

Meet the Parents, with Helena Cornu and Tom Edwick
(S01E01)
Not Another Science Podcast
September 2nd, 2020

Introduction

[Tom Edwick] Hey guys, welcome back to Not Another Science Podcast. I am your host, Tom Edwick. Just a little introduction to this episode, and we thought we'd do something a little bit different. Basically it's just me and Helena having a little chat talking about what we do, how we got involved with science communication, and the podcast and stuff. And then we have a little bit of promotion for some things, some really cool things that we have coming up in in the show basically, so have a cheeky listen. We had a lot of fun recording it and I think it's actually a really really nice and funny conversation and I think you'll enjoy it. So here we go.

Main

[Helena Cornu] Hey! Hi.

[Tom] Hello! How's it going?

[Helena] Yeah, it's alright. It's just, we had to change Internet provider so we had to move the Wi-Fi. So now it no longer quite reaches my room. So I hope the sound is OK.

[Tom] Oh that's so annoying. Working at home is just such a nightmare on so many levels.

[Helena] I'm also running on not much sleep because it's been... That's one of the weirdest things about being back at work because I haven't seen this side of eight o'clock in so long.

[Tom] Oh my god, yes.

[Helena] What?

[Tom] Just the alarm goes off at like 7, and you're like "Nooo".

[Helena] Yeah, I'm like "Oh? No, nah." My entire work day just shifted 'cause I didn't have to get up anymore. That was bliss. But yeah. I'm back to proper work days now, which is just..

[Tom] Sad times. I think that makes a very nice segue into the first question.

[Helena] Okay.

[Tom] So, Helena, who are you? What do you do?

[Helena] So I work in the Center for Discovery Brain Sciences at the University of Edinburgh, which is just a fancy department name. But essentially it's all neuroscience related research, so I'm a research assistant, which just means that I don't know anything and I need to ask for help. We use zebrafish to look at the spinal cord, and in particular we look at myelin, which is the fatty substance which surrounds your neurons, it insulates the nervous system, and it helps it to function better. And it's the thing that goes wrong when you have Multiple Sclerosis, for example. I love working with fish because we look at them when they're just developing, so you can literally see the two cells become four become eight, and it's really really cool.

[Tom] That's wild.

[Helena] And because they're transparent you can, just using a simple microscope, you don't have to do anything to them, you can just look and observe, and see what happens.

[Tom] That blows my mind.

[Helena] It's incredible. I can't get over what we get to do every day. It's mind blowing.

[Tom] Do you use any stains or dyes or anything like that? Do you add that to the cells while you're looking at them do their thing?

[Helena] Yeah so we don't add... What we do is we have lines that are transgenic, so they have the fluorescence already in them, so then you don't have to add anything to the fish, that's just how they grow up. And it doesn't affect them, you're just adding a fluorescent marker to the spinal cord for example and you can just look at them, it doesn't affect them, which is really cool.

[Tom] Yeah, mind blowing.

[Helena] I mean it was quite a difference to learn about all this and then to actually get to do it. Because you learn about all the procedures and the methods like "Oh yeah, this is how you modify a fish", for example, "this is how you modify an organism". And to actually be able to do it. So like yesterday, one of the things that I was doing was, when we need to add a new fluorescent marker to the fish, you have to inject it when they're still at the egg stage, when there's only one cell, and people let me do that. I can do this, this is something that I do in my job, it's just, like you say mind blowing.

[Tom] How long have you guys been back now for?

[Helena] Well, so we had people working throughout the lockdown. I think we were all at home for a few months, and then, just because

they are, you know, live animals, we needed to be able to use them and to make sure they were doing okay. So we had people in the lab quite early on but very few and not very often. I've only been back for about a month now, taking care of the fish, and experiments proper for only a week.

[Tom] That's cool.

[Helena] It was so strange to be back in the lab, like so strange. Mostly because they've moved everything around so that we can be socially distant, but also just because a huge feature of working in this lab, at least for me, is just that we all get on so well. So there's always chat, you know exactly what's going on in everybody's lives. And to not have that, to be in the lab and it be completely quiet, is so strange.

