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Evenings



Professor Phil Robinson interview with Chris Bath on ABC Sydney, June 21.

Chris Bath: For 60 years an Australian medical institute has been punching above its weight in research terms. It was established with money raised in Australia's very first telethon back in 1958. The work of what is now known as the Children's Medical Research Institute at Westmead in Sydney has dramatically improved the lives of children and their families right around the world. And this year marks an important anniversary for the fundraising campaign that helps support research there. You might have heard of it, might have even worn denim to work for the day to help this particular campaign out. It's the Jeans for Genes fundraising campaign and it's 25 years since it began. Professor Phil Robinson is the head of the Cell Signalling Unit at the Children's Medical Research Institute, bit of a mouthful, he's also a professor of medicine at Sydney University and he joins me now. Professor Robinson, lovely to have you on the show.

Phil Robinson: Good evening Chris, it's great to be here.

Chris: Now first of all, for people who don't know, can you give us, you know, this is your chance to have a bit of a brag about some of the things researchers like you at CMRI have achieved.

Phil: Oh, the list just goes on and on and on Chris, it's really important for, I think, the community to understand just how far the advances we've made in children's health overall, over the years, it's really incredible. And it's not just children, it flows on to so many other health issues. But what we focus on today is really what is wrong with my child, you know, what is not being fixed, what can't we deal with, and there will always be that problem. So, over the years, Children's Medical Research Institute has had an incredible history of contributing to the way we improve child health. We were the first to find various genetic diseases like cleft palate, and we've discovered about a dozen different related genetic diseases in eye disorders. We're the first to map how the very earliest embryo, when a baby is developing, how that takes the right shape and how the development process leads to the normal embryo without things going wrong. We were the first to discover different elements of cancer, how cancers are able to be sustained and maintained forever, and there are, sort of, two different processes there that the Children's Medical Research Institute has been involved in. We've been pioneering cures for genetic diseases, in particular, liver diseases and the very, very first gene therapy trials in Australia were performed here in partnership with the children's hospital. So, there's a lot happening.

Chris: Now I know, Phil, and I know that your work in the Cell Signalling Unit as well, apart from identifying all of those things, what you guys in your unit have been at the forefront of, have been developing new classes of drugs to help treat things like cancer and epilepsy and kidney disease.

Phil: And this is where it's really coming together and, you know, the next decades have incredible promise. So, it's one thing, an incredibly important thing to be able to pinpoint what is the genetic

disorder. What is wrong with my child, or with my family? But the main way that that child will be treated, if it's not surgery to remove, you know, a cancer, or some other, sort of, physical therapy, it's going to be drugs. And most people don't really understand what genes are and what they do, and I can go into that if you'd like but the main thing is they are blueprints to make proteins, and almost all the drugs in the world target proteins, and so what we want to do is find out what's wrong, what are the proteins that are changed in any particular disorder, and how can we deal with that? And my own group has been contributing to that in both epilepsy and cancer.

Chris: How hard is it to get funding for research these days, Professor?

Phil: Oh, that's a very sore question. The way that the Children's Medical Research Institute is funded, is, kind of, two main things. The biggest thing by far is the support from the Australian community through our Jeans for Genes campaign. And that funds, if you like the infrastructure, and the really big picture stories that we're able to work on, and the collaborative networks that we put together. And it keeps us with the best cutting-edge equipment and technology in the world. But the second way is the really difficult way. And that's the very specific, individual projects that individual scientists are working on and to stay at the head of their game, you apply to the Federal Government for particular project grants and they can make or break an entire career. You have to win these grants every two, three or four years, and you have to just keep on applying and keep on getting them, in order to fund the staff in a particular project. And at a place like Children's Medical Research Institute, all of these things have to come together to enable us to work as a team on these childhood disorders.

Chris: Is it hard to retain great Australian researchers? I know there's a lot more money off-shore for people like you. Or is it getting easier to try and stop that brain drain and keep some of our brightest and our best here?

Phil: It's a really difficult question to answer directly because we have some of the best facilities, the best brains in the world are in Australia, and the best equipment and the best training is in Australia. But scientists don't see boundaries, you know, we don't see the walls of Australia where science stops and so our students, our PhD students and our early career researchers, they want to travel the world and get the experiences of how things are done in all different places. And what we really need to be doing is focusing on how to attract them back to ensure that they want to come back to Australia and bring that technology and experience and those collaboration networks back to Australia. I think we're pretty good at that.

