope that our research can help to predict who will respond and who is not responding to a specific diet. So that will enable us to make our dietary guidelines a lot more specific and appropriate in the future.

Russell Betney Yes, that's really interesting because obviously a lot of the conclusions are broad strokes from large groups, so it's interesting to try to find some more individual responses.

Professor Baukje de Roos That's true. Yeah, because, like, we are very like we have been very used to population-based research, so you basically tell whether a population will benefit from a specific food or diet. But in the end, I want to know whether it works for me personally, right. So and I think that's an area where we are slowly heading into kind of with all the data we are collecting, we may be able in the future to tell whether individuals are going to respond to a specific diet rather than a whole population.

Russell Betney Now, moving away from your research for a moment. Do you have other responsibilities? Do you help with teaching perhaps, or do you run seminars?

Professor Baukje de Roos Yeah, so research is very important to me and I hope I can continue to do it for much longer. But as you already introduced me, I'm also the deputy director, the Rowett Institute. So that means I'm doing quite a bit of people management and one of my responsibilities is actually teaching in nutrition. So yes, I'm doing quite a bit of teaching. We now run an accredited programme on campus and online in nutrition. And this is really to inspire the next generation of scientists and health professionals to kind of become familiar with the research area of nutrition as well, so that is very exciting to do. And these programmes are growing year on year. So, it really indicates that there is a huge interest in the nutrition field.

Russell Betney I can imagine that the online courses have been very popular within the last year as well.

Professor Baukje de Roos Yes, we have actually seen an incredible growth and students that are choosing to do it online, they may do that in addition to their job, perhaps for upskilling or professional development. It may also be that people kind of perhaps thinking

of switching careers or perhaps have lost their jobs and looking at other opportunities. So, we have seen a wide range of people now engaging with our online programme. And that is very interesting because it shows us that there is obviously an interest in nutrition and that's important for generally the health of the population as well, to get more people excited about this topic.

Russell Betney Have there been any major career milestones or highlights or even obstacles that you have come across in your career?

Professor Baukje de Roos Yeah, I think one of probably my most major career milestones was when I decided to apply for the deputy director role at the Rowett Institute. And applying for this role was a major step for me. And I was, as a consequence, kind of absolutely excited to hear that I was one of the candidates being chosen for this role. So, in a way, it was very daunting. But it also put me in a position to develop new ideas for the Rowett, which I find very exciting. So, whilst on the one hand, it has been a very steep learning curve, I've also really enjoyed the journey because I've had some very good people to work with. And what I said that really allowed me to kind of start some new developments in teaching, especially, which I think have worked out well, and allow you kind of to be in a position that you can be creative and grow the institute in different ways and this way the teaching side of things. So that has been really, really enjoyable.

Russell Betney Do you have any advice that you might give to women who are interested in a career in science or research?

Professor Baukje de Roos Yeah, well, I think probably one of the best things I've ever heard is just don't give up and try to be ambitious. And it's sometimes kind of hard going because it is competitive and you really have to work hard. But the more effort you put into your career, the more you get out of it, and especially if that is in an area that inspires you. And another bit of advice I found hugely helpful is that you have to find role models. You have to find colleagues that inspire you and who can help you kind of give you advice on your next career move. I've been able to find some of these role models and I'm in touch with them regularly. I admire them for the way they have moved about in their career and what they have established in their scientific area. So, actually interacting with them, talking to them is a really good bit of advice I told by other people. And I think I would really ask other people to do as well.

Russell Betney Thank you Baukje, that is a really fascinating insight into your work at the Rowett and your journey through science. That is the end of our Rowett Institute investigative podcast. It just reminds me to say thank you very much to Professor Baukje de Roos.

Professor Baukje de Roos Thanks, thanks too. I really enjoy kind of participating in this interview.

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