[Tom] That is really weird. I've found that I've completely lost the ability to socialise with other human beings. So I'm just out and about, doing my shopping and stuff and I'm like "I've forgotten how to be a person, this is so awkward."

[Helena] Yeah, 'cause we've had Zoom meetings and stuff, but it's just, it's not the same. And doing presentations over Zoom is such a strange experience, 'cause you just hear voices coming from your computer telling you things. I don't know, it's weird. But yeah, but you've been quite busy during lockdown as well.

[Tom] Yeah! So I was one of those people who definitely got on the sourdough hype bandwagon very early on. I always had an interest in making bread, but I was always like "Making sourdough, that's just such a complicated thing, I'm never going to bother." But all of a sudden, I had all this time on my hands, to just make bread. And once I looked up how to actually do it, it's really not that difficult – as you know, because you've also done the sourdough stuff – getting a sourdough established, and it's not actually that much of an extra hassle, to just making regular bread I don't think.

[Helena] It takes a long longer. It's more involved, as a process.

[Tom] That is true, yeah.

[Helena] But it is worth it, it's so worth it.

[Tom] It's really bad, because it's just so tasty, just like on it's own with some butter or something. And so I'll make a loaf or two for me and my flatmates, and the first loaf is always gone within the first day. We're all just like "Ooh, I'll take another slice, don't mind me." It's really bad.

[Helena] I usually make two, and the first one is usually gone within a couple of hours. As soon as it comes out of the oven I'll be like

"Oh! Bread's done!" and I'll just hear little feet coming down the corridor and Boom! It's gone.

[Tom] It's just too good to not have it straight away, you know when it's still warm, and the butter is melting a little bit. Oh it's so nice.

[Helena] That was a weird adjustment for me, because being French, having a bakery at the bottom of the road is... There's a bakery at the bottom of every road, it's just so common to be able to get fresh bread. And it was weird for me here that the most common form of bread is the square stuff that you get in shops. This is not right. It's very nice to be able to have fresh bread again.

[Tom] Yeah. But I was also working on a little research project in the field, that I was very lucky to be able to take part in. So I was originally meant to be working on a project that would involve a lot of travel up and down Scotland, but obviously there was lockdown at the time, and it didn't seem like a very good idea for us to be travelling all over. But thankfully, there was another project working on the same species, which was blue tit, and that was taking place a lot closer to Edinburgh. I can't drive, so I was cycling out to the field at 5 in the morning.

[Helena] How far away was it?

[Tom] It was probably 5 and a half miles, but it was a bit of a deceptive cycle, because it was all just slightly uphill, just enough to make it not very pleasant.

[Helena] Well, at least the way back is alright then.

[Tom] Yeah, exactly. The way back was lovely, we'd come down to the coast and then cycle back along the promenade to where I live, and it was just, it was beautiful. But it was a pretty wild project, there was a lot of weird situations that I didn't expect to be in in my life.

So the project was looking at the genetics of natural selection in a natural population of blue tits, and to get the DNA, we had to catch the adult birds so we could take a blood sample and stuff, but to catch the adult blue tits, we had to wear those big camouflage outfits, that snipers in the military wear. Bearing in mind, this was in a woodland where people regularly walk their dogs and stuff, so we were just lying in the undergrowth, with these crazy camouflage outfits on, staring at a nest box waiting for a blue tit to appear so we could run and catch it.

[Helena] That's something else that they don't tell you in lectures, the amount of involvement that's necessary.

[Tom] Yeah, that was just, it was crazy. I remember I was around the corner from where someone was catching adults, and I heard these two dog walkers screaming, and I think they must have come across the person just lying in the undergrowth and like "Oh my god! What is this person lying on the floor?". So yeah, that was a fun time working with blue tits. It's an adventure, that's for sure.

[Helena] So what's the process? You have to lie in wait and then pounce on them?

[Tom] Yeah, so basically you have to catch them at a stage where the chicks are big enough so that they can provide their own body heat inside the nest, so that when you catch the adult and you take it away to process, which is like 15 minutes, the chicks can survive on their own basically. So that's around day 12, when the chicks are 12 days old. So you're basically waiting at the nest box, behind a tree or something or hiding in a bush, and you wait for the adult to fly in, and then you have to get up and sprint, as fast as you can, and then stop the hole in front of the nest, so the adult can't get out, and then you have to reach in around the side of the door and grab it. They call it the sausage grip, that's like an official birding term, so you literally just imagine grabbing a sausage from a nest, and then you put it in a bag, and tie off the bag and make sure it's all secure and stuff. That was my favourite part of the project, just running around the forest for a few days, it was pretty mad.

