

RCPCH Podcasts transcript

Child health research 2: Getting started and finding support

Will Carroll (intro)

We can all think of things in our clinical practice that stimulate a research question. I just need to speak to any colleagues, whether they're research active or not, to know that the things that excite me excite them. It doesn't matter how often you fail, as long as you just keep on getting back up after failing. That's the bottom line – and not being put off by that failure.

Davide, R&E team

Welcome to this podcast from the Royal College of Paediatrics and Child Health. This is the second in a series of podcasts exploring research in child health. In this episode, we'll hear about ways to paediatricians at all levels can get started with doing research alongside a clinical role, deal with the challenges and find support. My name is Davide and I'm a college staff member in the research and evidence team. I'm here today with Professor Will Carroll. Will, you've been officer for research at the college and have a deep involvement in research alongside your clinical work. So firstly, can you tell us how you got so interested in research?

Will Carroll

Okay, well, I'm a... respiratory paediatrician now, but I did 11 years as a consultant general paediatrician working in Derby, which was a great place to work. And I've now done almost exactly the same length of time, 11 years as a respiratory paediatrician working in Stoke-on-Trent. I guess I hope some of the listeners will realise that I'm the fairly recently departed officer for research for the College of Paediatrics and Child Health. So I'm interested in research. That's fairly obvious. And today I just wanted to share a bit of my experience about building research infrastructure in what is not a specialist children's hospital, in district general hospitals.

I guess my research journey started quite late in my career. I actually almost

finished training when I had my first period of research time. So my last year before CCT and my first year after CCT was doing research. And at that time, my research was anything I could do, anything I could do. My thesis is on asthma genetics, but I was also applied for and got funding to do a randomized controlled trial of asthma medicines. And I did work on breath analysis and then started some work on epigenetics and cord blood sampling. So I definitely turned my hand to everything in those couple of years when I was doing research. And I think it probably helped me that I was a little bit more senior at that point. I had the confidence to just go ahead and do things. I enjoyed that period of my career.

And then I went and became a consultant and I was working in a pretty busy clinical job. And I tried to squeeze alongside my clinical work a little bit of research still to keep going. I had a lot to write up for my thesis, so that kept me busy. But I also was interested in doing clinical work. And I was really lucky to be in Derby. I had a wonderful professor, Imti Chinara, who was really supportive and brought me into the team and said, come on, Will, you can do this study, you can do that study for, you know - these are other people's portfolio studies and recruiting into those studies. And I did that for the whole time I was in Derby, I did a little bit of my own work, but much of the work I was doing was portfolio studies, recruiting into large clinical trials and trying to help other people to get their work done.

And I learned a little bit about research funding. It wasn't really until 2015 when I went back to Stoke-on-Trent that I took a much more active part in research in that I had a little bit of time put aside for research in my job plan. I was aiming at that stage trying to become a professor of child health and recognized that I needed to strengthen my own personal research. And that's when I started to put together my own grant applications and as well as doing other people's research, try and lead a team of doctors who were also doing research at that time. So I've kind of had a career in every aspect as both a paediatrician working, just doing it alongside their day job as business as usual, and then as a consultant trying to incorporate it within the working week and actually make time for that research, which I hope the listeners will find useful.

Davide, R&E team

So have you faced any challenges in getting research done?

Will Carroll

Yeah. Find the time. I mean, that's the first thing. It's always difficult to find the time. And there's that temptation for clinical work to creep into when it's your research time. So you might be, I've literally, I'm doing this podcast now and I've

just seen my e-mail flash up patient query and I'm on call today. So I already know that I, you know, I feel that pressure as many of my colleagues will feel in that whenever you're trying to do research, something else always gets in the way. Making time to sit and think and do it properly is always very difficult.

What else? I mean, funding is difficult. I won't make any bones about it for those of us attempting for NIHR funding, unless you're really, really lucky, you're going to have to face failure a lot. You're going to have to face failure A lot. I like to say, I think nine out of ten ideas in research go nowhere and you spend a lot of time and energy and you have to dust yourself down and go, I didn't get that funding. And I'm always in awe of people who seem to find that aspect of research easy. they say, yeah, I've got a program running and we know what works and we've built this structure and I don't think I've ever got into that position where I find it easy. I'm constantly looking for my next source of funding and to try and make sure that funding is there to support my department because it's, in many ways, it's easier just to continue as an amateur, doing research in my own time, doing it because I enjoy it, not really worrying too much about funding, but then that prevents you from doing more important work because you need a bigger team behind you to do more important studies, answering more difficult questions. So yeah, funding is difficult.

