Hello and welcome. You are listening to Microbe Talk, the podcast by the Microbiology Society. I'm Adam Scales, the content and engagement manager. I have had dyslexia from a very young age, but was only formally diagnosed in my first year of university. As it's Dyslexia Awareness Week I was keen to talk to one of the society members about their journey with dyslexia in microbiology.

I reached out to Dr John Munnoch, a postdoctoral research associate at the University of Strathclyde Glasgow, and an editor of Access Microbiology. John was diagnosed with dyslexia around the age of eight, and I wanted to discuss the challenges he has faced in his career, as well as the positivity he has felt from the support he's received. So, John, thank you very much for joining me today.

No problem at all! So today, we are going to be talking about your journey of dyslexia as a scientist and a microbiologist. I suppose the first question I have is can you I think everyone knows what dyslexia is, but can you describe it in your own words?

Yeah. So I was diagnosed with it when I was in primary three, so about seven years old. And the two kind of vague manifestations for me was with my spelling and with my reading. So when it came to spelling, they described it to me in a good way for me. So basically, as I learn new things and are most people, when they learn new things, they are inside their head. You can imagine a bookshelf every time they read something and actually it gets put on the shelf and it's relatively inoffensive. Whereas means as effectively when I learn lots of stuff at once, the odd
book falls through a gap. So especially when I'm doing a lot of like really intense stuff and it sounds really weird, but I can forget how to spell things.

But it can be a thing as simple as like the word. Why? Why? Why? Like, I'll get to the point where it's like, I know it's not the letter Y, but I can't fix. So then I almost have to like Touchstone someone else to be like, Oh, hey, why is that? And that can happen for like relatively trivial stuff where it's like words you don't use very often.

Like, I don't know, dinosaur list. So whereas then it can, it can happen to words or it's like they are they're like, and I know that I'm spelling it wrong. I just can't fix it without that kind of touch.

Something I haven't. Sorry to interrupt, but I when you said use Dinosaur as an example, my initial thought was I wouldn't even know where to start. I mean, I know it's sort of a day, but I know what you mean. Is that kind of that block where you just kind of freeze in that moment?

Yeah. I mean, I was really lucky that I was diagnosed so early that I ended up having, like, specific classes during school for trying to cope with it and like spelling classes and all that kind of stuff. And for the most part, like I feel like I've always I've always been interested in reading, writing different things, but it's just a hard block that all of a sudden you're like, I almost needed external input to get past us and but as I got older and the more kind of stuff that I've done, that's been like less of an issue, but I know, for example, Jeremy, undergraduate exams and high school and stuff, like I had extra

time during exams to just have like 30 minutes to the end just to go through and spell stuff that I couldn't at the time. Yeah.
Adam Scales

I, I, my next question, it was something you've actually covered was, you know, when did you get a diagnosis and, you know, have you been diagnosed? Because a lot of people they haven’t. But three is very early to get a diagnosis.

Dr John Munnoch

So primary three So I was up at seven or eight.

Adam Scales

I’m like, okay, but I was just wondering how would you feel your world would be different if someone didn't put a name to it or diagnose it so early?

Dr John Munnoch

I remember at the time being really concerned because I don't know, I had this thing in my head. If you’re diagnosed with something serious, like it's like this. So I remember having a bit of a freak out because I was like, I didn’t know what it was. I don’t really know much. And then I get told at the time and it comforted me and made me feel better.

Dr John Munnoch

And again, those things that we put in place to help me out, whereas I know for a fact my dad had a very, very similar thing. And, and for most of his adult life, like, I think he I think he was very confident about it. But the clear signs, I think, that really impacted certain things for him. And because he didn’t have that kind of care and attention when he was younger and especially when he was growing up, that was still in the kind of territory where the separation between that type of a useless learning basically was just a sign of stupidity or something like that.

Dr John Munnoch

So even just the the emotional side of it was very different. And I can just imagine I would not go this far if I hadn’t had that kind of diagnosis.
Adam Scales

Absolutely. I have started at the society just over a year and I'm I'm a video maker, so I didn't actually know the science. And I'm learning as I go. But to me, being just someone who's dyslexic and going into science is a baffling concept to me. So was there any time where you saw I don't think I could do this job because of how academic it is, because of my dyslexia.

