AT:Welcome to the Infinite Women podcast. I'm your host, Allison Tyra, and today I'm joined by Liesel Higgins, a researcher at CSIRO's eHealth Research Center, to talk about Australian epidemiologist Mary Louise McLaws.

LH: She was an incredible epidemiologist that actually worked in Australia for many, many years, and internationally. She had an extensive interest and research pool in infectious diseases. She was actually born in Tasmania, so she was originally a Tassie girl, and then eventually ended up in Sydney in the New South Wales area where I think she did a large component of her study. I think epidemiology is one of those things that people don't often know what it is, and obviously she went down that path. She obviously had a head for numbers and big data and things like that. And I think she actually worked in almost all of the major infectious disease issues that the modern world has actually seen. So yeah, incredible scientist in that area, and really came to the forefront during COVID. That was when I think people really got to know who she was.

AT: One of the things that comes up when we're talking about scientists, and especially during COVID, was this feeling that we need science communicators, not just people who understand the science, but people who can explain things in a way that is not only understandable the average person, but also who you feel like you can trust. And my understanding is that she was very good at this.

LH: Yes, I think that was actually her charm. Obviously she had this incredible brilliance and research knowledge and capability, but anything that you ever saw her on in recent years, everyone commented on her communication. And I think that that is something which personally for me, I really, really took away. So I feel like she was very good at being able to communicate to many different audiences. Obviously she had an academic following with very high language skills right down to your everyday general population news programs, where people were all sorts of education and literacy abilities, communication challenges. She really communicated with such a diverse population of people on a day-to-day basis about a tricky topic that was very hard for some people, very stressful times. And everyone, every review I ever saw about her, any comment that was made about her personally, was always about what a wonderful communicator that she was. This is something which I think in the science community we really need more of. And I know we try really, really hard in our work to get that communication style right. And certainly she actually had great demonstration of those capabilities. I really enjoyed watching her updates and I found great comfort, often, personally in her update. She was very calm and measured and always had good rationales behind why she said the things that she said. So I think people really resounded with that as well.

AT: And she also just had a great deal of expertise in her field.

LH: I made a list of all the things, the different diseases that she actually had worked across because it's quite astounding actually when you think back on modern times. So she worked with COVID, SARS, swine flu and HIV. And I think that this is something which really resounded

with me because I know in our workplace we are always trying to solve the biggest challenges. And my goodness, one person, one scientist, worked with some of this world's most incredible challenges medically. So that's an impressive list of disease to actually have worked with. And she pioneered mask-wearing, she pioneered vaccinations and the safety of vaccinations. She pioneered social distancing. And those are things that, there are similarities across all of those disease sort of profiles as to how to take those measures. But this is also advice that really has lasted. We're a couple of years away from COVID, the COVID proper period now, but actually people are still holding firm on those. That advice has not wavered still, mask wearing, social distancing, vaccinations, they're all still recommendations which have stood. So I think her body of work, while probably very similar in approach to how she worked with those different diseases, the fact that she's worked across all those diseases is incredible. And the areas that she went to as well, like, I think she went to some of the most unusual areas. There are a couple of different countries she went to, which not many people have the ability to say they've worked in. I was having a look at her history and she really had traveled to some unusual places across the world to do that work. Incredible research body and incredible touch points in her career, obviously.

AT: And because she worked with the University of New South Wales Medicine and Health Faculty for 36 years. So, even though the thing that she's probably going to be best recognized for by our generation was obviously her public communication skills. But that doesn't mean that she wasn't doing this amazing work before that. And like, she wrote 180 papers.

## LH: Quite impressive.

AT: And she was made an officer of the Order of Australia in 2022 for distinguished service to epidemiology and infection prevention. So, you can argue about what part of her career was the most important, because certainly what she was doing as a communicator was important. But it certainly wasn't the only thing that she should be remembered for.