What else is a challenge? I would guess persuading colleagues that your idea is the best idea and they're going to spend their time doing it. So I'm lucky I work in a great team and we all try and have each other's back and recruit for each other's studies. But it is, there's always a certain pressure that it might be viewed as my study within the department. So then the pressure falls on my shoulder to answer any queries about that study, to speak to the research nurses, to speak to the patients, to do the consents for that study. And then if I'm not around, things can actually grind to a little bit of a halt. That doesn't always happen, but it does sometimes happen.

And then keeping momentum going so that you stick to timelines. If you're lucky enough to get the money in, certainly working with industry, they really want to see studies moving quite quickly and that really is a challenge because as I said, the clinical work somehow gets back into the way. I wear lots of other hats, whether it's the College hats or it's the writing books hats or it's the leading the department hat or it's clinical work. All of those things can get in the way. And it's quite easy to put research last because it's not immediate and therefore find that it's not been done.

And then trying to do it when you're tired. That's something I now recognize as I've got older, that trying to do research when I've had a long day already, trying to do something is more difficult. I just don't think as clearly after five o'clock as I used to. And so I have to try and make some quality time in my day to do the research. Otherwise, you've just got the rubbish bits in my brain left that don't work very well.

Davide, R&E team

Specifically with paediatricians, what support is available when you want to do research? Is there any advice?

Will Carroll

So I guess it depends what stage of your career you're at as a paediatrician. But there is for our residents the trainee research networks, which are just fantastic. And some of them would have been around for a very long time and are very established and some of them are newer. And certainly one of the highlights of my time as Officer for Research with May was getting those trainee research networks up and running so that there is a TRN near you. For those residents listening, there's a TRN near you. Go to the college website. You should be able to see where your local TRN is. And there'll be expertise within that TRN from the residents themselves that will surpass my expertise in many areas. I was just thinking today that I need to do a power calculation. Maybe I need to get PRAM involved, who's the West Midlands Research Network, because they'd be able to do the power calculation a bit easier than I could. I've been struggling with a pen and piece of paper over the weekend. So I might have to phone a friend this morning to make sure that calculation is bang on and correct.

And then for paediatricians who haven't done it before, the NIHR is a good source of support. I was really lucky that there was a short period of time where the NIHR were funding mid-career people and I benefited from a research scholarship in the West Midlands and they're all gone now. So sorry guys, I had that. Keep your eyes open. There always is this opportunity to get funding going. There are new things now for the NIHR. which I think are really helpful.

So the associate PI scheme is fantastic. So I would thoroughly recommend, and studies that I have run, we've had associate PIs go through, so I've been the chief investigator or the principal investigator, and I've allowed younger colleagues to get some experience of being a principal investigator alongside me by taking part

in that associate PI scheme. We actually know that studies that have associate PIs, they do better. So it's in everyone's interest to use the associate PI scheme.

For consultants who have done that and are looking for their first study, I would say a lot of support can be gained from your local research and innovation department. We're doing what we can to make sure that research is being done everywhere in children. One of the stock phrases we've used over the last four or five years within the research team has been currently only 4 to 5% of research funding is going to studies involving children. And yet they 13 to 14% of the NHS spend goes on healthcare involving children. 21% of our population are children and young people and 100% of our future are children and young people. So we have to do research in children and young people. We feel that really, really strongly.

And we are trying to ensure that research and innovation departments feel that as well. That research isn't just the preserve of something that should be done within a large children's hospital. Research, if it's going to be meaningful and representative for children, has to occur everywhere. It has to occur in district general hospitals where I've worked within non-specialist large teaching hospitals, within small hospitals, within community settings, we have to have research going on everywhere. Otherwise, we're really just letting the children down. And this needs to become part of business as usual for us as paediatricians.

The support therefore should come from the research and innovation teams and it's going to come more if you can find a study that you want to do that's on the portfolio. Because the way that funding works at the moment in the UK is that recruits count. If you are doing a NIHR portfolio study, and it is possible to search the portfolio yourself, even if you want to. But if you go to your research and innovation team, they'll know what studies are available. And you say you're interested in doing research and say, well, there's these studies that are open. You could see whether any of these would work in your department.

And then numbers count. When children are recruited to those portfolio studies, funding will follow that recruitment back into the research and innovation team, which then hopefully should make its way back to support paediatric research, whether that's with paediatric research nurses or with time for consultants is something that then could be negotiated. But it is something that is there and there is a structure in place and there is a transparent process for that funding. We've looked at this quite carefully in the paediatric research team. And we have advice. I think if you're trying to get started off, then actually looking for some of

the larger observational studies where you're going to get big numbers in is a really good place to start off because that will build you infrastructure for the future.

