Podcast – Jo Merrifield interviewing Lucy Whitaker

Transcript

Jo Merrifield speaking with Lucy Whitaker

Time	
0:10:	*Welcome to this episode of Clinical Research Career Conversations, brought to you by Edinburgh Clinical Research Facility. My name is Jo Merrifield, and today I have been speaking with Dr Lucy Whitaker, a Senior Clinical Research Fellow and Honorary Consultant Gynaecologist at the Centre of Reproductive Health, University of Edinburgh. She discusses her current research, her career path, benefits, challenges, and top tips. Enjoy.*
0:41: *(Jo)*	*So hi Lucy, thanks for talking with me today.*
0:44: *(Lucy)*	My pleasure, nice to see you.
0:46: *(Jo)*	*Thank you. So let's just jump straight in if that's OK, and I was wondering whether you could talk about your current role and the research you're currently involved with.*
0:56: *(Lucy)*	Yeah, absolutely. So I am a clinical academic, so I both have a role in the NHS - I'm a consultant gynaecologist - but the majority of my time is spent working for the university as a clinical researcher. So I work within an endometriosis and pelvic pain research group, which is led by Professor Andrew Horne and Professor Philippa Saunders, which encompasses through from discovery science, data science, but also has a very strong translational arm. And I'm predominantly involved in the translational work we do, so that's clinical trials to deliver better treatments for endometriosis. But I also have an interest in better diagnostics for endometriosis and better understanding of particularly the pain that's associated with the disease.
1:32: *(Jo)*	*And I think endometriosis has had quite a lot of publicity of late, hasn't it? It's a growing area of understanding.*
1:37: *(Lucy)*	Absolutely. Yes, very much so. But I think it's been a very overdue spotlight being put onto this disease. So it affects one in ten women and those assigned female at birth, so that's 1.5 million women in the UK, 190 million worldwide, but up to even three years ago, 50% of the UK population had never even heard of endometriosis. And it's a condition when you get cells similar to the lining of the womb, but elsewhere in the body, and these form into little lesions which undergo progressive cycles of inflammation, which leads to significant pain but also a lot of scarring.
2:12:	And it can have a really debilitating impact on people's lives from pain, impact on the bowel and bladder function, fatigue, but also it's one of the leading causes of unexplained infertility, so it can have a huge impact both on that individual woman, but also everyone around her, from her relationships, her family, but also her ability to participate in the workforce. And that's one of the reasons why endometriosis costs the UK economy £12.5 billion each year. And it's because that loss of women, their ability to work, at what should be some of the most effective times of their working life.

2:43: We don't have a cure for it, we don't fully understand it. And our current treatments are essentially either hormonal treatments to suppress the disease, because it's very like the lining of womb, or we cut it out surgically. But for many people surgery doesn't work for them and obviously it's associated with risks. And for the hormonal treatments, again, it doesn't work for everyone. They've got side effects with them, and also they're contraceptives, so for anyone seeking to fall pregnant, they're not an appropriate treatment for them. So there's a real unmet need to have better treatments for people, that are appropriate also for different stages of their reproductive life course.

3:16: I think also one of the big challenges of endometriosis is that we're terrible at diagnosing it. So the majority of endometriosis we can't see on a scan, or there's no blood test for it, and so we're dependent on doing surgery to diagnose it, and that means that from someone first going to their GP to seek help, to actually getting a definitive diagnosis is around 8.5 years, and that's not any better now compared to ten years ago. In fact, it's probably also worse because of the impact of the pandemic. So, as a researcher, it's a very fertile ground because there's an awful lot of unanswered questions that we desperately need to do better to serve this very large population.

3:51: *Yeah. That's great and a really important area. So I wonder, could you tell us a little bit*
(Jo) *about how you actually got to this point? So what has been your career path and why you decided to go into research?*

4:05: So I think, I suspect like most people in research, particularly clinical academics, it's
(Lucy) been a bit of a wiggly road. So I trained at the University of Edinburgh. I did my house jobs here, and I went to New Zealand for two years and then came back to do my specialty training in OG. And I've dipped into research at different time points in my career. So when I was an undergrad, I took a year out and did an honours degree in microbiology. I spent three months in a lab culturing E. coli - realised I'm not necessarily a great person for a lab. It was all from lots of bits of cow faeces and it was…

4:36: *Oh, nice! Very pleasant!*
(Jo)

4:39: Yeah - character building! But then when I, sort of latter end of medical school and
(Lucy) doing my foundation programmes, also house officer jobs, I was very interested in kind of better understanding conditions and particularly the sort of clinical management and often inequalities in care. So I did quite a lot of large audit projects which resulted in a couple of publications. So I think we're all aware that points mean prizes on CVs in terms of getting future jobs, so those were helpful things there.