[Helena] Yeah, I suppose it's quite nice. You got to get out while the rest of us were sitting inside.

[Tom] Yeah, I felt a bit guilty, leaving my flatmates back at the flat: "Guys, I'm just going to walk around the forest and look at some birds for a few hours, I'll see you later." It was actually really good to have that reason to get up and go somewhere. I was cycling 10 or 11 miles a day, just in my commute which was kind of cool. But I'd literally get home, and have some sourdough and then just pass out in my bed, have a little nap. It was a good routine.

Was there any hobbies or activities that you were doing pre-lockdown that you weren't able to do because of the whole situation? I know that you're a keen dancer.

[Helena] Yeah, I was going to say. Well you know this because we did the episode with Jamie Davies, but I'm a big fan of swing dancing, and that was quite a shock because it went from dancing regularly every week to nothing. And then there were a couple of weekends that we were supposed to go to that got cancelled obviously, and those are the highlight of the year, so it was very strange not to have that marker within the year.

[Tom] Yeah, totally.

[Helena] And then obviously, all the classes were... They tried to do classes online but it doesn't really work 'cause most people were alone, so trying to teach a partner dance, through video, by yourself, just kind of... I mean, it was a great effort, but I don't know how it's going to work for next year. I doubt we're going to get any new people, just because it's going to be so hard to teach. For a while, I actually stopped listening to that kind of music, because I was just like, you know, "I can't, it's too painful."

[Tom] Oh, too sad.

[Helena] ... Nobody to dance with. I offered to teach my flatmate and she was like, "Nah, sorry."

[Tom] "You're not dragging me into this!"

[Helena] Exactly! So there was nobody to dance with. What about you? Was there anything that you really missed?

[Tom] I think what I found challenging was, especially in the early stages, you could only hang out with one person, and it would have to be at a distance. Obviously you still have to do that now, but you can kind of meet up in bigger groups, of multiple households. So I found that I had to plan, rigorously, every social activity in my calendar, which is not something that I had to do that much. I'd normally just be like "Hey guys, we're going to have some drinks at this pub, or go have a barbecue at the Meadows or something", and just all that extra effort to meet up with people is something that I found quite challenging, I don't know about you.

[Helena] I mean yes, but then conversely I think it was really nice the amount of things that people did online. I started watching movies with people, just over Zoom, or doing pub quizzes. My lab started doing a pub quiz over Zoom which we're still carrying on every Tuesday, and that's something that we never used to do before, but in order to keep it social we started doing that. You know, I reached out to so many people that I haven't talked to in ages just being like "Hey! Wanna Skype? Wanna chat? Wanna catch up even though I know it's been ages?" And in a way I think that was quite nice because we couldn't socialise with people in person, I've done so much more over the Internet than I did before. And in a way it's kind of nice because I can be at home, in my pyjamas, socialising and seeing people, without ever having to get off my couch, which was quite nice.

[Tom] Yeah, I think that has been super nice, and I've seen so many people just out and about, just Skyping someone as they're walking through town or something like that. 'Cause I think it's kind of forced everyone to make more of an effort and catch up with people that they haven't spoken to in ages. I've definitely done so many pub

quizzes, way more pub quizzes than I've ever done in my entire life, over the past few months, it's just hilarious.

[Helena] And also just in terms of jobs and things. Because I'm interested in science communication, I messaged a bunch of people whose jobs I was interested in and just said "Can I ask you a few questions?", and because everybody was at home, they were all like "Yeah, absolutely!" So I managed to chat to so many people. It was so much fun, and it was so nice to be able to do that.

[Tom] That's really cool. So you mentioned science communication. Is that something that you were always interested in throughout university, or did you pick it up at some point along the way?

[Helena] I think when I started a science degree, I figured I would end up being a scientist, working in a lab, and that was sort of my career goal/plan. And then... So I remember watching, do you know John Oliver, Last Week Tonight?