Chris: I'm guessing that's where the Jeans for Genes fundraising campaign becomes very important then because if it's funding, you know, equipment, it gives you the razzle dazzle, in a way, to be able to attract all of these people back to Australia to go "hey, we've got the facilities, look what we've got to research with!"

Phil: That's absolutely right, in fact, it's kind of, almost, one of the only reasons I'm personally still in Australia doing my, leading my research from Sydney, although right now I'm in the Boston area, talking to you from the other side of the planet.

Chris: Yes but that's because of your genius. That's why you're over there. You're sort of, over there because you are one our best and brightest. But you are coming back, aren't you, Professor?

Phil: Yes, I am, but maybe not tomorrow. What I'm also doing at conferences like this is recruiting. It's like an advertisement for the kinds of research activities that we're doing. How do we attract others with, you know, incredible skill to join the medical research teams in Australia? And that's...it's partly the funding situation, and in Australia it's not great, it's certainly not terrible, it's kind of similar to a lot of other countries at the moment. But they're attracted by the science, they're attracted by the environment that places like CMRI or children's medical research provides, and the equipment and the cutting-edge science and technology that we use. That's what attracts students and really bring in young scientists.

Chris: I guess at the end of the day too, you know, people like you, and a lot of the scientists that you're working with, and the young researchers, are human beings so when you look at something like Jeans for Genes, and you see the amount of money that it raises for the Children's Medical Research Institute, at some level, for people like you, does it make you feel good to think, that's all public money, that's all donated money, those people are actually supporting us? Or is that, you know, not really something that you guys worry about?

Phil: I think for me particularly, Chris, you've kind of nailed it. The way I like to think of it is, it's a privilege. It really is a privilege to be a scientist and the scientist is not just a lab-coated person locked away in a laboratory with the doors closed, do not enter, do not feed, that kind of image. We're working with public money so I just told you that were two sources of funding for places like CMRI, and one is the public, the community Jeans for Genes campaign, and the other is these federal grants. And all of that is public money, and all of it is for public good so scientists actually, medical researchers in particular are spending their lives for social benefit. They're trying to change society, and they are doing it with, only capable of doing it with the support of the community. And whether it's the government or the individuals like the Jeans for Genes supporters. Do you know, that the Jeans for Genes has been supported in its 25 years by 12,000 schools across Australia, 20,000 individuals, and 40,000 specific work places have taken part in Jeans for Genes, and they've individually or collectively raised over \$60 million for the vital medical research that we do. So, it's a privilege to be on the other end of that and work with that money.

Chris: Phil is anything special happening for the 25th anniversary of Jeans for Genes?

Phil: Yes, we've...Jeans for Genes started 25 years ago, in fact it was the year after you first interviewed me, when you and I were back up in Newcastle. Do you remember those days?

Chris: That was many years ago, yes, I do remember that vividly and I'm so honoured to have met you and then watched you just fly in the scientific research community, it's been wonderful.

Phil: Well, what happened was the Jeans for Genes campaign launched pretty much the following year, and it was that funding that recruited me to Sydney eventually to work here. And that year we raised only \$250,000 from the Jeans for Genes campaign. The second year, '95, 1995, we raised about just under \$1 million. And so, for our 25th anniversary, we've set our goals a little bit high, and we're looking for raising \$25 million dollars this year. And it's for a very, very specific goals to create a centre for collaboration to bring as much of the science and technology around genetic disorders together, to bring hospitals together with our genetic research, to find ways to better treat Australian children.

Chris: Well, best of luck with that \$25 million goal, Phil, and I know you have to get back to your conference in Boston but I really appreciate your time this evening and congratulations, and thank you to you and all the researchers at Children's Medical Research Institute for everything you're doing for us.

Phil: Thanks so much, Chris, for your time. It's a really exciting period in medical research, really across the world but especially from Sydney's point of view.

Chris: Thanks Professor.

Phil: Bye

Chris: Professor Phil Robinson there, head of the Cell Signalling Unit at the Children's Medical Research Institute in Sydney at Westmead. He's also the professor of medicine at the Sydney University, one of the joint professors of medicine there. And if you want to help out researchers like Professor Phil Robinson at CMRI, the Jeans for Genes Denim Dinner is in July, and Jeans for Genes Day follows in August. Just head to jeansforgenes.org.au for all the details.