5:08: But it was really when I started O&G training in Edinburgh - I think we're incredibly fortunate here that it's a very, very strong clinical academic department, so we've got both across the UK and actually on the global platform as well. So I was surrounded by, I think it must have been five or six, you know, world renowned professors who were all here working as clinicians as well. And so they got me involved in recruiting for some of the different studies they were running, be that from giving GTN, which is what you take for angina, to get a placenta delivered, better understanding the impact of people who rupture their membranes early and how to manage them. But where I did quite a lot of my early research was with Andrew Horne and Professor Hilary Critchley, who were… Andrew was working very much in the pelvic pain space, and

then Hilary Critchley within heavy menstrual bleeding, and they got me to do various projects. I did a Master's in Surgical Sciences, so I then designed and delivered my own trial looking at neuropathic pain and chronic pelvic pain, but it was very much integrating within my clinical job, so identifying and recruiting patients for clinical trials.

6:09: I took two years out of programme to do an MD, so a doctorate degree. And for that, that allowed me two years of dedicated research time. And whilst my MD shows that I went back into a lab, which was a mixed experience, I think some people, it suits really well. For me, I'm more of a cooker than a baker, so, very precise laboratory science is not necessarily my forte. But actually what I spent most of my time doing was clinical trials and it was taking the condition of heavy menstrual bleeding, which again, really debilitating, really common, really badly managed for most people, and looking at new treatments for that. And that's where I like to be. I like to be at actually that sharp end of translational research. So seeing the clinical problem but actually presenting to patients something that could be a future treatment.

6:53: I then got a clinical lectureship after that, and then, I'm now a senior clinical research fellow, having got on an intermediate fellowship. So I now work 80% for the university and 20% for the NHS, but the two very much complement each other. The patients I see clinically are the patients who are taking part in my research studies.

7:09: (Jo) *Brilliant. And you've obviously spoken about being surrounded by all these professors and them supporting you with your career in research. Have there been any specific opportunities that helped you or has it just been because you've been in the right place at the right time?*

7:26: (Lucy) I think it's easier to be in the right place at the right time in Edinburgh because there are many more clinical academics, there are many more projects, so it's easier to get involved in things. I suspect there's also an element of people make their own luck. If you're enthusiastic, you are more likely to come across those opportunities.

7:42: So I decided I wanted to do the Master's in Surgical Science, but there was then Andrew Horne gave me the opportunity and support both from himself and from his clinical research team with the trial managers and research persons about how to design, how to deliver a trial.

7:55: And then for my MD, that was funded by the MRC. But what I think has been really pivotal is the support I've got from the Chief Scientist Office and the University of Edinburgh. So the Chief Scientist Office funded my clinical lectureship and are now funding my fellowship and that's allowed me to have the time - the protected academic time - alongside my training and now alongside my consultant job to be able to do the research. I think if you're trying to be an academic on a full-time NHS job, that's really, really tough. Some people do it, but it is very hard.

8:26: And also, I was lucky to get bridging posts from my lectureship finishing and getting my fellowship. So the University of Edinburgh had funded me for up to two years to have the time to write a fellowship because that is a big undertaking. So that was really important to have that space.

8:42: And then I've been really lucky in the grant funding that I've got, but I've been supported by a team of both those who helped deliver the research, but actually those

senior academics, to allow me to move to positions of more of a leadership role within clinical trials and then encouraging and supporting me to write grant applications for my own trials where I'm the chief investigator, two of which I was awarded before I finished my specialty training. So I think I was just really lucky about the support I had from Andrew.