[Tom] Yeah.

[Helena] He had this piece about reporting science and about how messed up it is, and about how people keep getting it wrong.¹ And that's when I started getting interested in science communication, and being like "Oh, okay, this is something that really needs to be addressed." So I started looking into it as a kind of side thing to science, and that's when I joined the magazine and I started writing, and doing things like that. I took the science communication course in my fourth year, just to get an idea of what other things I could do. And it's kind of only this year that I considered it as a career option rather than doing science. And I think it's because, I enjoy working in the lab, but it is quite slow-paced, in the sense that you know... I think I hadn't realised until I joined that lab that one article represents years of work, and repeated experiments, and failed experiments, and it's just so painstaking. And I like finding out about the result, I like learning cool new things..

[Tom] Take me to the end!

[Helena] ... I don't necessarily want to be the person who's painstakingly working out all of these things.

What about you? Is it a recent thing, or is it something you've thought about for a while?

[Tom] So I actually, I took a year out before going to university, and I did some voluntary conservation stuff, just to get a little taste of it. And I was working for this charity in Tenerife, and they have a scheme where they're monitoring the whales and dolphins that

¹ "Scientific studies." *Last Week Tonight with John Oliver*, Season 3 Episode 11. https://www.imdb.com/title/tt5605704/?ref_=ttep_ep11, <https://youtu.be/0Rnq1NpHdmw>

either pass through, or there's a resident pilot whale population that they monitor as well. So they go out and they take pictures of the fins, and you can identify individuals using the fins. So you can actually get a really accurate tracking of the population. And so I was like, oh maybe I should, you know, start writing about this or something, that could be kind of cool. So I started up a little blog, on WordPress where I could write about my experiences and stuff like that. And I was like "You know, why don't I just start writing about other general science and stuff like that?" So I just started writing about things that interested me. It wasn't very good. Reading it back, I'm like "Oh, I really hope no one finds this 'cause... ". So embarrassing.

[Helena] Well, see 'cause now after this conversation I'm gonna go and I'm gonna go find that blog.

[Tom] Now everyone knows, oh God. Oh nightmare. And then, when I got to University I found out that it was actually.. Especially with EUSci, that they were just like "Yeah, you can write for us, you don't need any experience, we'll help you out along the way." And I was like "Sweet! That's cool, that I can just get involved with that, proper science journalism." So that's how I got into it, definitely.

[Helena] I mean it's incredible the amount of work that goes into a single issue. There's editing, copy editing and so many... fact-checking. It was a really cool way for me as well to start writing 'cause you just know that there are people who are helping you out with this. And it's not... That you're getting feedback and stuff which is really useful.

[Tom] Yeah, definitely, and you get a taste of all the different bits of the process 'cause you can help out with editing, and all of that sort of stuff which is valuable experience especially if you want to go into that as a career. You know, looking at a lot of jobs out there, you need experience in this stuff and as you know, it's really hard to get that experience, but if you can do it at University then that's kind of ideal.

[Helena] And it's so nice as well, 'cause everybody's obviously so passionate about what they're doing. And so keen. I think that's been quite nice being on committee 'cause you get to meet all these people whose names you know from like emailing back and forth and things like that with articles. And you realise just how keen people they are.

[Tom] Yeah totally. So how did you end up getting involved with the podcast? Did Karolina², did she reach out to you about it?

² Karolina is the President of the Edinburgh University Science Magazine society.

[Helena] What happened was... So the day that we found out that we were going to be going into lockdown, I had a meeting with my boss but he was like "Well, look, there's not much for you to do at home, so I know that you're interested in this science communication stuff. So why don't you do more of that while you're in lockdown?" And that was the day that it was the deadline for the committee, for the EUSci Committee.

[Tom] Oh wow, yeah.

[Helena] And so that kind of motivated me and I went home and I wrote out my application, sent it out and then Karolina got back to me and said "Look, we picked someone else for the the position that you wanted, but we have this position of podcast editor that we haven't advertised, but I think you'd be good for it." And I said... And I think we talked about it a little bit, and I said "Yeah, that sounds like something I'd love to do."

[Tom] Sweet.

