



The ALBA Diversity Podcast

Season 1- Episode 12: Dr Maryam Ziaei

Speaker Key:

SM Shruti Muralidhar (Podcast host)

MZ Maryam Ziaei (Guest)

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SM Hello and welcome to the ALBA Diversity Podcast. An ALBA Network undertaking to profile and highlight diverse and immigrant neuroscientists. The ALBA Network aims to promote equity and diversity in the brain sciences. We talk to neuroscientists across positions, career paths and backgrounds to better understand their personal journeys. We showcase the grit and determination it takes to overcome hurdles as part of under-represented or minority groups. We talk about what keeps them going as individuals, and as neuroscientists, in today's world.

MZ I'm Doctor Maryam Ziaei and I'm a new group leader at Kavli Institute for Systems Neuroscience in Trondheim in Norway. I'm a clinical psychologist by training. I did my Bachelor in clinical psychology and from there I did my Master in clinical neuroscience. I'm studying patients with brain damage.

And then I moved to Stockholm for part of my PhD. I had to move on again from there to Australia and start on my PhD. Or continue my PhD at the University of Queensland. And then I finished my PhD in 2016 and then after that I got a postdoc. I've been doing a postdoc for a while and then I had a kid in between and then I got my position and I started in May 2021 actually. This year.

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SM Congratulations, first of all. Getting a position and starting in May 2021 is an achievement, regardless of where it is in the world and what you do.

MZ It has been a really tough journey. We started actually negotiating when I had my first interview in April 2020. So it was a long journey and I'm so grateful for my employer that they were civil with me. It took a while to get where I am but I'm glad that we are making progress.

SM So when was the first time that you talked about brains and neurons? And what got you thinking about the brain in general? And how did that grow in your career? Which university did you do your undergrad in?

MZ Isfahan University. I'm originally from Iran and from the middle of Iran. When I was in undergrad I had two lecturers that were interested in brain or they had some backgrounds in brain. And one of the actually was in psychiatry. So he would come to our department and we'd talk about the brain and speaking about serotonin, dopamine and all of these. And I would go and find some original English, because we were in Iran so I was studying everything in Farsi, so I was finding some textbooks and getting [unclear] that I was just go and ask him, what



about this, what about this.

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I would follow him to his car from our department asking all of these questions. And I would go to one of my lecturers, who was in my department, and every now and then I would just pop up in her office and ask all of these questions.

I definitely remember that when we were in lectures I would think about, this is the iron channel that is now activating or this is the neurotransmitter that is now in transit. I was trying to practice to myself what I'd read. And it was really interesting trying to find out what's happening when I was learning about learning or memory or any kind of topic that we had. So that was the first starting point.

And then from there I moved to Tehran, which is the capital. And I did my Master there. I started studying brain damage patients who had damage to their ventromedial prefrontal cortex and I was liaising with one of the radiologists and one of the neurologists there who see these patients or refer them to me. That was a continuation of studying the brain.

And at that University, which was Shahid Beheshti University in Tehran, there were another lab who were doing great neuroscience research, and they are still doing neuroscience research, but with animal physiologists. So I joined them. It was really far from my field, but it was another avenue for me to get to know how the brain works.

SM So you actually went from a clinical psychology studying human brain patients into animal research. Very few people make that jump.

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MZ While I was doing my Master and I was looking for patients, which took about three years to find six patients, while I was just doing that I joined that group. And I think that was the turning point for my career. Doing my Master, I came across another lab. They were doing human studies with fMRI, the functional imaging, rather than just looking at the structure of the brain, we were looking at the function of the brain and how the brain's activated actually.

Though at the time they were studying Alzheimer's disease so that was another event that was important for me to realise that I wanted to continue that path. To go to Stockholm and study the brain actually using fMRI. Which was my dream coming true.

SM On that note, tell us a little bit about what you do. What other questions that you're asking in neuroscience?

MZ What happens when we get older and what are the changes in terms of social and emotional aspects. The first study that I came across was that researchers found that, when you present some faces, older adults seem to remember happy faces more, or happy moods more, than neutral or the negative compared to younger adults. So that was really interesting phenomena for me.

