essi viding what works final

**Sophie Scott** 00:15

Hello, and welcome to the next episode of What Works. What Works is from UCL PALS Equality and Diversity Committee. And we are talking to different people within the PALS scientific community about their life and their work and how they manage life and they manage work. And I'm really delighted today to be introducing Professor Essi Viding. There's an old Morrissey song that says we hate it when our friends become successful. But one of the things that's really, really nice about being in academia is kind of people you bump into at different points in your life and I remember Essi being a very new person when the ICN first started and now it's fantastic that she's actually here as one of the more established and important academics within UCL doing really interesting work. So, Essi, hello.

**Essi Viding** 01:03

Hello. Thank you for having me.

**Sophie Scott** 01:06

I'm really... We can take this whichever way you want but I would be interested in knowing if you can think of anything that you.... What first made you, when you were younger, what first made you interested in science? Can you remember a time when you thought that's what I'd like to do for a living? Something that kind of caught your interest.

**Essi Viding** 01:26

Not really, I think I ended up doing psychology half accidentally. I moved to UK, I wanted to start an undergrad education. I wasn't quite sure what I wanted to do. I even toyed with the idea of doing architecture. But I also was interested in psychology and I decided to apply for psychology undergrad knowing very little about what the programme actually contained. It was different from what I expected. There was a lot more statistics for starters, which I found I actually quite enjoyed. And instead of just covering clinical psychology type of topics, which I think was my understanding of psychology beforehand, there were all sorts of fascinating research about attention and memory. So, I very quickly got hooked, but I sort of meandered into psychology semi-accidentally. So, I didn't start the course thinking I want to be a psychologist, or I want to be a scientist.

**Sophie Scott** 02:27

Where did you do psychology?

**Essi Viding** 02:28

So, I did my undergrad at UCL.

**Sophie Scott** 02:30

Oh, wow.

**Essi Viding** 02:31

Yes. And then thought, somewhat misguidedly, I think that I might want to go into clinical after the course. So, I applied for a research assistant position at the Institute of Cognitive Neuroscience with James Blair and Uta Frith, which is I think when we first met, and after doing this job for two years, I thought, oh, research is much more fascinating. So, then I applied for a PhD programme in King's College London. They had just started a new programme combining social, genetic and developmental psychiatry. I thought this is very interesting, bringing lots of different strands of research together. It was a four-year MRC programme, I got on it. And I did my PhD there with Francesca Happé and then did a postdoc there with Robert Plomin. And then I came back to UCL and I've been here ever since.

**Sophie Scott** 03:22

Fantastic. And can we just go a little bit deeper. So, the research that you were doing when you were working with James, that was pretty full-on, wasn't it? Because I remember that James Blair wasn't here at the ICN all that long. He got whipped off to America quite quickly, but it was the first sort of research I'd come across looking at psychopathy from a kind of cognitive neuroscience background.

**Essi Viding** 03:45

Yes. So, we went to prisons, and special hospitals and collected data on murderers. And essentially, we were interested in whether there was a difference between those who had psychopathy and those who didn't in how they process emotions and in their attention to emotions. And essentially, I spent two years travelling to various prisons, collecting data from people who had killed somebody.

**Sophie Scott** 04:14

That can't have been easy, it must have literally been quite hard work. I mean, any kind of testing that takes you around the country testing is already quite hard work, but the actual going into prisons and that...

**Essi Viding** 04:27

I think, to start with, it seemed quite heavy. And I remember the first ever testing session I had was with somebody who was sitting a long sentence for murdering somebody and I couldn't get the skin conductance equipment to work. And I was faffing around with the little sensors that you were meant to put on the fingers and the computer and trying to get it to record and it just wasn't coming up. And I was getting very nervous because I'm thinking I'm here with somebody who's killed someone, and nothing is working. So, I apologised profusely This man said, "It's all right love, I've got 18 years." It didn't exactly reassure me at the time. But after that first slightly tricky session, it became more routine. And actually, by the end of it, the most tricky part was the travel and lugging the heavy equipment. The testing became very routine. I mean, these are interesting characters, but actually, some of them could also be quite dull. And if I'd had a heavy lunch, I was liable to nearly falling asleep during testing sessions. So, then the sort of being in a normal situation and it being slightly odd sitting in a room with somebody who has been very violent, that sort of wears off very quickly. They have no reason to be unpleasant to you. And these are not individuals who are mentally ill in a way that that they would be seeing things or hearing things I didn't ever feel unsafe.