[Helena] And it was quite funny as well. So I wanted to ask you about this because when she said, so when she told me that you were going to be hosting, I... 'cause I feel like we met in Freshers Week and became Facebook friends, but then never talked again for the next four years.

[Tom] Yeah, we totally went down different paths I think, 'cause I was...

[Helena] I don't even remember how we met, I just know that we've been friends on Facebook for ages. But we've not really interacted. But it's funny though, 'cause I have seen, when you write articles and stuff you put them on Facebook and I've seen that and you've seen mine. So we've kind of been like keeping an eye on each other. In a not creepy way. Yeah, so that was quite cool to find out that you were going to be hosting. Did you... 'Cause you said that you're the one who said having a podcast is that right?

[Tom] Kind of yeah! So I had noticed on the EUSci web page that there was this podcast section. And I was like "That sounds pretty cool so I'll go and have a look". But it turns out they went running the podcast anymore, so I was like "Oh OK, I'll get in touch with Karolina, and see if they're going to start it up for next year, or if there's like any way I can get involved." And so my idea was that I get involved in some seriously minor way, maybe doing fact checking for an episode or something like that. And then she got back to me, and she was like "Yeah man, if you want to just host the new podcast, you totally can." I was like "Oh! Okay." I really wasn't expecting that to happen at all. And it was a little bit scary, I was like

"Okay, this is getting real. I'm going to be broadcasting my voice to the nation."

[Helena] She's very cool like that. That's kind of how the edit-a-thon came about, because I was like: "Oh, this might be a fun event to run in Freshers Week. I don't know, just putting this out there," and then she was like: "Great! You're organizing." Okay! This is happening.

[Tom] So tell us, tell us about this event that you are running in Freshers Week. What is that all about?

[Helena] Yeah, so I discovered that editing Wikipedia was a thing, over lockdown, because when George Floyd was killed and there were the protests, there were people who organized a Wikipedia edit-a-thon to try and get more people of colour onto Wikipedia. Because at the moment it's really biased towards white people and also towards men, so the idea is to get more women, more people of colour onto Wikipedia and make it more diverse and more representative of the people who use it.

Yeah, so I got into that, and then I went down a sort of wormhole where... It's very addictive. You wouldn't expect it to be so addictive, but genuinely, it's like... Like today I found out that there's an immunologist who died recently because of COVID-19, and she doesn't have a Wikipedia page. And I was like: "Well, I know what I'm doing this afternoon."

Yeah, it's become a bit of a habit. Anyway, all this to say that I found it really fun and I thought it could be a cool event for Freshers Week because it's a way to get to know each other and, for people who are interested in the magazine, it's writing and it's researching and it's a great way to teach people how to do all these things and use these skills and even just for University like you have to... Because it's, you know, it is an encyclopedia, so you have to learn how to cite properly and that kind of thing. So they're really cool skills to have. And the University of Edinburgh has a Wikipedian in Residence³ whose whole job it is to help people with Wikipedia...

[Tom] That is wild.

[Helena] ... and he's helping us organise. So I'm really excited about that. So he's gonna help train people.

[Tom] Nice.

[Helena] So yes! Please please attend. Please attend this edit-a-thon. It's gonna be a lot of fun.

³ https://en.wikipedia.org/wiki/Wikipedia:University_of_Edinburgh

[Tom] Yeah, exactly, I think it's all out on the social media that we have. I think it's all been promoted now.

[Helena] Yes, the edit-a-thon is on the 17th of September, on the Thursday, and look out for the episode that's going to come out on Wednesday, 'cause that's my interview with Jess Wade who's just, all around amazing.⁴ Such a fan.

[Tom] Yeah, Jess Wade, she's a legend. She is very heavily involved in the Wikipedia editing movement.⁵ That episode comes out on Wednesday the 16th September, so you want to listen to that. Go and get your tickets. They are free, but make sure you sign up, 'cause it's gonna be wild.

[Helena] Yes, absolutely. But there's another thing that's going to be wild because you're also organising something for Freshers Week.