I continued that line of research to understand how our memory changes as a result, or in respect to, emotional valence. And then I continued with that social



aspect where we present faces, like angry faces or happy faces to participants with different eye gazes and we would scan their brain and see where brain areas are involved in younger compared to older age participants.

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SM What is the reason why you chose young versus old? That sounds really interesting to me.

MZ Well ideally you would follow people from a younger age to all the way through their 60s, 70s, and 80s. But financially it's not... So what we would do to study the aging brain, again in quotation marks, is to compare older adults from 65 years of age with younger adults.

But most of my work is actually against dogma that we think that, when we get older, we lose everything. Our memories. We're going to lose our memory and all these cognitive decline that we think about. But my research actually said that this is not such the whole story.

Despite the fact that these changes happen, so we have some changes in our memory and executive functioning and also speed of processing, but we gain more positive output perhaps when we get older and our motivation changes, our goal changes. And so it's not all decline and it's not all deficit or difficulties that we normally think about in respect to aging. I'm not saying that everything is rosy.

SM We should know that everything is not downhill. Say after you're 40 or...

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MZ Exactly. Even cognitively, we know that cognitive decline and memory loss is not actually the same as aging. So when we get older it doesn't mean that we necessarily lose our memory. In terms of my research, there's actually some theory saying that, because we perceive time limited, then as a result we are more positive. There are some individuals who [unclear], but we seem to shift our focus on more and more positive aspects. Which I think is an interesting translation to our mental health, for everyone in general.

As younger adults who might think, oh we have enough time. We have, I don't know, 60 years ahead of us or something. Where older adults, of course, they're, we don't have enough time left so they focus on the positive.

SM What we're going to do with the time we have left. What we have. We're going to try to be as happy as we can in the most limited time that we have in our hand.

MZ Exactly. So that's, I think, one of the message from this type of research that, perceive your time as not unlimited and then that could come with a bit more enjoyment and satisfaction in what you actually do and perhaps a bit more happiness.

SM Of all our guests, I think you're one of the few people who are actually trying to do this quality of life, mental... Very human-focused neuroscience. Do you have somebody that you consider to be a role model or a mentor? And what do you admire about them? It could be anybody who inspired you to get where you are.



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MZ I've worked with different people throughout my career and I think one of the main characteristics of people who I aspire to be like them is that they have some much motivation and commitment to what they do. So it's not like the job is an obligation for them. They want to do their work because of the curiosity that they have and they want to explore and find the truth. And that's really inspiring for me and I wanted to be someone like that, that is just driven by truth and finding out what's happening in any field of research.

One of the other characteristics, is that they just support, really genuinely support, young scientists and they nurture them. They just want them to grow and become the best of themselves so I think the best mentors are the ones that they find the potential in you and they just try to teach you that you have those potentials and you can be who you want to be.

SM Good mentors are here to give you that guidance and give you that training and say, yes, this is what you need to do, go ahead and do it, I'm here to help you. I think that's very, very rare. That's true.

MZ Exactly. Because a lot of people in academia, they have this kind of imposter syndrome. The mentors that I've experienced, they actually taught me that, you have the potential you can do it and it's just the attitude and giving me more confidence. And I think that's really important so I really like that characteristic and I wanted to be someone like that, to be someone that bring the best in people and help them to realise that they have those characteristics and potentials as well.

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SM Yes, and combating imposter syndrome, especially among women, I think is totally important. Because that's something that, as I see, academia pushes into us. And it's considered really hard to remove after a while because it just becomes the way you think and you don't want that like staying in your head. Especially when you're coming out to be like a new [unclear] and you have all these questions to answer. It's a bigger hurdle to get over and it's very mental health kind of a hurdle, so yes. Anybody in Tehran who had such an outsized influence on you? Like the professor you went and asked questions to?

MZ Yes, definitely. Actually I'm still in touch with one of my lecturer from my undergrad. Doctor Ann Murie [?] and also the one that I studied in his lab with animals in physiology, Doctor Haghparast..