**Sophie Scott** 05:49

And I wondered if you could just very quickly comment on what you mean when you talk about psychopathy in this context, because I think my impression is it's a phrase that's got picked up and is applied very generally in the wider kind of community. And I just wondered if you could just say exactly what it was that you were studying in that context as I think sometimes the common or lay understanding isn’t...

**Essi Viding** 06:18

There are all sorts of you know, some people hear the word and think of serial killers. Now, there are some serial killers that are psychopaths, but obviously not all psychopaths are serial killers. Some people think it means extreme antisociality. But it's more than that. It's extreme antisocial behaviour, coupled with this complete incapacity to feel empathy for other people and guilt for what you've done. So essentially, these are a specific type of offender. We can characterise them using standardised instruments that have been well validated. There are these sorts of traits that occur in a continuum in a typical population as well, and I think given some of the recent politicians in UK and US, people sort of have tended to diagnosing from a distance. And certainly, we have, we can see people in public domain who have higher levels of these sorts of features, who have manifest lack of empathy, who have manifest lack of skills, who are happy to manipulate and con other people. So, because the traits occur in a continuum, you may have colleagues, or you may know of someone or there may be someone in the public eye who has higher levels of these traits. But in order for you to have a diagnosis of criminal psychopathy, you have to have behavioural problems that started very early in life. You have to have this profound lack of empathy and guilt that has manifested across different situations for a long period of time. You have to have quite a prolific criminal record.

**Sophie Scott** 07:52

So it's the offending really that is the thing that makes a difference here, you're seeing people who from the outset, you know, have always been behaving in a way that's taking them you know, it's called conduct disorders. Conduct disorder isn't an abstract diagnosis is it, it means you've done things that...

**Essi Viding** 08:06

It means to have [UNCLEAR]. And it's not really the offending that makes the difference because there are other people who offend and who don't have the psychopathic features, but it's the combination of the two things that could get you a diagnosis of psychopathy. Now, we might argue that somebody who has very high levels of mercenary behaviour, who doesn't empathise with others, who doesn't have any guilt, and who manages to stay on the right side of the law is still antisocial and unpleasant, just not in a way that gets them convicted. So, in a way, you might want to call them a psychopath, but you would be on a thin ground in terms of actually diagnosing them, if they don't have the prolific criminal record.

**Sophie Scott** 08:44

I understand. Thank you. Thank you. What was it like doing the PhD at Kings, having been at UCL?

**Essi Viding** 08:52

I really enjoyed it. It was a great setup where you had people from lots of different research traditions. So, I got exposed to behaviour, genetic research, I got exposed to really good developmental research and some neuroscience and cognitive research as well. And people are really trying to think how to bring the different methods together in order to triangulate on understanding a problem. And I really like that, I thought that no single method on its own is going to give you all the answers, particularly when we think about really complex clinical problems. So, I thought that was an excellent programme. It's still ongoing, and I think it's produced lots of brilliant discoveries and brilliant scientists.

**Sophie Scott** 09:39

With the genetics work that was going on in Kings and the IOP seem to be... It was quite different from the sort stuff that you saw at UCL, they seem to have something... I'm trying to look for a better phrase, somewhat ahead of its time in terms of, you know, arguing for the importance of genetics ahead of having the kind of didactic techniques to ask some of the questions. Do you think that's something that's really kind of paid off? They kind of, Robert Plomin, in particular was taking that further. You know, 30 years ago it seemed quite out there to be sort of saying now we have to look, there are important genetic contributions.

**Essi Viding** 10:26

So, I think UCL has been brilliant in doing work on single gene disorders in particular, absolutely fabulous work in that area. The work at Kings was more focusing on what we call polygenic traits. So, traits for which there isn't a single gene that influences the outcome but instead we think we're talking about multiple genes that each increase the risk a little bit in combination with environmental factors. So the studies that were set up at kings were really set up to understand this common variation, the slightly increased risk due to genetics, how that might interplay with environmental factors and some of the really cool novel research that was taking place there was demonstrated actually in many of the social environmental factors that we study actually have a genetic component, which if you think about it isn't surprising because you have two or more people in a social interaction. And each of these people brings their genetic traits and dispositions to this interaction, which can then be interpreted in multiple ways depending on you know, how you are biased in perceiving the situation. And I think that the work they do there is really, really neat and important, and I think what we have as a sort of a strong suit in UCL is our extremely strong cognitive neuroscience and my sort of dream is to try and get these two areas of research coming together to better understand how individuals essentially are creators of their own social environments.