Dr John Munnoch

And I don't think there was ever a point where I thought, I can't do this because so the other aspect of my dyslexia is my reading. So I'm relatively really slow reader. Any time like me, my wife will be reading something the same time she'll be finished and I'll be halfway through it. Whereas and for me that's quite daunting when it comes to staying on top of the literature because I just, just, I need extra hours.

Dr John Munnoch

I'm like, if I want to stay on top of I just need to spend the time. Whereas the benefit for me is a lot of things and there are no especially nowadays, but generally recorded lectures, lectures and seminars. And actually it's part of the reason I really love the Microbiology Society annual conferences. It's just a really efficient way for me to catch up in a lot of the kind of background literature.

Adam Scales

I'm going to put you on the spot because I know it's hard to think of example sometimes, but can you think of an example where dyslexia has blocked you in your career and then perhaps then find out how you got around that.

Dr John Munnoch

And I think it's tough because I think that type of question is I don't really know what the other sites like. So to say for a start, right. But for me, I've had a few really great examples of people I've worked with, people who worked for who are just incredible scientists and the volume of work they can get through from reading stuff, from grant panels, from being editors and journals and stuff like that.
So I'm an editor for Access Micro, and at times I'm like, Man, how do people get through that so much work? Because that's kind of probably my biggest weakness is just reading. Whereas there's so much about science, which is really hands on, you're getting in the lab in and talk of stuff. And I've really I've been so lucky that I've had really fantastic supervisors who have supported me and their own way.

Violet Just being on top of the literature and like really helping me catch stuff that I might have missed and just the, the massive kind of high throughput of research comes out now. And yeah.

I'm going to get back to the fact that you're an editor for access bias and very, very determined, and I hope you share this thought that this isn't a negative podcast about challenge after challenge, because I probably could say a few positives about having dyslexia. And are there positives for you?

And probably in a roundabout way, I think it's definitely changed my perspective of what it potentially would be in surrounding asking for help, supporting other people, providing help, that type of thing. So one of the things I've really enjoyed throughout my career is kind of mentoring people and I think dyslexia, having it and knowing that here, here's a thing, there's ways to get around it.

I feel like it's really impacted how I interact with people and finding the right solution for them rather than the right way for me to teach or to train or whatever.
Absolutely. And you touched on it earlier, but the fact that you are slightly more reliable and reliant on, uh, visuals and spoken words, can you kind of talk about how important that is to you when you know if someone puts a big paper in front of you, it's going to be a bit more of a challenge?

Dr John Munnoch

Yeah. So see, for example, it was a paper that I was going through. Um, as long as I get the time through, it can more than successfully get through that just ASOS. But certainly if it's so, especially with it and we can have stuff come across our desks were not necessarily experts on and we have the scientific background so we can support things like methodology and how rigorously the experiments have been done, but we might not know anything about the specific field.

Dr John Munnoch

So I'll tend to take by key phrases and go in a Google search of images and try and get infographics and that type of thing to really efficiently get on top of it quickly. And then I can dive back into the actual paper with almost a set of images in my head to keep all straight.

Adam Scales

To be honest, I when I knew I had dyslexia, I, I basically just went down the drama school route. I went, I turned into an actor like I was like, this is you know, I'm not I'm getting my days and he's in GCSE and I'm I'm just ready to completely removed anything academic from my world. I have, I suppose, like maybe I haven't I kind of fully faced face there.

Adam Scales

I've just, I've just like, weaved around it. I find it very admirable that you have the challenges, but you've gone into such an academic world.

Dr John Munnoch

It's funny. I think a lot of it, the credit can go towards my parents and my brothers, but probably my brothers especially. So my older brother has got the East in chemistry and my oldest brother has done like physics, computing and data science degrees and stuff like that. They've always been very academically oriented and being the younger brother, I was very much the just mimicking them.
Dr John Munnoch

And I think I’ll never see you because I had so much support and help with it. I don't think I've ever really went. That's about it for me to do things. And because I've had so much support and figuring out my own kind of learning strategies. But all of that said, I bombed everything in high school. Like I literally failed.