SM Is this Doctor Abbas Haghparast?

MZ Yes. I'm still in touch after 15, 17 years. I'm still in touch with them. They encourage me. They get really excited when I get new positions or I'm succeeding in what I'm doing so it's just... It's amazing. I don't know how they do it but they just have such genuine interest in our future. And I'm not the only students that they [unclear] their lab who've been successful and achieve and what they can achieve. I hope they [overtalking].

SM It's just an example of really good behaviour to emulate I feel. I think that sort of



thing...

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MZ Exactly.

SM Like they show what good behaviour is so you can take that and go and make your own lab and try to do [overtalking].

MZ Hopefully. Yes exactly.

SM [Overtalking] of what they've done for you. I mean, that's really the whole... Okay, we will now dive into the EDI part of my podcast. So my first question is, do you consider yourself to be part of the minority or an immigrant group? And have there been times when you've faced overt or subtle discrimination because of this?

MZ Well, I am an immigrant by definition. I moved from Iran ten years ago and moved to Stockholm and then I moved to Australia. Throughout this time, for the last ten years, I have travelled across the globe in different continents so it's kind of inevitable that at some point you will come across discrimination if you want to call it that. But yes, I have.

There were times that I felt unsafe, threatened or scared. Not because something directly happened to me it's because something happened to people from my religious background and I'm visibly religious. I wear hijabs, so it's easier for people to judge me because of my appearance.

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I've got comments from people in terms of my freedom as a Muslim women because they assume that I don't have much freedom. Which is not true, I should say. So yes, there were covert and overt discrimination throughout the years. But I think one of the important things is that I've developed a coping mechanism. One of the coping mechanisms for me is that you stay focussed. I came out of Iran to be successful, to achieve what I wanted to do and try to answer all my questions. [Overtalking].

SM [Overtalking] you came out to do science. That's your main goal.

MZ Exactly and I when I left... I was talking to one of my friends as well, we didn't have any other options to be successful, to achieve what we actually came out of Iran to do. Not because we escaped Iran or something. It's just because we decided that for infrastructure, for whatever reason, we wanted to go out, we wanted to study abroad.

My coping mechanism was to stay focussed and help people to understand me as a whole person. So, yes, I'm from Iran, I'm religious but I'm more than that. I'm more than these parts. And people who don't know me they might judge me because of my appearance, because I'm from Middle East. But when they get to know me, they know more than that. They know that I'm funny, I'm curious, or those kind of characteristics.

I have a very diverse group of friendships here in Australia. And so I think we got



to know each other beyond that religion, or beyond that race and ethnicity background. But that sense of being an immigrant or being, in social psychology terminology, out group, I haven't come across as much because most of my friends are actually are from, either they're Australian or they're from different countries.

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Yes, there are people that they might have these kinds of discrimination ideas against me but I'm trying to work hard and show them that that I can be successful, I can contribute to your kids' education. I am a lecturer, I can teach them and I can be part of the society to improve mental health. When I contribute then the discrimination, or at least my perception of the discrimination, will be less because I'm contributing.

Trying to understand the science of this kind of discrimination. I am not sure whether you are interested to know about it, but understanding the science behind this type of behaviour it actually was helpful. Because people judge you because they don't want to spend time to understand and it's just a snap judgement. It's quick and fast and intuitive. But then if they wanted to overcome that, it requires more effort, more cognitive effort. They need to spend more time. It's easier to judge you based on some kind of features, from your appearance.

SM I was thinking alongside you apparently, when you were talking about it. One, it is definitely difficult for people to go beyond first impressions. But what you mentioned in terms of trying to make people understand that you are on their side and you're trying to do this by putting your science first. Before them looking at you or before, I guess, you coming out and saying, I'm a Muslim woman, I am religious and I wear the hijab.