LH: No, and I actually don't think you get those kind of accolades for just one thing. I think you have to have built and layered on. And she also worked for the World Health Organization. So, she really was such a trusted advisor across so many different forums. And I think to have had the confidence to provide that kind of trusted information, you really have to back yourself, what an incredible woman to be able to back herself with that information and really trust in her own knowledge and her own expertise. And that can only come from years and years of varied and incredible bodies of work put together over time. So, I think while, as you say, we know her for the most current few years, I think people who have worked with her more extensively really probably look back on that incredible history. She was director of the Public Health Unit for the Sydney, Southwest Area Health. So, she had that clinical input as well. She advised to China. She worked in Hong Kong. She worked in Malaysia. A member of WHO's Interfection Prevention and Control Global Unit in 2022, UNSW named its new Clinical Education Center in Professor McClaw's honor. And that's when she was also appointed to the officer of the Order of Australia for distinguished services to medical research, particularly epidemiology and infection

prevention to tertiary education and to health administration. Incredible person.

AT: And when we're talking about, she worked for the World Health Organization, not just that, but she was on their Health Emergencies Program Expert Advisory Panel. That sounds really impressive to someone like me. I don't know the full context of that, but that sounds really cool.

LH: Yeah, yeah. And I think just a testament again to that backing of expertise. There are very few people in the world who get to those kind of positions. Clearly, there was an incredible respect for her knowledge and her understanding of how disease moves. I think I heard an interview with her once where she talked about getting in front of it and how she really looked at the data and really read the data properly to get in front of these diseases. And, the other thing which I think was amazing about her, and I really think this is the sign as well of an incredible professional in her field, is it was commented that she knew her limits, which I think is amazing. Because, often we do see people who are in very high level positions who often maybe don't want to admit that they don't know everything and so try to cover it up or use lots of techniques. But she was well known for saying, "look, I'm coming from this as an epidemiologist. I will always say, 'we should go the extra mile. We should have the extra shutdown. We should have, whatever it is the strategy is needed." But she actually also openly said, "but I'm not a business person. And I'm not the person who's trying to work out the world health economics." I think that's an incredible trait to have that you can admit when you don't know something in this situation. So obviously her combination of personal skill and personal expertise combined really added to those high level positions, which just simply not many people get to. Quite an achievement.

AT: What you're touching on is these different aspects of why we trust people. So talking about why we don't trust people. But in this case, you've got someone who is not only honest about, I wouldn't say her shortcomings because no one can know everything. And the fact that you do get people who will BS you because they want to look like they know what they're talking about, even when they don't. And so having someone who straight up acknowledges, "I don't know." But beyond that, we've also got someone who is acknowledging different points of view, which is another thing I feel often gets lost in less nuanced discourse where we're just saying, "this is what you should do because I said so." And we're not acknowledging the repercussions for different kinds of people. We're not acknowledging the viewpoints of other people who have perfectly valid concerns. And so I think that empathy was probably also a big factor.

LH: Oh, absolutely. And you can see it when she spoke. If you ever watched a live interview with her, she had this incredible ability to say, "these are the facts. This is what the science tells us. However, these are the considerations that other people need to think about." And you're right. I believe firmly that that kind of approach will make people more trustworthy of what they're hearing. Because I just think it's such a mistake often to say, "yes, this is exactly how it should be." No one can understand what it will be and what it should be for every single individual case. It's simply unachievable. And I think it's incredibly admirable that she was able to really put herself in a different position, I guess, and actually say, "well, I know the facts, but I can't always

know how that applies for someone." And that's unique. It is unique, unfortunately. And I think that stems from people often feeling like they have to have an answer. People are looking at them. But I think this comes back to, again, that self-assuredness that she definitely had in that trust in her own capabilities. That, "well, this is what I do know. And this is what I don't know. And that's okay." But that's why we also, points to that ability of scientists having to work as a team or the correct collection of professionals working as a team to try and find a pathway through these tricky situations. So she obviously was an incredible team player as well in that way that she really did consider others around her.

AT: It sounds like it required a combination of confidence and vulnerability to be able to say, "yes, I'm an expert. Yes, I am one of the most qualified people in this country, if not the world, to speak to this topic. I know what I'm talking about. But because of that, I also know how much I don't know. And I have the self-assuredness to be vulnerable, to admit that I don't know, but also maybe no one knows right now. And we're trying to figure it out." And that's incredibly reassuring to actually have someone say, "I don't know," even when everybody's freaking out because no one knows. But at least we know the best qualified people, hopefully, are working on it. And we know that we can trust this person to be straight with us. Because if nobody knows anything, and instead all we're getting is misinformation, that's way worse in the long run.