**Sophie Scott** 12:02

Yeah, yeah, the whole thing is not like two abstract things being added together, is it?

**Essi Viding** 12:07

It's a little bit like the work we've collaborated on laughter perception in boys with conduct disorder, who don't essentially seem to have the same emotional response to other people's laughter, don't seem to have the same kind of motor impetus to join in with other people. Laughter is something that joins us together, that makes us feel like we belong and helps with social affiliation. Now, if for both probably genetic and environmental reasons, you react and perceive that laughter in a different way, it means that you are going to have very different social interactions from your peers, and that's going to shape your development and your interactions with other people.

**Sophie Scott** 12:50

So, how did you make the move? Because you've got this amazing lab now asking these really interesting questions about, you know, not just looking at psychopathy, but looking at boys who are at risk, looking at people actually on the progression towards this possible outcome. And how did you kind of start to put that together? So, you've got the PhD, you have done some work in psychopathy, you then do a PhD at Kings. How did you move that forward? You said you did a fellowship.

**Essi Viding** 13:20

So, I did... My PhD was on cognitive correlates of conduct problems, and ADHD actually, and then my postdoc was on doing behaviour genetic work on different types of conduct problems and how they relate to other disorders. And...

**Sophie Scott** 13:42

What did you find there?

**Essi Viding** 13:43

So, for instance, we found that there was a strong genetic overlap between the traits that predispose you to psychopathy and antisocial behaviour more overtly. We also looked at antisocial behaviour in relation to parenting over time in a longitudinal design and showed that there were genetic child effects that evoked bad parenting, but there was also bad parenting that influenced child behaviour over time. So, there are these interesting, really dynamic social relationships over time. Some later work we did looking at genetic contributions to autism and risk for psychopathy. And we found that although both conditions are very strongly heritable, there's hardly any genetic overlap. So that's very interesting, because it suggests that even though both disorders are characterised by social difficulties, the origins of those social difficulties are very different. We already knew from earlier work that the neurocognitive presentation was very different. So, those on the autism spectrum, have difficulty in understanding other minds but they can feel or resonate with other people's feelings and individuals at risk of psychopathy are exactly the opposite. They can understand what someone is thinking but they don't resonate with their feelings, which, in fact makes you a very good manipulator of other people. So that was the sort of work that we were doing early on. And then a position came up at UCL that I applied for, and got after my ESRC, sort of postdoc fellowship, and I've been here ever since.

**Sophie Scott** 15:20

What was it like coming back?

**Essi Viding** 15:22

It was a bit odd. And I still go to staff meetings with some people who taught me on my undergrad and feel like I should not be there.

**Sophie Scott** 15:32

I get that because I did my PhD here, you know, 20 million years ago. I can't quite get past that. There are still people who interviewed me or supervise me, and this is just strange.

**Essi Viding** 15:41

They've all been very lovely. So, my feeling of imposter system is not because these people have in any way made me feel unwelcome.

**Sophie Scott** 15:48

Absolutely. So, did you come back as a lecturer?

**Essi Viding** 15:50

I came back as a lecturer and interestingly, Eamon McCrory, who had been at ICN at the same time as myself, he had done his PhD with Uta Frith, had gone on to do clinical training and had also come back to UCL as a new lecturer. And we were good friends and we talked about our respective research interests realised there was quite a lot of overlap. He wanted to understand the impact of childhood maltreatment on cognitive development. Of course, a lot of kids with conduct problems have these sorts of experiences. I was interested in understanding the gene environment interplay. We started talking, we ended up writing two grants, we got them both and sort of almost by accident ended up setting up a research together.

**Sophie Scott** 16:47

One of the things I really liked about working in science is the kind of collaborations that one has. It's a joy to me, but I think it... Your work with Eamon seems to be a really beautiful example of how you can build something that's got bigger than the sum of its parts. You've got really, really excellent science and then you bring this together and you get a lot more than just those things individually.

**Essi Viding** 17:08

Absolutely. And I think we think about things in a fairly similar way. He's the only person I can sit down and write together with, which is very bizarre. And we work at the same pace, we get each other, but at the same time, we bring different things to the table. So, I've got a stronger grounding on the kind of genetics and biological side; he's a clinician, he's got excellent understanding of the social environment. And I think that we can really feed into each other's work that way.