Dr John Munnoch

I very modeling and my kind of third and fourth year high school got. I've almost failed everything in my first year and in my final year I could just the entry requirements to Strathclyde, which at the time was my lowest entry requirement uni. And it wasn’t even even then like so as much support and help I had, it wasn't really until I was in uni I learned how I learn and, and for me it's touching everything.

Dr John Munnoch

Visual, audio, writing and practice and writing a subset of hands on because of I imagine in many ways because I don't necessarily have a specific strength that I just need to talk to a person. And then it's reputation, reputation, reputation. So I think for me it's just been hard is though it's been about having really great role models that and kind of no, I'm not even going to say well even in myself.

Dr John Munnoch

But having key people believe in me kind of really spurred me on.

Adam Scales

I'm going to go on to the fact that you are an editor and edit full access book apology. How did that come about? First of all.

Dr John Munnoch

So and I guess almost anecdotally so I did my PhD alongside Alex Herbert, who was an someone really key in kind of bringing the journal from the ground up and the current editor in chief, Helena
Marshall, I and I, I think it was my first year of my course talking law school and I kind of got introduced during a Zoom call and was to help with some RNA leak stuff.

Dr John Munnoch
And it was just that kind of and it was two people I knew who, as far as I'm concerned, can have really helped build it from the ground up and chat to them at the conference. And they were like, Hey, if this is something you're interested in, however not try. And that was pretty much it was actually the people, you know, kind of thing.

Dr John Munnoch
And that one of the benefits was unlike a lot of other journals, they really support introduction of early career scientists, whereas like I know, for example, PLOS Journals to be an academic editor and some of them have published like 20 papers, that type of thing.

Adam Scales
Was, was there a moment where you were thinking, I'd love to be an editor, but as you said, I'm going to be slow at times and it's going to be a challenge.

Dr John Munnoch
Yeah, So kind of 2 to 3 interesting points there. So of your friend who is an editor and she just sent me a job advert for another journalist just to see if I was interested in stuff. And it was I had basically two interviews for editor positions and stuff editing. So it's a kind of slightly different aspect of it's really high throughput rather than necessarily academic editing where you're focusing on like a couple of papers in more detail.

Dr John Munnoch
This is really like ten, 20 papers a day and you really try to just get through them. And it was going through that interview process where there is thought and I was just like, I really don't think that I don't think I could achieve that meaningfully. And, and I guess more recently, so I've recently just had a couple of weeks break and and I knowing myself, I realized I really needed to take that because I was kind of seeing the signs of kind of burning out a wee bit just because really hard focusing and
deadlines, that kind of thing and actually had to ask for some help from the office just being like, Hey,

Dr John Munnoch
I'm at the point where I need to take some break. I've got a few papers that I'm not going to have an opportunity to handle and a reason with the Office. And they were really supportive, angry about like either passing them on to other writers in the same way I've received papers from other writers in the same circumstances.

Dr John Munnoch
And I think it's just especially academically, you tend to test your limits quite a lot. She get to know herself well enough to know that, okay, I'm not in a position to handle this well. I'm going to raise it with people that can help me out. And more often than not, you can always receive that help.

Adam Scales
Yeah, slowly and just. I think that I maybe kept my six year under wraps, which is one of the reasons why I'd like I wanted to do this podcast. I don't normally do the podcasts, but I was I just, you know, I just kind of want to want to hear from from someone else. Do you from out there, when you meet people, get a new job to go, this is the situation or do you kind of let it unfold.

Dr John Munnoch
And I would say let it unfold. It's not something that I'm I would say that I'm like, embarrassed about or anything like that. And if anything, I tend to use it as an opportunity to kind of connect with people or like because while it's a diagnosed thing and there is so many different ways that people learn that even just understanding like, Oh, hey, here's a thing, here's the way I get around it, and it makes them think for their own situation, even if they don't have a specifically diagnosed thing.

