

PEDIAPOD MARCH 2024 TRANSCRIPT

Geoff Marsh

Hello and welcome back to PediaPod for March 2024. For today, I'm thrilled to be joined by two of my esteemed Pediatric Research colleagues, Cynthia Bearer and Eleanor Molloy who are here to give us an update on plans for the podcast and to offer some sage advice for Early Career Investigators. Cynthia, why don't you start us off by introducing yourself.

Cynthia Bearer

Hi, I'm Cynthia Bearer. I'm the Division Chief of Neonatology here at Rainbow Babies and Children's Hospital and a professor at Case Western Reserve University. I'm also Editor-in-Chief of Pediatric Research. I'm a neuroscientist and also an environmentalist and so I look at how the environment impacts on fetal development and in particular, the brain. I also do some clinical research in our NICU looking at factors in the environment that may be environmental hazards as well as things that promote development.

Geoff Marsh

Okay, so you're one half of my screen and the other half is Eleanor. Could you introduce yourself please?

Eleanor Molloy

Hi, my name is Eleanor Molloy and I'm a pediatrician and neonatologist based in Dublin, Ireland. I'm the Chair of Pediatrics in Trinity College Dublin but I work in Children's Health Ireland. I was lucky to be a Fellow in Rainbow Babies and I've known Cynthia for some time. My research interest is in understanding inflammation and how we can modify it to improve outcomes for preterm babies so similar to Cynthia, we have research labs as well as clinical research. And then I'm the Associate Editor-in-Chief of Pediatric Research representing the European side of the journal.

Geoff Marsh

Listeners might have noticed that PediaPod has changed from focusing solely on Early Career Investigators to a rotating roster of different types of episodes. I wonder if you could just speak for under a minute on what they are and what the thinking behind that was?

Cynthia Bearer

So we decided that just having Early Career Investigators on the PediaPod, now that we've been doing it for a couple of years, it might be more informative if we spaced them out and included the look back from Senior Investigators who have really made it. You know, their stories are very inspiring and could give ideas to people coming along on their pathway as to how to manage that.

Geoff Marsh

And Eleanor, there's also these 'What's hot in...' certain specialties in pediatric research. What was the thought behind that genre?

Eleanor Molloy

I think because we're a journal that covers every single area of child health and pediatrics and every specialty and every part of the body, we've gone to our experts in the sections and asked them for interviews on what's hot in their area. And we're starting with endocrinology as our first one.

Geoff Marsh

Listeners have that to look forward to. And finally, there are these Collections episodes, of which today is one. And we've already done one on global climate change, and today is 'Advice for Early Career Investigators'.

Cynthia Bearer

Well, we recognized that there was a need amongst those people who had just started out on their research careers, because I would say something in a group of colleagues at meetings, and folks who were new to the field would light up and go 'wow, I didn't know that'. So I got together with Eleanor and we brainstormed about it and decided that we would start writing an editorial series on things that we felt were the real pearls of getting your research career started, and putting that online so that it was available for everybody who can get to the journal. And that was the beginning of it.

Eleanor Molloy

Absolutely and we have a Collection, if you look on the website we have five short editorials so far, including advice for doing a PhD, willingness to risk failure, data management, unexpected life skills, as well as ways of getting grants. So we're hoping that those are part of a longer series and we've looked throughout the pediatric community for the absolute experts in these areas to give career advice to improve the quality of research and outcomes for the Early Career Investigators.

Geoff Marsh

It strikes me this isn't just a one-off. Helping Early Career Investigators seems to be a part of the DNA of Pediatric Research as a journal.

Cynthia Bearer

Yes. Our mission statement is really kind of broad but it's always been focused on developing that next generation of pediatric researchers and for that we're targeting this particular group to give them more of the tools and the skills to navigate that career choice.

Geoff Marsh

And so as is always the challenge with PediaPod, it's cramming a lot of information in under 10 minutes. So obviously we'll just point listeners towards the Collection but let's just dig into some

of those that you mentioned Eleanor. Why don't we just pick two or three to chat about together today in this episode?

Eleanor Molloy

Well one of the things that we really noticed is that a lot of our Early Career Investigators have done so well, they've gone into science or medical school, they've thrived, they've passed all their exams, and then suddenly they come into the academic field and this is when for the first time they fail, in exams or in publishing and so on. And we feel this has been kind of core in all our careers so far. So we have an article on willingness to risk failure.

Geoff Marsh

So willingness to fail, you think that's a crucial part of being an investigator. Cynthia, has that been your experience?

Cynthia Bearer

Yes, simply. This sort of stems from my experience of being a grad student. The president of Princeton University wrote a similar editorial in the journal *Science* and I read that and it was very informative for me when I was an up-and-coming, beginning researcher. And actually, the other person who has really examined and explored this area is J.K. Rowling. She gave the commencement address at Harvard and referred to failing, she was a failure before she wrote *Harry Potter*, or some people would have said that she was a failure. And so this article really explores what does it mean to fail and how do you look at that failure? You know, Edison said, he didn't fail, but found 1000 ways how *not* to make a light bulb. Not only having the negative fail stuff, but turning it around to a positive is a very powerful thing. I actually think it's a very meaty topic.

