



## *Medical student scholars – how to get involved in research at medical school.*

### Transcript of webinar:

ELIOT

Hello, good evening all. We'll just give it a minute or two for everyone to arrive before we get started.

ELIOT

OK so I think that should be enough time for everyone to have joined and some more people might join as we get started. So, good evening all. Welcome to our latest ASME BITESIZE session. This evening we're delighted to be joined by Brian Wang who is a final year MBBS PhD student at Imperial College London. Brian completed his undergraduate degree at Cambridge University and his clinical training at Imperial College London and took three years out to do an intercalated PhD. He's going to be telling us this evening, he's going to be discussing; medical student scholars - how to get involved in research at medical school. The session will last approximately 45 minutes and there will be an opportunity to ask questions at the end, Brian's going to go through a presentation first. If you do want to ask questions if you could add them in the chat field and please do make sure that you post them both to the panellists and the attendees so that everyone can see your comments or questions. If there are any questions that we don't have the opportunity to answer during the session we will provide a document after the webinar with any questions that we were unable to address, and this will be on the event page on the ASME website. The chat field is available for you to contribute to the conversation and we might invite some participants to expand on their comments by asking their permission to make their audio and video live. So, if we message you about this, we'll ask you before we do that. Please respond via the chat feed if you are happy to do that and then we can add you as a temporary panellist to join the discussion and expand on your comments. Just to let you know that this webinar is being recorded and a video of the webinar will be made available on the ASME website along with the Q&A and any other supporting materials. If you're having any technical problems, we ask that you make ASME aware by emailing [events@asme.org.uk](mailto:events@asme.org.uk) and I'll pop that in the chat in a minute rather than adding it to the comments field and that way our Events Co-ordinator, Leigh, will be able to get back to you and assist with any problems. So, without further ado over to you Brian.

BRIAN

Thanks Eliot. Welcome everyone. Thank you for taking time out to listen to my talk this evening. I'm just going to share my screen now so that everyone can see my slides. Ok if anyone has any issues viewing the slides at any point do let me know. What I'll do is I'll have the chat up as well and yeah please if you have any questions put them in the chat. I'll try and answer them either during the talk or at the end. So, yes as Eliot said I'm Brian, I'm a doctor by PhD but I'm a final year medical student at the moment. And I'll just be talking about how you guys can get involved in research at medical school. I'm assuming that most if not all of you are medical students, especially probably early career medical students so