Dr John Munnoch
How often have we all been in that position where we've had some mental block with? I've been working too hard and I just can't think run that's problem. So I tend to use it as kind of an opportunity to like and not teaching or and I can tend to have it as a bit of a a throwaway thing
plainly over and or even just making a joke of like hey man, I realize have spelt my name wrong here, but you know, I'm dyslexic.

00;18;06;27 - 00;18;09;07

Dr John Munnoch

It's like.

00;18;09;10 - 00;18;33;14

Adam Scales

Absolutely, yeah. There's, there is actually something quite liberating to be able to, to joke about it. I think a theme that has been running through this is support. And it sounds like you've been extremely supported. What were they doing to make you where you are now and who you are now? What what support were they providing?

00;18;33;16 - 00;18;58;09

Dr John Munnoch

Yeah, so I'm probably going to go with an for aspects and it's kind of I'll go chronologically. So I had a teacher who effectively screened a few kids that there was clearly elite barriers of some form and that's kind of how I ended up getting marital test. And that then led to basically I can't remember how much it was.

00;18;58;09 - 00;19;25;24

Dr John Munnoch

I think it was at least an hour a week of like specifically taking out a class and just spelling games, that type of thing for like buffing like in of ability to like do that. And so that was direct learning, teaching kind of interaction and kind of intervention. Then I had a guidance teacher and high school and my kind of second to last year high school biology teacher.

00;19;25;24 - 00;20;04;19

Dr John Munnoch

So I crashed biology and then the high school as well. And the type of support was very much and just kind of believing in me. I didn't necessarily have the grades to reflect that type of belief at the time, and especially when so I was very much going into trades and much more practical and kind of employment. And as my guidance teacher was like, well, the thing is, regardless of your grades, you're more than capable of doing this stuff.
Dr John Munnoch

I see, for example, going to uni for something I would never think about as an opportunity if it’s kind of what you want to do. And it’s something I’d always thought about again with my brothers being that kind of dispossession. So that's what will it mean to crash in biology? Loved it, really enjoyed. It was such a sad thing in physics and chemistry beforehand and relatively it was such a visual and it was the most valuable science in a sense, because pictures of animals, pictures of bacteria like all that kind of stuff versus heart equations and numbers and whatever.

Dr John Munnoch

And I think it was so that second aspect was very much someone encouraging me to try something new and then much more kind of professionally and through like Ph.D. and academically. It was effectively really great supervision where regardless of the news specifically, they knew that staying on top of the literature was really not my strong suit. And so the as soon as anything came across their table, they thought would be useful, they were always firing it towards me, keep it light.

Dr John Munnoch

And I made it very clear there was no ego there for me. Like, see if someone's helping me. I don't just sit there, go, Oh, I'm clearly not good enough to do that. I'm like, That's great. That's a step forward for me. That's been a really efficient interaction, that type of thing, and then the opportunities to pass that on to other people.

Dr John Munnoch

When I became either leader or postdoc and seeing how much it helped that was people who clearly had never had that. Whereas I've had it through my entire kind of career.

Adam Scales

That that honestly leads us perfectly onto my last question, which is what? What advice would you give to someone who's ever diagnosed and starting a career in microbiology or is just kind of thinking, I’m struggling here and I don’t really know why?
Dr John Munnoch

Yeah, I think from a career perspective, I'm always going to go for what you're passionate about. Like the thing is, regardless of what your goals as a spirit financially, academic pursuits, whatever, like follow your passion. And unfortunately for a lot of people, their passion isn't necessarily their strength, but so much can be made up for by really assessing yourself, assessing your difficulties and being honest with yourself about like, what do I need help with?

Dr John Munnoch

Where do I need support? And and then again, I've been very lucky with the people who've worked with that, finding the right people that you can synergize with and just anybody as you have it, can either help compensate for or give you that level of extra time to really get there yourself.

Adam Scales

John, thank you so much for joining me today. It's been an absolute pleasure.

Dr John Munnoch

No, thank you. I honestly privilege for me.

Adam Scales

I would like to thank John for his brilliant, insightful and open conversation about his journey with dyslexia. Thank you for listening to this episode of Microbe Talk, and we'll catch you in the next episode.