[Tom] Yes, I'm going to be hosting Edinburgh University Science Media: Not Another Science Pub Quiz. That's going to be a virtual pub quiz, just like we've all done so many of recently. It's going to be pretty crazy, yeah. I think it's gonna be about, thinking about five rounds. We're going to split people into teams so we can get to know each other, have a chat, have a good time. There will be prizes. I haven't decided what they are yet, but there will be prizes. That is a certainty.

[Helena] I mean obviously on top of our undying recognition and admiration.

[Tom] Of course. Yes, exactly. I think that's all the promo that we need to do anyways. Checked those boxes.

[Helena] Do you wanna talk a bit about what we've planned for this season?

[Tom] Yes, yes I do. OK, so, basically the plan: semester one, we have 6 extremely extremely interesting episodes of the podcast coming out. We'll be publishing on a fortnightly basis, starting from the 16th of September, our episode with Jess Wade which is gonna be really cool. But also we will be preparing for semester two and so we are kind of looking for suggestions and ideas or people that you think might be interested in either coming on the podcast or someone who would be cool. We really want student societies to be a big part of who we talked to on the podcast as well, so we have a really cool episode coming up in October with the ornithological society, that's gonna be really cool. So any sort of thing like that would be really awesome, if you think your society has something really interesting

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<https://anchor.fm/not-another-science-pod/episodes/Tackling-Bias-Using-Wikipedia--with-Dr--Jess-Wade-ejmibk/a-a37kosi>

⁵ https://en.wikipedia.org/wiki/Jess_Wade

that we'd like to have on the podcast, then please do get in touch. I've totally forgotten where people can get in touch. We have an email address.

[Helena] We have an email address and all of the social media.

[Tom] Yeah, but we'll put all that in in the show notes I guess. We are also planning a little series that we'd like to broadcast over Christmas and New Year's, and this is going to be an opportunity for anyone to get involved in the show, basically. We're planning what we're calling mini-stories episodes, so we're gonna have three episodes, and in each episode there's going to be two or three little stories about interesting things and we would like these to be made by anyone who wants to get involved in the podcast.

So yeah, basically for the mini stories you can come to us with, a totally new idea if you like, something that you think would be really, some science-related topic that you think would be really interesting to explore, or you can take your inspiration from the magazine or articles that have been published on the website really recently, that would be quite a cool way to get involved as well.

[Helena] Or if you've written an article and you want to, if there's more you want to say, that could be a really cool episode as well.

[Tom] Yeah, that would be really, really cool. Just kind of a good opportunity to explore a topic in a more informal way, and take it in a new direction. So yeah, so if you want to get involved in the podcast, that's a really cool way of doing that. Going forward, we want everyone who is interested to get involved 'cause the more people we have, the more interesting and diverse stories from all parts of the University and what's happening in the city and in the science world more generally, the more sort of stuff we can explore, that would be really cool, and just to just to keep it going. You know, if ever we decide to leave the podcast, we can bring in the next generation of hosts and editors.

[Helena] Shock horror.

[Tom] When I'm old, when I die. In my grave, that's when I'll give it up.

I don't know how to end it.

[Helena] I don't really know either.

[Tom] I guess, keep it science everyone, OK? Make sure you keep it science.'Cause I'll know if you don't.

[Helena] I love how that was like a placeholder for a for a tagline and it's just become the tagline.

[Tom] Yeah, I think I quite like actually.

[Helena] So do I. I think it's become the thing, yup. So yeah, keep it science.

Outro

Outro music plays

Thanks for listening guys. This podcast is brought to you by the Edinburgh University Science magazine. In each episode we explore fascinating themes and ideas, talk to awesome researchers about their work, and find out about the science being done by our very own staff and students here at the University. If you'd like to get in touch with the question, suggestion, or if you want to be featured on the podcast, you can reach us on our Facebook page: Edinburgh University science media, or at our Twitter: @eusci, that's E-U-S-C-I. You can also drop us an email at euscipodcast@gmail.com, and you can find the show notes in the latest issue of the magazine at eusci.org.uk. This episode was edited by my partner in crime, Helena Cornu. The awesome podcast cover art was designed by EUSci chief editor Apple Chew. The intro music is an edited version of Funkorama and the outro music is an edited version of Funk Game Loop both by Kevin McLeod. I've been your host, Tom Edwick. Until next time. Keep it science.