within the first half-ish or the first two thirds of your time at medical school. So, I'll be trying to focus on how to help you guys. Ok. So, in terms of the talk, over the next 40 minutes or so I'll do the really cringey bit about me at the start and then I'll be talking mainly about my own experiences; why I think you might want to get involved in research, what the pros and cons are, think about what type of research is there, top tips for getting research experience and I'll also be giving some examples of how you can get involved in your medical school and also how you can get involved in research and audits on a national and international level. I'm assuming a lot of you will be doing or have done an intercalated degree and I'll be talking about how you can get the most out of your degree in terms of the output. And also, how to maximise your portfolios for when you apply for foundation jobs as I am doing at the moment. So, the cringey bit; a little bit about me and why I think I have some good, a good deal of experience in terms of research. So, as Eliot mentioned I started university, started my undergraduate studies at Cambridge, I was there for three years before I transferred to Imperial College in 2015. I did one year of my clinical studies, one year of the three before I met my PhD supervisor who took me on for a PhD for three and a half years and then I re-joined into the medicine course and I'm currently in my final year so I'm applying for my FPAS and AFP jobs at the moment. In terms of my experience in teaching medical education I've been a supervisor for the Cardiovascular BSc at Imperial, I've been a guest lecturer as well in the Cardiovascular Sciences course. My experiences and my contributions to medical education have given me Associate Fellowship to the Higher Education Academy and membership to the Academy of Medical Educators. I've also been a Graduate Teaching Assistant at Imperial as well so I've got quite a bit of teaching experience. And I think this is quite an important slide to show you guys about different types of research experiences. So, these are my own research experiences just to let you all know, give you sort of an idea of what's out there. For a large chunk of my time at University I've been a basic scientist so my PhD was using stem cells to look at the contribution of fibrosis and fibroblasts in heart failure. I'm now also moving towards more focus on clinical research. So, I am the Imperial Lead for the Remarxs Research Collaborative and I'll be talking about Remarxs a bit later on. It's a great opportunity for you guys to get involved at your University and I'll be talking a bit more about them in a bit. I'll also be talking about STARSurg I think a lot of you might have heard of STARSurg and the stuff that they do so I'm an Imperial representative of STARSurg. I'm also now involved in the Pan-London Heart Attack Group so my main area of interest is cardiology and interventional cardiology and I work with clinicians there. A lot of you will also be involved in auditing so helping junior doctors and the consultants with audits, that's something that I've done at Hammersmith hospital in the intensive care unit. I also work with the Royal Society of Medicine in terms of their Core Committee, we are looking for new university representatives and there's a lot of opportunities to get involved in research if that's something you're interested in please look on the Royal Society of Medicine website. And I can also provide more information on the PDFs afterwards. Like I said I've been a supervisor, I'm also currently a reviewer on several journals and the Deputy Chief Editor for the Journal of National Student Association of Medical Research. This is a journal that provides the opportunity for a lot of medical students to learn how to publish so that's something if you want to get into publishing and learn how to do it, then that's something that you guys could probably have a look at after this talk. So, recently I've had a lot of good output. I wrote a review for my PhD about the use of stem cells in cardiac disease modelling. I've done a Viewpoint paper for Open Heart about cardiovascular disease and Covid. I took some BSc students under my wing and we wrote a review about the prognostic value of cardiovascular biomarkers in Covid and just last Monday we had this published in Open Heart with the pan-London Heart Attack Group looking at the outcomes

of STEMIs in pre-Covid versus during Covid. So, I do have quite a bit of experience in terms of research. I don't want to scare anyone because to be honest I probably have more research experience than 99.5% of medical students but if you do have any questions about any sort of aspect of research please feel free to ask them in the chat function and I'll try and do my best to answer them. So yeah, so that's a lot of talking about me and why I think I have quite a good deal of knowledge about doing research when you're at medical school. I've just put this slide up so, this slide is just a really broad overview of possible research orientated pathways in your training after you finish medical school. So, a lot of you, well I assume almost all of you, if not all of you, will be in the stage here on the left so at medical school. A lot of you will be doing an intercalated BSc and some of you may also consider doing the MB PhD like myself. I'm not really going to talk too much about research in terms of the MB PhD because I know it's not offered at a lot of universities and it's quite a big step to take. If anyone has any questions or thinks this will be useful in the future to do a whole talk on the MB PhD then I'm more than happy to do it if you just suggest it to ASME or suggest that at the end then I'm happy to talk with the ASME team about doing a full-on talk about the MB PhD programme. And a lot of you will also be graduate entry medical students so you might have had some research experience in the past. And then this is broadly the pathway that a lot of you guys can take when you qualify. So, obviously you can go through F1, F2 years you have the option of doing F3, F4, most people now do F3 year to improve their portfolio. Parallel to this you can also apply for Academic Foundation Training so the AFP a lot of you will have heard this, I won't go into too much detail about it but it's the same as the normal Foundation 1, Foundation 2 years except the only difference is that in most cases one of the rotations, so four months of your F2 will be dedicated just to research and you have a lot of options in terms of what sort of research you want to do. It can be basic science, it can be clinical, there's many different options and the options available to you are varied depending on what deanery you apply to so I won't go into too much detail about that. And then after you've done your foundation training you can go into your clinical training and there are parallel routes that you can take so if you are interested in a career in academia there's the option to do academic clinical fellowship moving onto clinical lectureship and then you have the option if you'd like to become a senior lecturer in the future alongside your clinical responsibilities with the NHS. And there's also personal fellowships available as well. I won't dwell on this too much a lot of this information all of it is available online and I think it's pretty early for a lot of you to be thinking about this so, I'm just going to leave it at that. And yeah if you want the information then it's all available online.