9:10: (Jo) *Yeah. And, so you talk about how you're 80% funded by the university and obviously 20% at the NHS. So how do you find that your research work impacts on your clinical work and vice versa?*

9:24: (Lucy) So I think being sat in the clinic, seeing the woman in front of you who has lost her job, her marriage has broken down, she is housebound half the month. It really, really reinforces to you the impact of this condition. I think that it serves as a constant reminder and inspiration about why we do what we do. You can read all these statistics on the page and there's some good statistics about the impact of endometriosis, but actually being reminded of that woman in front of you.

9:50: So I think that really helps centre what our research questions are. We've been very lucky about the patient public involvement we've had in our research design, but you can then combine that with your clinical experience. And I think that also helps you design research that is more pragmatic and deliverable and addresses the issues that the patients want. And both that we have then further definitions about what they want from things like a James Lind Alliance Priority Setting Partnership with patients, as well as the PPI work we do and we're designing the more sort of nuanced and granular aspects of the trials themselves.

10:25: I think in terms of delivering the research, you've then, you know, I see patients every day who, the majority of which will be eligible for at least one of the studies, depending on what stage of their endometriosis journey they're at.

10:40: And I think it also helps you, both when things are being frustrating, whether or not it's in your NHS practice or in your university, you can go and do the other side and that kind of reinvigorates you. And it's same that, you know, when I sit and see these women having a terrible time, I go well, actually, this is really exciting. We've got better understanding, we've got new drugs coming through, we've got better diagnostics coming through.

11:01: And I think it enabled me also to be a better clinician. I've got a really, really good overview of what the existing evidence base is. So I think that helps me to join decision making with my patients.

11:11: (Jo) *Yeah, excellent. And from a personal point of view, what have been the benefits of being part of research?*

11:19: (Lucy) There are so many varied benefits of having these dual roles in both aspects of my job, be it the NHS or research. I work with fantastic teams. But within the NHS, it is really quite hierarchical, whereas I feel within our research team, whilst there is the overall group leader, principal investigators, and then the trial managers, research nurses, research administrators, there is a hierarchy, but I feel it's much flatter and there's much more… I feel it's more of a two-way relationship. There are things that our trial managers know that I just absolutely do not know what they know, and I'm very reliant on their expertise. And same when you're working with different disciplines, be

it health economists, statisticians, other discovery scientists. There's all these different people you work with, and I find that really encouraging. I think also having that continuity and able to mentor students in the different ways so that your NHS role… we've lost that old firm style delivery of training. So actually it's great for the students to be with the same person week in, week out and actually see their progression. That's really incredibly rewarding.

12:26: Then, and I hope I'm not overly egotistical - I think we're probably all slightly more egotistical than we think - it is great making a difference. I am really excited when things come through and go, actually, this is really exciting and this could change things, this could really help a lot of people.

12:42: And I think there's also the other, you know, the wider interactions with, you know, I've now got people I collaborate with all over the world. I've got to travel to places that I never would have ordinarily picked to go to that have been fascinating.

12:52: And then also having better understandings of the infrastructure around clinical healthcare services. So knowing more about governance and strategy, you know, what the policy makers are thinking, what they want to see. I think that's added much more richness both to my overall career, but also better understanding for the NHS side of things.

13:10: (Jo) *And it sounds a really varied mix and, like you say, if things are frustrating on the university side, you've got the NHS and vice versa.*

13:20: (Lucy) And there's absolutely frustrations on both sides.

13:22: (Jo) *Yes, I can imagine.*

13:24: (Lucy) But hopefully, they usually don't both happen at the same time you can go back to the other and that will motivate you all over again.

13:28: (Jo) *And I guess that's the beauty of having that protected time as well and you're not having to try and do things on top of each other.*

13:41: *So we've spoken about the benefits, but I'm guessing there's been huge challenges as well, and we should give them airtime. So what challenges have you faced in your career?*

13:44: (Lucy) So I think there's both the things that will affect everyone involved in research, in particular I think surrounding clinical trials. But there's also then the personal things that being a clinical academic, you are doing two jobs and, no matter what your job plan says, whether, you know, when I was doing lectureship doing 50/50 and I'm now 80%/20%, you know, I don't do 80%. Or when I was 50%, I didn't do 50% of two jobs. I probably did 80% and 80%. So it is busy, but there are usually ebbs and flows and you can balance them. I think you need to be organised. I think you need to have clarity of vision.