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Putting your science before your person is, I think, is a very worldly view right. You are actually trying to extend the hand of friendship or extend the hand of mutual recognition but through science or through social health. Because you're saying, you know I can help your society. And I think that's such a brave thing to do. As many people as I have spoken to, it's not something that people have vocalised as eloquently as you just did.

It's such a nice thing to do because I feel like all of us... I mean, me as an immigrant, I do it too, and it's just to a different degree. I guess I have done it too, I just haven't been able to explain it to people so I'm really thankful for you for saying that. Because it's exactly, I think, what all of us end up doing because we try to put our science in front of us and say, this is a part of who I am, this is something that can help you.

MZ Yes, definitely. But I have to say, I don't feel me being a religious person is contradictory or in conflict with me being a scientist. What people need to understand from me, this is my personal way about religion. I don't need to necessarily talk about it and I don't talk about it unless people ask. And for science, this is my mission and this is my way of thinking. My way of living, actually.



SM Using science to show that you are a multi-faceted, multidimensional person, in general, I think it's very useful and I'm glad you've made the distinction because that is also really difficult and it's not something I feel even scientists talk about a lot. Being religions, as a personal choice versus being in science and still having those two sides of your person and your personality, coexisting within you.

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MZ Thank you. I think one of the studies that I mentioned briefly was kind of tapping into this. Because if you believe that all Muslims are terrorists, right, that's a fast judgement that you somehow you acquired and that's your assumption. And then if you come across Muslims and you see, well, that's your judgement and based on that you will show some behaviour. But if somebody contradicts that assumption and they try to argue with you that not all Muslims are terrorists, that assumption is being conflicted and being argued with.

So we find that areas of the brain, like the prefrontal gyrus involved in processing conflict, it's becoming really activated because that assumption that you had was challenged. And so, I think, that's one of the reason I'm saying people will judge because it's faster for them. And when you provide more information it becomes more cognitively taxing. They have to practice it until that new assumption becomes easy as well.

So then, in the beginning, it requires more effort from their side. But also from our side as well, for people who are being judged, to show that we are not only Muslims, we are not only that particular minority that you are thinking of. So we have more to offer. Science is my offering. So yes, I think it's a very complicated phenomena.

SM Exactly. Now that you've mentioned it, it also feels like its extra steps. People on both sides have to take extra steps to get to that point, right?

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MZ Exactly.

SM Because if somebody is snap judging you, you can just be like, I don't really care it's their judgment, it's what people will think of me and you can walk away. But at the same time, you can offer information about yourself that they can just be like, I don't want to take this I'm happy with my snap judgements. Both parties need to take a step forward.

MZ Exactly. I remember I had a lecturer in Stockholm that one day we just bumped into each other in the subway and he asked, can women study in university in Iran? And I said, well I got my Master in Iran before I came to Stockholm and he said, I never thought about it. It's almost like he didn't know, he probably didn't ask, nobody explained it to him that we can go to university, or we can drive or we can do this and this.

I don't take my husband's family name because that's not what we would do in Iran and I told one of my colleagues and she was, that's the only freedom. And, you know, so there are people that don't know actually. And then they just make a judgement. So sometimes it's our responsibility as well to kind of be open



about it and explain and we can be more approachable and people would ask more questions and we can have a conversation so both parties will get to know each other better.

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SM Absolutely. This already segwayed into my next question but I'm going to ask it anyway because I feel like it could just wind up this conversation beautifully. I was just going to say, diversity has become an overwhelming catch-phrase recently, but what does diversity mean to you? And do you have an event in your career where you've seen inclusivity and diversity play an important role?

MZ I totally agree with you that it's a catch phrase these days, but I think diversity is everywhere. We are all diverse. Not every two persons the same. We have different genetic compositions, different education background, and even if we are from the same family, from similar genetic, the life is different, our experiences will be different. So we are all diverse. And I think inclusion and the ability for everyone to contribute regardless their skin type, or ethnicity or religion, that their voice will be heard and their legitimacy and validity of their voice and what they are saying, is not judged because they are from different ethnicity.

SM Yes, the validity of their experiences also.

MZ Exactly.