So, what I'm going to do really briefly is talk about the pros and cons of research. These are all my own experiences and the opinions of my peers. So, in terms of the pros if you take a look at yourself as being one small cog in a big machine, in a big system. Research is crucial for healthcare advancements. I find it very stimulating. When people ask me of my experiences in research so that being my BSc as well as my PhD, they were fantastic. I absolutely loved doing my PhD. It was a great opportunity to feel like you know I was really doing something that was different, being the first person to try something. Making, in my eyes, ground-breaking discoveries and often I mean of course it's going to be fantastic working for the NHS but I think a lot of the times some doctors feel like they're sort of lost in the system. They may feel days where they don't feel it's that rewarding or they feel like their contribution isn't as great which is a shame. But on a more personal, more selfish point of view it is very stimulating and I think it's a great experience for any clinician to also do some research on the side. And of course, it helps to inform clinical practice. So, if you want to do research then obviously try and do research in an area that you're interested in then being involved and reading up, and remaining up to date with the research in your

area helps you become an expert in your field and also helps to inform your clinical practice which of course is very important. And the last one there is career progression. It's very quickly becoming the case where there's a lot of specialties especially in medicine that to get the top jobs and top consultant jobs you pretty much need to have a PhD. Without it being set in stone or being the rule often the competition is so great now that you often do need a PhD. In terms of the cons so, this is one of the main cons to doing research as a clinician; so, a lot of the time you'll have to split your time between clinical and academic responsibilities. During my PhD because I took the three years out of medical school to do the PhD, obviously I didn't really have to worry about this whereas I worked alongside a lot of clinical PhD researchers and I think a lot of them would agree that it's very tough balancing the two together. So often when you're doing a PhD, you'll also still have clinical responsibilities with the NHS and rather than it being 50/50 often it's the case where it feels like you're doing 75/75. So, it's not two part-time jobs you're almost doing two full time jobs. But of course, it depends on what sort of area of research you're involved in, what your clinical responsibilities are as well. But this was one of the main advantages to doing a PhD and doing research early on is that now I don't have to really worry about doing a PhD as a junior doctor. So, I've got that in the bag already. Another one is competition for grants. So, I was very lucky I was very well supported by my supervisors. We had a grant ready pretty quickly and competition for grants for MB PhD students is much, much lower than any clinicians that wish to do a PhD. I think what can happen is that clinicians can get sort of stuck in a cycle trying to get grants and it often takes a long time writing grants and actually getting them approved because it is so competitive. So that's one thing to think about. The next one is a big con in my opinion. So, output is very difficult. Once you get your research and you think it's ready and you send it out it can be very disheartening when you get rejection after rejection, after rejection. Unfortunately, this is a big part of doing research. Very rarely will you have the case where you have something ready that will go straight to a top, top journal. Often, it's the case, if not always, it's the case that when the reviewers come back there's some sort of revision that they ask for, some more experiments and often it's the case you do the experiments and they might think it's not enough and reject and then you've got to reapply. So, this can be a very long process so actually getting the output often takes months in some cases in can take years so this is something to think about. Also, if you're doing an intercalated degree and you want to get output from that because this process is so long - I'll be talking about some tips about how to get output from your intercalated degree - but this is often quite frustrating for researchers. The other thing to consider is a PhD is often not required for all careers. I think especially, I might be wrong, but especially for surgeons. So, if you want to go into surgery there are a lot of specialities where the top surgeons don't have PhDs. It might be that the field is changing and PhDs become required but I don't think I'm in the right position to say but PhDs aren't required for all careers. And the last one I've sort of alluded to throughout, it takes a lot of perseverance and resilience. You get quite a thick skin; you learn to deal with rejection and I think these are very important features of any good researcher. So obviously there are different types of research. So, there's clinical research so if you were to do a PhD later down the line once you become a junior doctor then often it'll be clinical research. A lot of you will be doing like in vitro lab-based stuff during an intercalated degree. I think it's a great opportunity to do, obviously if you're not interested in basic science then that's no problem at all, but I think it's a great opportunity to sort of gain some experience of basic science when you do an intercalated degree. Especially because later on down the line it becomes much, much more difficult when you're actually a junior doctor to sort of go in, revise your pre-clinical knowledge, learn about basic science again. So, that's something to consider even if you don't think down the line basic science isn't for you it's