14:17: It's really easy - I'm an enthusiast - you get distracted and often I'll go, oh, this looks really, really fascinating. And you know, there is that flexibility in an academic fellowship to explore these new avenues, but I think you have to realise that, whilst I hope most people can do anything if they put their mind to it, but you can't do

everything. So you do need to be considered and have focus about what you choose to pursue.

14:36: I think in terms of the wider landscape, like all research, if you're in a laboratory, there will sometimes be an experiment that you've done 17 times. The 18th time it just doesn't work. I just don't know why. Sometimes you can go back and go, actually no, it was a step that went wrong. Sometimes it just doesn't work. It's deeply frustrating. Particularly, I feel sorry for people who have these experiments that run for weeks or months at a time.

14:58: And then for trials, you always think there are going to be more patients than there actually are.

15:05: And leading a team, you know, learning those management skills is tricky and I think, particularly within the university structure, that sort of getting management skills is better built into it, whereas in the NHS it's a different style of management and it's more about clinical supervision and so they're different dynamics, so acquiring those.

15:24: But I think on the wider clinical trial landscape, COVID obviously was a huge challenge. Although I think - let's try and see the silver linings - I think we've now got more nimble clinical trial designs. Some of the infrastructure approvals has been more streamlined. I think patients are more receptive to research, and I think there's innovative design not just in the methodology of a trial, but things like using remote sample collection, moving towards decentralised trials, so you're not dependent on them coming up to a trial centre, which for me, working with young women who've got jobs, they've got children, they've got busy lives, they can't be coming up to a research centre three times a week. It's just not a practical thing. And then that means that they're unable to participate in research.

16:06: I think one of the things I find challenging at the moment is drug delivery pathways. So if you're working with new drugs, with smaller companies, the infrastructure and how long that takes, and the MHRA approvals, I feel constantly I'm meeting new challenges that I was never even expecting to meet. And everything always takes at least three times as long as you thought it was going to and probably costs twice as much. So if you just lean into that early on, then it becomes slightly less frustrating.

16:38: (Jo) *And those frustrations, how do you keep yourself motivated? I'm guessing the overall purpose really keeps you going, but in those really frustrating moments…*

16:49: (Lucy) I work with a brilliant team who are all, you know, we've got really, really experienced trial managers. Andrew Horne is very much, as well as being my boss and is a great mentor, although I, you know, wouldn't call him a mentor because he is my immediate boss, but he still has done a huge amount of mentorship. But there's, you know, within the wider IRR, they are, so Philippa Saunders, Hilary Critchley, and now I'm really lucky to be working with Dave Newby. They are good at reminding me that these things happen and it will be fine. It's just going to take a bit longer.

17:19: And I think also at the moment, I don't just have one project that my whole life is all about. I've got lots of different projects. And it would be unusual if they were all having a disaster at exactly the same time. So you've always got things going, right, this is how we're going to deal with these problems. But, no, let's remember the positives. This is going really well. And so… But it is all about coming back to a team.

The days of when you did something on your own are long gone. And so we talk about team science, but it's absolutely true, and I'm incredibly fortunate with the group I work with.

17:46: (Jo) *Yeah, brilliant. So you're doing all this research. What do you hope at the end of your career, what do you hope your legacy will be?*

17:55: (Lucy) Well, this is going back to ego, isn't it?

17:56: (Jo) *Yeah, I was just thinking that! But it's good to make your mark.*

18:01: (Lucy) I suppose it won't be my legacy, it will be me and the team I work with legacy first and foremost, but I hope that women will get a diagnosis faster. They will be able to get to the right treatment for them much earlier and that they will have a plethora of evidence-based options for them so that they will be able to have effective control of their symptoms, preserve their fertility, be able to do what they want to do on a daily basis. But I think also there's a more important piece in terms of the advocacy we do about women's health, so not just endometriosis and pelvic pain, but heavy periods, incontinence, all the issues surrounding fertility. I think medical misogyny is something that we've become a bit more aware of in the last year - it's certainly been a hot topic in the last 12 months or so - but I think the work that we do as a team to raise awareness has been hugely rewarding and I think we have seen a big change in, you know, people talking about endometriosis compared to even five years ago. And that's a really wonderful thing to see.