**Sophie Scott** 17:35

That's amazing. And it's also extremely positive. So I've just got two quick questions I'd like to pick up on that I hadn't thought about before, but first of all, how do you find writing together because one of my favourite things are the people I can sit down with and write a paper with. It's not very many people. How do you find actually managing that? Is it a thing that you can kind of make time for?

**Essi Viding** 17:56

We have a half a day a week, at least, which is pretty much sacrosanct, where we don't book any meetings, and we sit down in front of a computer, and we write whichever, you know, whether we've got a grant going on, or a paper going on. And we divide the time very equitably with each of our priorities. And because we think at the same speed and we write in a very similar way, we often sort of find that we're trying to find the right sentence and then we come up with the same sentence at the same time. Or the other person says something and the other person thinks it's not quite right, it's not quite sharp enough and we're quite brutal, but in a nice way, and neither of us is very sensitive, so it works really swiftly and actually, we write quicker together than we would write separately.

**Sophie Scott** 18:43

That's brilliant. And more generally, how do you have... Any relationship you know, emotional relationships as well as you don't take these things for granted, you work at the collaboration, what do you do to keep it working?

**Essi Viding** 18:57

Well, I think we are bizarrely lucky in that I think we're genuinely people who annoy each other the least in the world. He annoys me a lot less than my husband, it probably helps that I don't have to live with him. And he says the same thing in relation to me. I call him my scientific husband. I have his husband's permission to do so. But we genuinely have not had many disagreements over the years. And the few that we have had, we've been able to sort out immediately upfront, and I think it's been quite easy because both of us value the collaboration. So, when we've discussed the disagreement, I think the primary anxiety is that it doesn't sabotage a really good working relationship. So, it has actually been really easy to hash out and we've got different... I think we have some different temperamental qualities which also help. Eamon is a lot more considered and has probably a bigger frontal lobe when it comes to blurting things out but is maybe sometimes a bit cautious. He can rein me back when I need to be reined back. And I can sometimes push him out a little bit when he needs it. And I think it seems to work quite well.

**Sophie Scott** 20:15

It's brilliant. Can you just, I mean, obviously you've got a huge amount going on but you've kind of got this very interesting research programme where you're looking at development, is that fair to say, and resilience, you can expand on that?

**Essi Viding** 20:30

So, we're looking at both psychiatric risk and also resilience in the face of biological vulnerabilities and also environmental vulnerabilities. So, we've got essentially two strands of research in the group. One looks at development of antisocial behaviour disorders, both developmental risk of psychopathy, but also developmental risk for impulsive antisocial behaviour. We combine different methodologies, such as twin study designs, molecular genetic designs, imaging, behavioural experimental work to do that, and the other strand looks at neurocognitive consequences of childhood maltreatment. So how maltreatment experience calibrates your brain development in a way that then makes you be at higher risk for developing psychiatric disorders later on. So, Eamon and I together have developed a theory called latent vulnerability, which essentially describes the fact that children who live in these sorts of really unfortunate circumstances have to adapt to those circumstances. So, if you live in a family that is characterised by violence, it pays to be vigilant to that violence, so you may develop bias to threat stimuli, and we can see this in behavioural paradigms. We can see this in imaging paradigms, and that's very adaptive for the environment where you grew up with. But it's not going to be adaptive when you go out to the wider world and when you're at school, you're not going to be able to concentrate on learning if you're hyper vigilant. The threat to your social interactions might derail if you're hyper vigilant to threat. And over time, that can lead to social thinning, because if you react in a hostile way, or in a scared way, your social interactions are more difficult, people feel less likely to sort of want to hang out with you. And over time, the very people who are most vulnerable are actually least likely to be able to elicit social support. And that may over time then manifest as a psychiatric vulnerability. Now, of course, there are also a number of children who don't develop psychiatric disorders, despite these really horrific childhood experiences, and that's interesting as well. And what is different about these children, you know, is do they have natural information processing strengths that help counteract the impact of the childhood maltreatment and help them illicit social support. And these are the kind of dynamics that we're trying to understand.

**Sophie Scott** 22:28

And this is not easy doing this, is it? I know no one ever said, this is going to be easy. But this is a particularly difficult challenge to set yourself, what are some of the ways that you manage that?

**Essi Viding** 23:19

So, I suppose you allude to the fact that they are very tricky populations to record?

