

MRC talks podcast: Career inspirations: Daniel Freeman, clinical psychologist January 2019

Presenter:

Welcome to the MRC talks podcast. I'm Isabel Harding.

For 2019 we're launching a 12-part 'career inspirations' series.

We'll feature 12 scientists, all working in different areas of medical research, to find out how they got there and what makes them tick.

First up, Debs Barber talks to Daniel Freeman Professor of Clinical Psychology at the University of Oxford.

Daniel Freeman (DF):

My focus is about understanding what causes mental health disorders in order to develop better treatments. So, life feels very interesting and it feels like we are making progress, and I think that helps with some of the stuff that's always less appealing in one's job, that you can get it through because of all the exciting stuff and the people around you

Interviewer – Debs Barber (INT):

Although many view it as a gateway to immersive video gaming, Daniel sees virtual reality as an exciting technology that has the capability to go far beyond the world of entertainment.

Daniel's been working with VR for over 15 years. As a world pioneer in using VR to understand and treat mental health problems, he's worked on over 15 clinical trials and he led the largest ever randomised controlled trial of a psychological treatment for a mental health problem.

Driven by listening to what patients want, he co-founded a spinout company called OxfordVR who use immersive technology to increase access to evidence-based psychological therapies.

He's also committed to telling the wider world about his work. He's authored 10 books and over 200 peer-reviewed journal articles.

One of the areas Daniel and his team believe immersive VR can help with is in opening up new, innovative treatment options to a wider range of people.

Although the NHS offers psychological therapies to treat people diagnosed with various mental health conditions, not everyone is currently getting access to the help they need. Especially for those experiencing severe mental health problems, access can be difficult.

In collaboration with a wide range of people, from other researchers to game designers, Daniel's team have created virtual environments of the situations that patients find challenging in their day to day lives.

In Daniel's words, VR is powerful, "because although they know it's not real, they can do things that they wouldn't normally try in the real world."

After seeing promising results in the early trial, Daniel's team are now at the beginning of a new study using VR with the cognitive therapy built into it, called THRIVE.

Just imagine being inside a video game but at the same time you're standing opposite a therapist who is explaining the treatment and teaching you new coping techniques.

MRC talks podcast: Career inspirations: Daniel Freeman, clinical psychologist January 2019

It's early days and the team have a lot more work to do, but without the technological barriers of the past, using VR in the clinic to treat mental health problems could soon be a part of the future...

INTERVIEW

- DF: I'm Daniel Freeman and I'm Professor of Clinical Psychology at the University of Oxford.
- INT: Firstly, how would you describe your job to a non-scientist friend in the pub?
- DF: My focus is about understanding what causes mental health disorders in order to develop better treatments. In particular I'm focused upon trying to produce better outcomes for patients who have delusions.
- INT: Taking it back to the very, very beginning of your journey, when did you first know that you wanted to be a scientist active in research?
- DF: I think it was very much at university, I did a natural sciences course and tried lots of different sciences, and really took to psychology. I think I fell in love with the subject actually at that point. I really didn't know much about how one then became a clinical academic, but I thought I would give it a go. At that stage you get what's called an assistant psychologist position, straight after university, and from then on basically I completely took to it, I have to say.
- INT: In a very, very brief format as an elevator pitch, can you tell me how you reached this point in your career?
- DF: I guess I've always been just focused on the clinical issue. For me it's about what can you do to help people suffering from a particular problem, and that's always been the driver for it really. That's led to me trying to understand problems, trying to think of new treatments, and then testing them out. Increasingly, as my career has progressed really, it's about issues then about implementing innovations.
- INT: What made you decide to have a career in this area, in mental health treatments?
- DF: For me, I think as soon as I was first in an NHS service, in mental health services, and listening to patients, that has inspired most of it. All the ideas really have formed from being in a room and hearing patients share their experiences, listening out for the psychology of it, and then using that to develop theoretical models. I've done a lot of work experimentally testing out potential causal factors, and if you do that kind of work you're also at the edges of treatment development. You can take some of the things you do as experiments, you can use them to develop therapy techniques, and I've done a lot of work trying to then test out whether they're effective and building up new treatments. Mental health, probably as with many conditions, there is no single cause, you're dealing with complex causation, and that means you've got a lot to learn, that means you've got a lot to do

**MRC talks podcast: Career inspirations: Daniel Freeman, clinical psychologist
January 2019**

in treatments. And of course, all of that is in the context of listening to what patients want. The work has kind of been rooted in the science, very much evidence based, but also getting a lot of patient feedback. Also, you have to think about the staff in the services who may be delivering treatments too.

INT: What does a typical working day for you look like, if there's a typical working day?

DF: There doesn't seem to be, I guess that's the variety of my job is something I like a lot. I might be seeing a patient with a member of my team during the day, but I might also be supervising some of the research assistants on trials or therapist on trails, like for today. Then also having a meeting thinking about their research and encouraging them. This week I've also been doing some radio work as well for public dissemination. The variety is partly what I love. I think during your career it's really important that you focus, and you don't get distracted, but I think as time goes on and as you build up your work, you have so much variety. I like working with people from different disciplines, I learn huge amounts from statisticians, from other psychologists or psychiatrists, computer scientists now also. Working with smart people is fantastic in the work, but yeah, sometimes it's hard to remember with so much happening in a single week, and some of the projects we've got now are rather fast-paced for our world. We're doing some work with virtual reality where we're working with patients to help really get their views about what they want, we're also working with the Royal College of Art Healthcare Design Unit to help with user sensitive design, we're with the McPin Foundation, who are a patient charity, we're working with NIHR Mind Tech, who are about implementation of digital technology, we're working with Oxford VR, a university spin out company we have who have lots of programmers doing great stuff in VR, and then working directly with the people in my team as well, making sure the projects are aligned. So, life feels busy, it's also just feels very interesting and it feels like we are making progress, and I think that helps with some of the stuff that's always less appealing in one's job, that you can get it through because of all the exciting stuff and the people around you.