19:03: (Jo) *Yeah, that must be super rewarding, and you feel like you are making a difference.*

19:08: *And finally, what tips or advice might you give colleagues who are interested in being more involved or who are thinking about pursuing a research career? What would you tell them?*

19:21: (Lucy) So, I think, be enthusiastic. I think it's rare that someone knows exactly which very specific part of research - be it discovery science, translational research - they want to do when they're starting out. And actually it's really good to try some of these different things. So get involved in a bit of laboratory work. I suppose I came through it as a doctor, so during my training, doing things like undergraduate honours degree, taking time out of a programme later on to do a doctorate. But actually, where I first got involved was recruiting for other people's trials, so just the patients I'm seeing day in day out.

19:56: I think it is getting harder to get funding to go out of programme to do a PhD, and so you need to start building your CV. So take on these little extra credit projects where you, you know, at least get a poster out of it, or ideally get a publication from it. You know, no one's expected to be first author straight off the bat, but you work your way up and you gradually get more and more skills and then your CV will start to grow. But I think you do have to be enthusiastic and organised, but just also go and ask.

20:23: Obviously I'm in Edinburgh, I'm hugely biased. I think it's a great organisation and I was really fortunate to have easy exposure to clinical academics who are really supportive. You do also have to go and ask people for things. You can't just expect to have the opportunities delivered to you. There are lots of people there and they won't know by telepathy who wants to be involved.

20:43: I have to say, I know we now work together on the Edinburgh Clinical Research Methodology Course. I did that when I was a third year trainee and I was about to go out of programme to do my doctorate, and I find that a really, really useful course. I sort of understand a bit more of the mysteries around particularly clinical research, which was then going to be something I could engage with much more easily.

21:03: And it's because at times, funny I'm now involved in helping organise and deliver that course, having sat in that room being a very junior researcher, probably longer ago now than I care to think, but it feels not very long ago. So I think it's about seek out people and wherever you are, there will be academics. Be enthusiastic, but also be a little bit strategic. So you know it's reasonable to ask the question, what will I get as an output from this? And look at your CV, think about where the gaps are.

21:34: But we all want to help. I think most researchers are involved in higher education institutions. We find having students and seeing them achieve and succeed one of the most rewarding things about their jobs. I think sometimes the reality is we're really busy and don't have capacity to have more students, but always ask. The worst someone can say is “look, I'm really sorry I don't have the capacity at the moment”. But they often will also say, but, you know, ask this person. It's a supportive environment.

22:01: I think, you know, there used to be these examples of professors in ivory towers 30 years ago, jealously guarding their research. I think now we're much more collaborative and open about things.

22:12: But I think it is helpful to get skills like doing your good clinical practice. That's a really easy kind of go on a one day course or do an online program, and then actually you can be involved in the patient-facing aspects of clinical trials that are running. For lots of my trials, I've had an army of trainees that have helped support them, you know, without them you couldn’t have delivered them. But also we've been able to then support them in research training, so it's very much a two-way relationship.

22:37: (Jo) *Brilliant. Well, thank you so much for chatting to me today, Lucy. I think that was a really interesting and insightful conversation. So thank you very much.*

22:45: (Lucy) My absolute pleasure. I love what I do. I really, really - I still go home and say to my husband “guess what I did today”, which is an enthusiasm I had when I was a medical student, but it's great to still have that now. It's busy and it’s got its own challenges, but I really love what I do.

22:57: (Jo) *What a lovely way to end. Thank you.*

23:03 (Lucy) My pleasure. Thank you very much.

23:15: (Jo) *Thank you for listening to today's episode of Clinical Research Career Conversations. Today, Lucy shared her path into a clinical academic role, her enthusiasm for translational research and her ongoing work in endometriosis. She highlighted how combining clinical practice with research can keep projects focused on patient priorities and how teamwork and protected research time have been crucial in her career.*

23:37: *Lucy was candid about the challenges, balancing two roles, recruitment targets, and projects that don't go to plan, but also clear that these are all part of the process. Her hope for the future is faster diagnosis of endometriosis, better treatments, and more advocacy for women's health.*

23:57: *For anyone considering a similar path, her advice is practical. Try different types of research, help with existing studies, be strategic and seek out opportunities.*

24:09: *Thanks for listening to Clinical Research Career Conversations. If you enjoyed this episode, don't forget to subscribe, share, and leave a review. Until next time, bye.*