**Sophie Scott** 23:24

Hard work to do, isn't it? I mean, it's not simple to say.... It's easy to say, well, we will study children who are but how did you even start accessing this population?

**Essi Viding** 23:31

So, you have to, you know, we recruit children from special schools, mainly for the antisocial behaviour strand of our research because, sadly, these kids don't often get referred to clinics, even though they would meet clinical diagnosis. So, we recruit from the special school settings. We've got very good relationships with the schools and teachers and parents and the children themselves. So that's helpful and for the maltreatment strand of research, Eamon has done amazing work essentially getting social services on board. So, we've got independent records of the maltreatment history rather than relying on self-report. But it is slow, slow work and we've got a really amazing team of people who work very hard and go to coffee mornings with social workers and make sure that if the families need accompanying to testing sessions, they will go and pick them up and it is very, very, very slow going collecting the data. It's not like, you know, collecting data for 35 undergraduates, which you can do in a week if you're lucky.

**Sophie Scott** 24:33

No, and I guess when you get families in for testing, there can't be any margin for error. You can't... You've done so much to get the people around to actually collect data you must have an amazing team, I guess, to be absolutely certain this is going to work now we're here.

**Essi Viding** 24:49

They're absolutely brilliant and sometimes it doesn't work and that is something that you know, we factor into all of our grant budgets, about 10% dropout, just you know, people don't turn up because, I don't know, someone was arrested for knife crime that morning. So now they can't come to the testing session. You just have to anticipate that.

**Sophie Scott** 25:11

Yeah. And how do you find them... Because I love psychology, I love working in psychology, but it can be difficult sometimes to actually get psychologists to engage with something, with complex issues in a multifactorial, are you I mean, are you finding it... I'm going to have to edit out my incredible inability to ask this question, but the.... How do you find actually taking these papers through to publication because this is a complex story? And sometimes people want things to be simple and they're not.

**Essi Viding** 25:42

Yes. But I think the community who work on the same issues, if you go to more specialist journals, know the issues. And as long as you discuss them in a balanced way and you don't try to overclaim, I think our overall understanding of it, I think the trickier bit is sometimes if you submit to a more general science journals, is how to communicate it in a way that you have a story that is easy for a general science audience to digest, but which doesn't over simplify things. So that that can be tricky. And I think I've also found it sometimes tricky collaborating with colleagues who do research on healthy adults who might have some interesting paradigms, and you then work on translating the paradigms for children. And the colleagues say, well, you know, we absolutely need 45 minutes of data collection and you just think, well, you might need it, but you won't get it from this. So, you need to try and get as much signal as you can from a paradigm that is used in a maximum 15 minutes because otherwise you've lost your participants. And if you only collect data on that very unrepresentative group who can sit through a 45-minute experiment, you will not get data representative of the population that you're trying to understand.

**Sophie Scott** 27:02

Yeah. And something else before we move on that I was struck by going to a talk years ago by a speech and language therapist who worked at Surrey University and she was working with offenders, with young offenders, first time young offenders, looking at their communication skills and finding phenomenal levels of undiagnosed communication problems. And but she was finding it then very hard to get her work funded because it wasn't seen as a clinical problem. And she was saying they're mostly boys, if they get picked up when they're in primary school, then there's a chance they will have some access to some kind of therapy. It tends to be treated as a conduct problem once you're in secondary school and you are directed via different routes. Are you finding that, because you seem to be really challenging this?

**Essi Viding** 27:49

Well, I do think it's objectively hard to get this sort of work funded. MQ, which is the mental health charity, published a report on funding that has gone to mental health research, which is hugely lagging behind any other kind of health research, but then it broke down the funding within the mental health research and conduct disorder, I think got something like 2% of the pie. And this is one of the most common reasons for referral for Child and Adolescent Mental Health Services. We've got an enormous cost burden of offending. So, this is not a minor problem. But it is underfunded, given the scale of the problem. So, I don't think that that colleague was strong in their perception and it's often very hard to situate the funding. You also get people concerned about stigmatising children, which is something that I have very little patience for, because I'm thinking that's an easy sort of concern to lob off when you sit in the comfort of your own armchair and you don't have to work with these children day in, day out. But actually, if we want to help these children, we do have to be able to define a condition, you obviously have to do things sensitively. You don't give feedback on individual children to settings where you don't know what is going to be done about the feedback. But at the same time, this idea that you shouldn't do research, in order, not to stigmatise people, I feel it's a huge cop out, that is actually failing these really vulnerable children and their families.