Geoff Marsh

I wonder if we should talk about failure more on the podcast because we've probably given a very biased impression of research on Padiapod because it's always highlighting either an Early Career Investigator or some amazing Senior Investigators who have had a huge impact in their field. And obviously, in under 10 minutes, you focus on their successes, don't you?

Cynthia Bearer

Actually, it would be very interesting, I think, for the Senior Investigator Padiapods to ask them what was their biggest failure and how did they respond to it? How did they turn it into a success?

Geoff Marsh

Eleanor, did you mention another article on how to get through a PhD?

Eleanor Molloy

Absolutely, because we have recognized that a lot of people are experts at doing a PhD when it's completed but just as they start off it's a little bit difficult to navigate. So we made up the 10

golden rules, really just trying to recognize how important doing the research is and how to select their area of research and supervisors. And just the importance of keeping their life on track and thinking about their external life and again, coping with failure. I think as well, we noticed that especially for clinicians, that transition to being in the lab and having that time to do a project that's less directed than say, a clinical job can be really difficult for people. And they're not used to not having their day filled with clinical duties. So I think it was to really reassure them that the beginning is hard, but it's worth it in the end. And then ultimately, the last thing we say is enjoy it.

Geoff Marsh

I can see our time limit ticking away. Cynthia, is there anything else you want to highlight from the Collection before we just point people towards the website?

Cynthia Bearer

Just I think that it's really going to grow. We'd love to have suggestions about other topics that Early Career Investigators would find helpful, or even if they're not Early Career Investigators any more, suggestions about what helped them get successful in their role. We have several in the pipeline right now. A couple are based on our very popular workshops at PAS, such as how to get published and how to do a good review, those kinds of very mundane but necessary skills that people develop.

Geoff Marsh

Maybe it'd be worth ending on thoughts from both of you on the question, is now a good time to be an Early Career Investigator in pediatrics?

Cynthia Bearer

Well, right now in the United States it's very difficult. We have a federal budget that funds NIH, you know, it's sort of a trickle down effect. And my understanding is that the federal budget is held up in our government system and has not been passed through the legislature. And so NIH does not have a budget yet for this year. So it's really hurting our Early Career Investigators as well as more senior investigators because we can't get any of our research grants funded until we know what the budget is. NIH doesn't want to give money away that they're not going to have if the budget doesn't pass. So for Early Career Investigators, my advice would be to look at other sources of funding to keep your lab going. There are a number of foundations that are very focused on neonatology, which is a good place to apply. There's also a lot of usually in-house, local grant sources that you can find. There'll be small grants that are there for pilot studies. There'll be maybe more major ones like University Hospitals has the Harrington Research Institute that has grants. A lot of places in the US also have the CTSC units which are Clinical Translational Science Collaboratives. And they also have funds to promote research projects.

Geoff Marsh

And Eleanor, what's the European picture?

Eleanor Molloy

It would be a little bit similar, I'm afraid. We are noticing that less and less pediatricians have their own research lab but they do a lot of collaboration with scientists. But I think it's really important that as clinicians who actually go from the bedside that we can actually go to the lab and try and understand what's going on and work really closely and train all our trainees so that they actually know what scientists do as well. And I think that really builds strong relationships in the future. But I would have to say resilience and perseverance are important, and as Cynthia said, follow the money a little bit because that's going to really help you. Also follow what you really love, as in, if you're doing a clinic, I'm thinking of my clinics for babies with Down's syndrome, that's where you're going to follow your research. And as well as that I think, work with people you get on with really well and make it fun. And my last thing I was going to say actually is I would really encourage people to look at the lovely Biocommentaries from the Early Career Investigators because we've had the pleasure of reading them and they're very inspiring and thoughtful and they give fantastic advice about how to develop your career. And they're a very diverse group of ECIs who have come from so many different areas.

Geoff Marsh

And I would also just add to that a plug for the handful of Senior Investigator episodes that we've made on the podcast because they were also very illuminating weren't they?

Eleanor Molloy

Yes, they're fantastic.

Cynthia Bearer

Yes they are.

Geoff Marsh

Any other thoughts before I finish this call?

Cynthia Bearer

I would like to encourage people to submit their articles. We definitely like original research articles. Most of the articles are original research but there are a lot of other types of articles that we're interested in publishing. Review articles are always welcome but we have editorials, we have correspondents, we have commentaries and we have a new section called Insights which includes families who may want to comment on the impact of research on a disease that has affected their family. If you have a poem we publish poems, we publish artwork. So even if you're not a researcher, you can still be published. We also publish policy statements and a policy commentary from the Pediatric Policy Council so we're very interested in not just research but also what does the research mean? And we have a way of extending that into real life, out of the lab or out of the clinical setting or whatever and into the mainstream and developing and changing policy.