Davide, R&E team

Thank you, Will. That's very interesting. And then just on more on a general note, what advice do you have for those that would want to undertake research?

Will Carroll

Okay, I mean, this is, there's some crucial things for those wanting to do research. I think there's some skills that researchers need to have that are kind of generic. Persistence is the one thing that absolutely I think separates the successful from the unsuccessful researcher. It doesn't matter how often you fail, as long as you just keep on getting back up after failing. That's the bottom line. Wanting to do it and not being put off by that failure is vital. And just going into it with eyes wide open, going, yeah, I am going to maybe have to try this far more than management or clinical work. I'm going to have to fail much more often than I do in these settings. And you just have to prepare yourself for that before you start your journey.

Because if you think that it's any of us found it easy when we start, then You've been speaking to very lucky researchers, if anyone found it very easy. Nearly every successful academic I speak to, my own heroes, my own mentors, I speak to them. They've all had their share of failure and difficulty and knocks and something works and something doesn't. And some of it can be quite unexpected. You know, you can have got through all the funding, you've got this massive grant, you get things going, and then suddenly the study fails. People aren't recruiting, the funding gets pulled. It's just so dispiriting and demoralizing. And yet the successful researchers are the ones who keep going. So number one, don't give up.

And number two, I think, do stuff that really interests you as a research topic. I've seen people do topics because they're fundable or do topics because they're fashionable, but they're not particularly interested in the answer themselves. I think A unifying feature of a lot of researchers is that when we talk to each other, there is something so exciting about having the answer to a question, having the data there. Actually, it's a big problem for me because once I have the data, I almost don't care whether I share it with anyone or write it up. And the funders are going mad, going, 'Will, are you going to write this paper up?' I go, 'but I know

the answer to the question now. Would you like to know it? Because it's really exciting.' 'I think I know we'd like you to publish the paper.' But the excitement for me was doing the data analysis and actually knowing the answers to the questions.

So I think, you know, be excited by the questions you're asking. I don't just do them because they're fashionable, but I think we can all think of things in our clinical practice that stimulate a research question. I just need to speak to any colleagues who, whether they're research active or not, to know that the things that excite me excite them, knowing about things like what effects are screens having on children? How do we solve some of the... very difficult and expanding problems we see with neurodiversity, with sleep, with behaviour. You know these questions excite all of us as paediatricians because we've seen these changes within our own lifetime. And we're also fundamentally driven to ask 'why?'

I guess the final piece of, if I want to be really, really clever about it, if I was setting out as a resident, the thing I would think about would be what impact is your research going to have as well as does it interest you? Is it going to be able to impact upon children's health and their wellbeing? Because at the end of the day, when we look back on our careers, that's what we hope for, that we hope that the work we've done will have brought about some positive change and had some impact.

So it's not as difficult as it sounds. There are resources out there. are places you can go to for help. I think be enthused, be excited. Don't give up that questioning spirit that I know so many of you have. I expect even people listening to this podcast are dialling in because they're interested in research because they want to get things going. And the truth is, it is possible.

We started from a position here in Stoke 10 years ago where research had come to a bit of a standstill. There was research going on, but we had slowed down and then COVID slowed us down again. And we've had to dust ourselves down, we've had to pick ourselves up, and we've had to work at ensuring we get resources available. And through doing portfolio studies, through working with my R&I team and with the university, we've been able to build that infrastructure to actually have a good and thriving department where we're expanding now. It's not just in respiratory paediatrics. seeing my colleagues in general paediatrics, community paediatrics, all taking on studies. And it's just so exciting because I feel like we're on the cusp of really pushing things forward. And I want to share

that excitement and I want to share that success with people. And I want to see that success elsewhere. I want to see every hospital in the West Midlands, in the Midlands in the UK, where more paediatricians are doing more research involving more children, because that's our responsibility as paediatricians.

Davide, R&E team

Thank you, Will. That was very insightful and thanks for sharing your enthusiasm on child health research. This has been a podcast from RCPCH. If you'd like to find out more about how to do research in paediatrics, why not visit RCPCH learning at learning.rcpch.ac.uk. Search for research to find lots of free e-learning and webinars all about this topic. And you can find all our podcasts on our website at www.rcpch.ac.uk/podcasts or wherever you listen to your podcasts. Thank you for listening and goodbye.