**Sophie Scott** 29:22

Yeah. Well, congratulations, because it's an amazing set of work, amazing body of work. And I'm really thrilled to hear that it's built on such a strong kind of collaborative programme. It's brilliant. Can we talk a bit about the other side of life, which is everything else that's also going on? So, you have, you mentioned your husband.

**Essi Viding** 29:42

He's very lovely even though he annoys me more than ever, because I have to live together with him and the rest of it, which I don't have to do with Eamon.

**Sophie Scott** 29:50

So how, you know if you're comfortable talking about it, when did you get married?

**Essi Viding** 29:55

So, I got married in 2006. And our first child, Ava, was born in 2007. Where were you in your career then? So, I was still a lecturer, but I submitted my promotion application from maternity leave. And I was promoted to Reader a year after Ava was born. Somehow the promotion cycle takes... I submitted the materials I think, literally a few months after she was born, and then that promotion came through. Milo was born in 2010. And he was born two months prematurely with a huge tumour. So, he's a Great Ormond Street baby. And he's another one who coincides with promotion application going in a few months later. I also got that promotion so UCL has been very, very good to me and very supportive. And I have another half who is actually incredibly hands on, so we definitely do childcare as a properly divided task.

**Sophie Scott** 31:03

I'm going to come back to childcare in a second. But some specific questions about maternity leave, how did you find that, I accept that with your son, it must have been quite different, but... I mean, it's like a stupid thing to say, but I think sometimes in academia it's pretty hard to really get a maternity leave by many people's standards, because a lot of PhD students don't go away. And you know, the lab is still existing. But also, you have a bit of sort of flexibility sometimes when you're coming back. So, how did you find that?

**Essi Viding** 31:31

Well, for me, the experience was hugely positive both times around. I gave all my students an option to transfer to somebody else or to continue my supervision, but they had to be willing to come to my home for supervision and cope with the fact that I'm feeding a child, which they all chose to do. But as a result, I was able to accumulate these keeping in touch days, which I could add to the end of my maternity leave, so that meant that I got a little bit more time at home with the babies. I thought that coming back from maternity leave was made easier because of the teaching sabbatical that UCL offered. On the whole, I felt huge supported, particularly with my son because I, of course had to start my maternity leave nearly two months before I had anticipated and colleagues were incredibly supportive and rallied around and came and saw us when we were at Great Ormond Street and took over duties that sort of fell into their lap earlier than they expected. And I was never made to feel that there was anything I needed to worry about. If anything, I was sort of told to keep away and people would sort it out for me, so I had a very positive experience both times around.

**Sophie Scott** 32:51

How do you... What works for you in terms of managing life and work, because, you know, academia is one of those jobs which will just expand to fill. And being a parent will also expand to fill the spaces available. What works for you?

**Essi Viding** 33:12

I actually think, for me, constitutionally, I think academics suits me quite well, because I don't know that I would be very good with a nine to five job. I enjoy thinking about things. So, it doesn't seem like a chore most of the time if I have to go back to looking at some paper even after the kids have gone to bed. And I think that the flexibility that the academia affords in terms of you can go and see that Christmas play without having to necessarily make arrangements three weeks in advance, as long as, you know, you're not reneging on your teaching and administrative commitments. I think that flexibility has worked out really well for me. I'm also lucky in that my husband can work flexibly. So, between both of us being able to be flexible and also outsourcing a bunch of the childcare we've managed to do it reasonably well. Yeah, it's some resemblance of sanity, particularly when the kids were small, even though neither of us has parents living close by.

**Sophie Scott** 34:16

Certainly, my partner was almost offended at the thought that he might not want to make major contributions to childcare. You know, and it's a really positive thing actually, I think there's a common stereotype that no man would touch childcare if he could possibly make it and a lot of people...Really you know, it's a fantastic thing. I sort of assumed a parent was, like one of those... My father used to use the phrase, you will get your reward in heaven, you know. It may be a trial at the time but enabling some greater good later in your life because it's wonderful. It's great being a parent. It's a real honour and joy to be around your babies and your children. And, you know, why wouldn't you want to be part of that, you know, both members of the parents, God willing, they're both around, it's a joy. It's a wonderful thing. So, it's a really, you know, it's always been a positive experience for me, the kind of, dealing with childcare is a thing you need to think about, but in and of itself, it's a good thing.