INT: Would you say that the variety is the favourite part of the job for you, or is there anything else that you particularly enjoy about what you do?

DF: I really value the patient contact and the privilege of listening to people share some really important key concerns and fears and life stories. I really value that. I do less of this now and miss it, because of the variety I miss actually going away and reading everything on the subject and writing stuff, I perhaps have less time for that now than I used to. Perhaps these days it's far more supervision of others, or the writing often is grant based to support your team going forward. Actually, some of the stuff I like, actually doing stuff in solitude, has disappeared a bit, yeah, I miss that bit. So, it's not variety per se, I still think, although I do a variety, that there's still a clear focus that guides all of it. I think it really is, in summary, it's about

**MRC talks podcast: Career inspirations: Daniel Freeman, clinical psychologist
January 2019**

translational work really, it's about developing understanding, use that to develop better treatments, and thinking about how that applies in services. Very focused targeted work, because I think that's how you make the best progress.

INT: Okay. What has been your biggest challenge in your career to date, do you think?

DF: There's a question. I guess the run of the mill challenge or the thing that is always on one's mind is making sure that there's the funding in place to support the work of the team, and that feels the area that in some ways you have less control about. I think the systems have worked well for me, the different funders at the different stages of treatment development, it has worked as a joined-up system, and I appreciate that. I've had support from the MRC on some of the piloting and theoretical development, more recently support from the NIHR on the implementation side of it more directly, so that's worked well. But I think that's always the challenge really, is securing the funds to do the work. Generally, it's been that if you focus on a key important problem, there does seem to be a good degree of backing for that.

INT: Is there any one person who has inspired or influenced you throughout your career to date?

DF: There have been lots of people. I would certainly say having mentors and people who you can look up to and learn from is hugely important. Philippa Garrity is hugely important for teaching me about science and delusions, David Clark at Oxford has been hugely important in ways to understand psychological disorders and to think things through. I've benefited hugely from Graham Dunn who's a statistician at the University of Manchester, who's helped teach me about methodology and lots of other things in terms of how to conduct oneself as a scientist. There are many more. Again, it's one of the joys of working in science, finding the right people around you, and there are many people who've been incredibly generous and helped me develop my career, I could actually do a whole podcast on the amount of people. I could shout out to lots of people out there who've helped me, and I think that's completely right, you learn so much from the people around you.

INT: Imagine that your younger self was sat on the sofa where I currently am, do you have any advice that you would give to them that you know now, that you didn't know back then?

DF: You mean apart from a general dress sense, and other things like that? There's probably a number of things, I think I'd probably had a tendency to work focused on my own quite a lot, and I think getting collaborations in and working with other people early is always a good thing to do. Also, I think you become more and more aware that communication is so important that you're not just talking in jargon, you've got to explain things to people in your profession who are doing other things, but also other

**MRC talks podcast: Career inspirations: Daniel Freeman, clinical psychologist
January 2019**

professions. So, I think you have to see the bigger picture of where your work particularly fits in. But having said all of that, I think there are certain stages of your career where you should focus on the detail, you should know everything about that particular problem, that's time well spent. I think some different skills kick into play later, but clarity in communication and working with others is the area that I think my younger self could have done better at, probably myself now probably could be better at that stuff. Although these days actually I do, I think I work and collaborate with huge amounts of people, and really value that.

INT: It definitely sounds like it from all the people that you've listed that have inspired you throughout your career and the busyness of your week, radio shows too.

DF: Yes, it's a collective endeavour, I think that's really true. There's a joy working with the senior people and learning from that, there's also a joy of the younger people coming through and seeing them flourish and helping them flourish. It feels fantastic. Yeah, I think for a lot of the science I've spent quite a lot of time thinking about how I do I build up a team, how do we make sure that people feel happy, whilst also making sure that we do really good high-quality science.

INT: Looking into the future a little bit, where do you see yourself going over maybe then next five years or so?

DF: I'm not short of ideas of stuff I want to do. There's a programme of work over the last maybe 20 years which has been developing theory particularly of persecutory delusions, testing aspects of treatment, developing a face to face therapy that we think could be state of the art. But if that is successful, we're currently trialling that, if that's really successful then there's a whole implementation side about that. Also of course, our state of the art treatment we hope will really improve recovery rates, there's still a group of people who don't seem to benefit and we need to develop treatments for those. Then there's a whole strand, I think, with technology, particularly immersive virtual reality that I think will change mental health treatment in the future. So, we've got huge amounts of work to do on developing really good VR psychological treatments. Yeah, there's lots of stuff.

INT: It definitely sounds like there are lots of exciting times to come. Thank you very much, Daniel, really appreciate it.

Presenter:

Look out for more about Daniel's work on our blog: mrc.ukri.org/blog

For information about other biomedical career options check out our map at: mrc.ukri.org/interactiveframework

**MRC talks podcast: Career inspirations: Daniel Freeman, clinical psychologist
January 2019**

If you like what you hear, then please like, share and subscribe on iTunes, or wherever you get your podcasts.

Send us your feedback, via Twitter – at The, underscore, MRC – or on Facebook we're MRCComms.

Tune in for our next episode when we'll be talking with nutrition scientist Professor Nita Forouhi, about the rewards and challenges of a career studying diet and diabetes.

This episode was produced by Debs Barber and Hasina Sacranie, presented by Isabel Harding, and edited by Hasina Sacranie.

Thanks for listening.