SM You as a person come with very different experiences and you have a small space to stand on and say, you know what, this is me but also this is my story.

MZ Exactly. And I think from cultural and organisational point of view, diversity is very important that brings creativity. I've worked in different research centres that they have cultural and scientific diversity and they are really creative. They are the most creative people that I've seen. Because they talk to each other a lot from different backgrounds. And they challenge each other because they are coming from different points of view. And they beautiful ideas birth from that kind of conversation.

Inclusion in diversity is not a luxury thing that only rich organisations can and should adopt. It's just for everyone. It's a necessity. And everyone, if you wanted to progress with science, if you wanted to move the boundaries of science, we have to have diversity from...

And in terms of my career, a few years ago I was a committee chair of a national conference and we had to invite three speakers and so I invited three young female scientists from early and mid-career stages to give a talk. We had a few speakers and the majority of them from female scientists. And I knew them, I knew their science and I knew they were great so we invited them and they presented fantastically and everyone was in awe of the richness of their talks and their experiences, despite the fact that they were really young in their career.

And, actually, one of my senior main colleague came to me and said, look, I didn't really think that they would be able to deliver such great talks, I'm really impressed and I'm really glad that you managed to do this. And if you wanted to



promote them to our senior leadership, they can do it. But they need, obviously, training and they need opportunity and they need similar opportunities than other colleagues to be able to do so.

I'm going to be honest; I came across a few months ago, like last year because we were making a decision about our move and transition to a new stage.

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It was really stressful and, mentally, I was very stressed and overwhelmed so I went to a professional and I wanted help and I needed help and I think it was the best decision that I made. And I think everyone who is dealing with either transition or is overwhelmed, they need to seek professional help because that helps them to clear some visions that they have for the future. Clear some goals. Clear some values.

And, because I'm in a new stage, I'm trying to upskill myself in terms of mentorship, in terms of my values and my goals, for my family, for my students, for my lab. So I think upskilling yourself is really important. Doesn't matter if you wanted to read more books or just get more professional help. We just have to make sure. Because I was a perfectionist and I'm still trying to get over that fact that everything needs to be the best of all. The whole kind of really high standards. But sometimes you just need to drop that expectation of yourself.

SM Especially for yourself. Not just from other people but also from yourself, right?

MZ From yourself, exactly. And I think all of these could help us to have a clear boundary from work life and I know working from home it's kind of hard to make that boundary, but having set time and set boundaries will help to close your work and just rest. And when you're resting, just rest hard and when you're working, work hard.

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SM I'm so glad you came out and talked so openly about the fact that you actually sought mental health help because that's something that I think a lot of people, especially immigrants, it never crosses our minds. We never think of it as an option. We never think, oh, if I go talk to somebody else about my ideas and about my problems they might be able to help me. And so thank you for saying that.

MZ I think a lot of us feel, because I'm a psychologist by background, so I don't feel it's, in quotation again, it's a shame to seek help. I think it's necessary and talking to friends sometimes helps but they are not professionals so they might not be able to give you the best advice. And also, thinking about seeking professional help, in terms of upskilling yourself because they know something that you might be able to implement to manage your time better and manage your stress better and manage your workflow better.

So I don't think it's necessarily related to minority, but everyone who is in academia would benefit if they are struggling. Especially if they are in that transition from postdoc to faculty member. Or like from PhD to postdoc. Because it's a change and there are lots of responsibilities all of a sudden.



SM We're all done.

MZ Thank you so much for having me, it was really an interesting conversation.

SM It's all entirely my pleasure and I feel so lucky that ALBA has given me this opportunity to actually go ahead. And I feel like I've learned so much from so many people I've spoken to.

Thank you for listening to this episode of the ALBA Diversity Podcast. To know more about the ALBA Network and its activities to promote equity and diversity in the brain sciences, please visit alba.network. You can also register as a member for free and take full advantage of the network's resources. For more details, follow the Twitter handle [@network_alba](https://twitter.com/network_alba) or [albanetbrain](https://www.facebook.com/albanetbrain) on Facebook.

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