**Essi Viding** 35:21

I think I found them surprisingly interesting when they were small, because I've never been a big baby person. But once they're your own, they're surprisingly interesting. But I also am finding it delightful as they grow up. And you can have interesting conversations with them and yeah, go and see interesting things with them and reflect about it. So as they get older, I find myself enjoying it more and more. Also, it probably helps that you get a full night's sleep. [LAUGHTER]

**Sophie Scott** 36:08

Is there anything else that you'd like to say about being a working parent? You don't have to, you've said loads, but if there's anything else you'd like to add.

**Essi Viding** 36:15

I think, I mean, one thing that I always tell junior people in my group who haven't had children yet, is to really, really think about, before having the children, think about how they are gonna make the childcare as equitable as possible. And what really concerns me, more often in relation to young women than young men, is that there seems to be this inherent assumption that the woman will cut back on their work. And no one, despite their multiple degrees and PhDs seems to think about the impact of that on their pensions, on their career progression, on the dynamics of their relationship, particularly in a kind of demographic that we are in where people are highly educated, and you often get together with somebody because that person is very interesting and you are interested in what they do, they are interested in what you do, what's going to happen if one of you scales back hugely, and the other one just keeps getting ahead with always having a priority. I think that that can have a really, really toxic impact. You take a risk with your pension and with your career progress. And I mean, if you're very lucky, you will be with that person for the rest of your life, but you don't know. You know, relationships don't always work out, someone may pass away. I just always think particularly in the kind of career that we're in where there is room to be flexible, I think it's a very short time when kids are small, even if it's a bit of a financial sacrifice for both of you to keep in there in your careers, I really think it's so worth doing.

**Sophie Scott** 38:07

And it's such a short period of your life actually, it really feels like forever at the time. They're tiny for such a short amount of time. Would you be okay if I asked some questions about life outside of science and family? So, you have a lot going on, you're a fantastic scientist, and you're doing amazing work. And you're also a parent who is working very hard, of two fantastic kids. I know there are bits of your life that are not doing science, that are not being a parent, what else do you like to do? I know that you do some fairly amazing things.

**Essi Viding** 38:46

I do boring things as well. I mean, I love running. I love yoga, I love doing weights. So those are the kind of things that I do to look after... I call them looking after my mental health. I think I get out of my head when I go for a long run and I usually listen to opera when I go running, which is maybe a bit unusual, but I love it. I also love cooking. And I love having people over and entertaining. I read a huge amount of... I read work stuff, but I also read a huge amount of fiction. And yes, I love going to see art. I love going to concerts. I used to go to opera before I had children. It's not my other half's cup of tea, so once we had children, when we managed to get out of the house, we didn't go and do something that he didn't enjoy. But then a few years ago, I thought well, I can go on my own, especially now that the children are bit older. So, I've been going to opera on my own quite a lot, which I actually prefer.

**Sophie Scott** 39:49

We did a thing on voices a couple of years ago at the Royal Society and as part of that we were scanning doing dynamic imaging with different sorts of voice artists and someone I've known for years, who does opera singing, I never really heard her sing and she just stood at one side of the opera, sorry not opera, [INAUDIBLE] suite, phonological error there, and started singing and it was absolutely extraordinary. It was just the sheer scale of the sound she was making, and it was an absolutely beautiful sound, but it was also almost totally overwhelming, issuing forth from someone you've known for years. She just starts doing it. It's like some incredible...

**Essi Viding** 40:36

It's an instrument. This is I think when people say it sounds so weird, it's a weird thing and I'm thinking well it's an instrument. You have think of it as another instrument.

**Sophie Scott** 40:45

The instrument. The only instrument that can die. It is quite extraordinary. Just to second what you said, the only kind of wisdom that's come to me with age is that it's really worth making time in the day to do the things that will make you feel better and I do get up horribly early in the morning just so I can get some exercise because everything will be better, the whole day will be better. I will enjoy staying in bed for another hour, but I'll feel better and the whole day will be better if I get up.