LH: Yeah, absolutely. And I think it is. You're right. It's really reassuring to have someone go, "even with all my knowledge, I don't know. But let's work it out together. Let's try and work it out. Let's try and find the best way forward." And also, the other thing that I saw her do during that time in many of the interviews that I'd seen was while some things, the scientific facts, obviously for her, were very black and white. "This is how it is. And that's the knowledge we have." And that's how that should be, because it is scientific process. If you followed it, it's pretty guaranteed. But she would actually go, not just, "I'm not an expert in this other field." She would also add in things like, "okay, so for this group," like I made her make a comment once on aged care facilities, where she was like, "no, they still need to be really careful, because the mechanism of how an aged care facility is set up, it will just run like wildfire through that. But if you're somewhere where you've got great ventilation" and, comments on travel, "if we can find like-minded countries that have similar precautions to us, then travel between those should definitely go ahead." There were these comments that came through that clearly were not "it's a no, no, can't do that." It was "no, there just needs to be a provision," or "we need to think about how we can make that work." So yeah, it was very much that I may not know it all, and I don't know it all, and I'm okay with not knowing it all. But if we all work together, we'll work out something that best fits probably most people, maybe not everyone, but most people. And it's an incredibly admirable trait. Professionals should be working more like that. I think it's an incredibly inspirational way to move forward as a professional looking at that as an example.

AT: And I think what we're touching on again here is nuance and context. So saying, "yes, travel is okay under these specific rules." And I think a lot of the time that gets flattened because people only hear, "well, she said we can travel," or you get a headline saying, "oh, she says we can travel." And it's like, no, that is the short, simple takeaway, but it leaves out so much of that

nuance and context. And I think that's why a lot of people are more inclined to just do sort of the knee-jerk, "nope, nobody gets to travel because we can't trust you people to not just say, 'she said we could travel. That's it. I'm going, bye!"

LH: Yeah, you're right. And I think it's hard, isn't it? And I think it's that skill in being able to present information in a number of different ways so that eventually the information goes in or gets captured somehow. And that's the other thing I think was so wonderful about her style, actually, was that she just was so, she had this calm, measured way of talking in quite simple language. It actually was very easy to listen to. I found it very easy to listen to. And I'm the first person to admit I don't often have a great attention span at times. I'm used to listening to lots of big words, but I don't always take them in, I confess. And I found her very, very easy to listen to, easy to understand. Her messaging was simple. It was about complex issues, but very simple. And again, it comes back to what we've been talking about around that really skilled communication style of being able to provide a complicated issue, making it a simple message, in a trustworthy way.

At the moment, as I said, I work in digital health inside the Australian eHealth Research Centre, so very much a health-orientated area. We're looking at a lot of different things which really are very much informed by epidemiology approaches. I don't work personally in a team that deals specifically with disease prevention, but I think that we very much have that same approach of looking at big data, looking at how things are moving across populations, really looking at how we can communicate with people. That is an incredible remit for us in our teams. We're working across acute and chronic care areas. We've just recently done some work with the NDIS, the National Disability Insurance Scheme here in Australia. We're working across diabetes, we're working across stroke care, and all sorts of different areas looking at how digital health can help those things. And in fact, we are even beginning to look a little bit at some of the long COVID work, and we've had a number of people talking to us recently around the prevalence of long COVID and how it could be measured through technology, things like that. So there's definitely crossover in the work and definitely, I guess, touch points that are very important for lessons to have been taken away from someone like Professor McLaws. And I think that that epidemiology informed approach is really important. I think also aged care, we're doing a lot of work in aged care at the moment, really talking to aged care providers, looking at what their technology needs are moving forward in a very challenging work environment for them at the moment. And I think it's very well documented how challenging the aged care workforce and the aged care environment is finding their current situation, so how we can help in those areas. Yeah, it's quite varied work at the moment, but very interesting, very interesting and up-and-coming kind of work.

AT: Join us next time on the Infinite Women podcast and remember - well-behaved women rarely make history.