**Essi Viding** 41:18

I got up early this morning and went to the gym for half an hour and I'll do it even if I just have 20 minutes to go for a run, it's still better than nothing. Another thing, again, I think this is when you get to a certain age, some bit of wisdom which is that if you just focus on one thing, lovely as your science might be, you will get the inevitable rejections and they are so much harder to take, if that's the only thing you're doing, because your whole identity is bound up in the work and of course a lot of our identity is bound up on the work, much more so than for most people because it's fascinating and it's interesting and It's something that we're hugely motivated by. And it's yours. It's your thing. But at the same time, I think it's so important to have those things, the friends, the family, the activities outside the work, because when the inevitable, failed paper or grant rejections come, you are much less likely to be crushed by it. You can sort of go and take a deep breath get a little bit angry, rewrite it or, or forget about it.

**Sophie Scott** 42:30

Someone on Twitter was being very rude about one of my papers a couple of years ago, and I was on holiday and he started saying these things. And I was standing in a queue for lunch with my family, and I saw a couple of things and I replied, and then Tom went, "Oh, God, what's going on?" And I said, "Oh, sorry." Then I thought, you know what I'm on holiday. I just blocked him. I thought, this is great, it wasn't a particularly good criticism of my work anyway. And really what matters more, being here now matters more. I'm not going to be on my deathbed saying I really wish I replied to that Tweet and set that dam burning, you know exactly. Had I not been with my family, if I didn't have that, I would have just got caught up in a row.

**Essi Viding** 43:14

You would have gotten distracted. And of course, in Twitter there seem to be... I mean, I was on Twitter and I left because... not because I had any hugely negative personal experience, but I, to me on balance, there were more negative things that I was witnessing, than positive things. And there were lots of positive things, but I personally haven't really missed it. I have missed your Tweets.

**Sophie Scott** 43:36

Well, I would imagine that's true for most for most people.

**Essi Viding** 43:39

But I get some of that on Facebook so it's not complete cold turkey.

**Sophie Scott** 43:43

It's true. I do sometimes... I think there's legitimate questions to ask about the sort of emotional feelings that you are left with having had these sorts of engagements and it's mostly... I mean, I've... The only way that I've stopped caring a lot less about what happens on Twitter, and I just do what I want to do on Twitter and if I see something stupid, I think you know what, fine, go and be stupid. I don't care. You know, that's not why I'm here. And it does make it more manageable. But you're right, the tone of it going on around you sometimes...

**Essi Viding** 43:44

I think that it has sort of unearthed the worst things about the humanity.

**Sophie Scott** 44:16

I think we may be learning an important lesson that actually, although it's great to have all these conversations you can eavesdrop, it's not good. No one's benefiting from it. It's not good for us in the long term. Essi, is there anything else that you'd like to add? Anything else you want? One last thing I just really quickly want to ask you, we just zipped past this right at the start. Of course, you are Finnish.

**Essi Viding** 44:39

I am.

**Sophie Scott** 44:39

You are Finnish, how do you find it being in UK academia and are you ever tempted to try a life in Scandinavia which has many advantages?

**Essi Viding** 44:52

I've found it quite nice in the UK academia. I think it's taken me some time to learn to moderate my directness in some occasions, and probably most of my colleagues would say, you're not doing that successfully. But on the whole, I mean, I like the British academia, I think it's a fairly egalitarian system compared to a lot of other academic setups. The hierarchy is a lot more flat than when you go to continental Europe. And I like that. I think that's healthy. And it's good. I think there's a real culture of looking after early career researchers here, which is much better than again, most places in continental Europe. And I think there's a great tradition of sort of debating things and doing it in a quite a robust but civil way, which I also like. I miss Finland on occasion, but I also miss England when I go home to Finland, so there are good bits in both places. I don't think I would want to be an academic in Finland. It's a much smaller setting so you'd be a kind of a big fish in a small pond, which I'm not sure would be as healthy as being a smaller fish in a bigger pond and also the academia there is a lot more hierarchical, the research is less well joined together and although there are some sort pockets of excellent, it's not overall as thriving, as it is here, in my area of research in particular. So, I'm not really tempted to go and work there. But I do like going home for holidays.

**Sophie Scott** 46:36

The occasions I get to go, it's a delightful country. I once saw an elk.

**Essi Viding** 46:42

On your run.

**Sophie Scott** 46:44

I didn't try and talk to it, apparently they're not all that friendly.

**Essi Viding** 46:48

They're not very friendly.

**Sophie Scott** 46:53

Thank you very much, Essi, that was really helpful. Thank you.

**Essi Viding** 46:57

Thank you.

**Sophie Scott** 47:04

Thanks for listening. This has been What Works. My name is Sophie Scott.