often a good idea to do some sort of basic science if you can at medical school, whether that be your intercalated degree or through summer projects. And you can also do animal work as well. When I was looking for PhD projects, I had a couple of project offers where it involved a lot of animal work. I wasn't too interested in animal work because I didn't really like the idea of dealing with dead animals but there is the possibility of doing animal work and often it can be considered that that's closer to clinical research than basic science, so animal stuff is sort of somewhere in between. So, that's something to consider as well. And then a lot of you if you are interested in doing an intercalated degree you might be interested in doing meta-analyses if you know how to code often that is very useful. That's something that I would advise you guys to do if you have free time is actually learn how to code because when medical students approach possible supervisors often if you say oh, I know how to code it can actually really, really broaden possible research ideas. So, those are some of the main areas. And yeah and there's medical education research as well as Eliot says.

So, these are some top tips in terms of when you're trying to get some research experience. These are things that I found very useful when I was looking for supervisors. And also, now being a supervisor for basic science and also for some clinical research as well these are sort of the things that I look for when students approach me. So, the first one I think is very important it's to be inquisitive and ask questions. That shows you have an interest in the field and that you can sort of drive a project yourself. Often the supervisor is there to sort of help guide you and help when you get stuck but as the person on the ground doing all the work you should be quite inquisitive and ask a lot of questions. And then I'll go across so next to it is try lesser research first. I think this is very important to make sure you don't get too overwhelmed with something that you're not comfortable with and often this is something that researchers or supervisors will want to see, is that you've done some research in the past and I'll talk about that later on when I talk about research opportunities with Remarxs and InciSioN and STARSurg. Often it's good to do some data collection sort of work behind the scenes, getting the data together so that you can add that to your CV so the next time you go to a different supervisor you say look I've been involved in research, I've been involved in publications not at the front of the authors' list but I've been involved and that's often much better than someone coming to their supervisor and saying I've never done any research before, what have you got for me? Often that's not the best way to go about it. And then funding as well. Hopefully this is where the supervisor will be able to help a lot of the time but obviously it depends on what research you do but you've got to think about, you know, consumables, how are they going to be funded, it's obviously very expensive. Also, you can think about a stipend if you want to get paid whilst you're doing your research, if you're doing a summer project often you get paid for it. And also, just stuff like travel and accommodation if you are doing research during the summer. I was very fortunate that I received funding from the British Heart Foundation for my PhD without that funding it wouldn't have been possible and funding often is the major barrier to actually getting a project going. And I think the next one's very important it's the supervisor. So, of course the project you do is very important but I think there isn't enough weight put on your actual supervisor. So, there are several things you want to consider; 1) if you're thinking about output you want to have a supervisor who publishes a lot, often that's a good indicator that your project's more likely to go somewhere and produce something. The other thing is try and have a supervisor who works with a lot of people at your stage of training. So, my PhD supervisor when I went to meet him, we have a small group - so this is Professor Terracciano at the National Heart and Lung Institute - quite a small group of about a dozen or so people, obviously it goes up and down, but of that group there were two other MB PhD students who were the year above me. So, I thought that was a very

good indicator that he's been around students in my situation, he can help me if I get stuck in the process because it can often be quite daunting you know joining a research group as a medical student. So, having a supervisor who knows or has interacted with people similar to your situation is obviously very good. Referencing software, can't emphasise this enough. It makes such a big difference when you're writing things up to use referencing software. They're very easy to use and in the long run save you a tonne of time so for example Mendeley, EndNote stuff like that I won't go into too much detail but have some sort of referencing software that you use so that when you are submitting things it saves you a lot of time rather than having to manually edit everything. And think about opportunities for learning as well. A project if you want to learn how to code you can use a research opportunity to learn how to code. If you're honest and just say look I've not done coding before but I'd like to learn coding during this research project is there a way I can implement it, is there a way that you can help support me financially so that I can attend courses for coding, that's just one example but if you want to be involved in animal research, if you like surgery then it might be quite good to do some sort of animal work as well. And then networking so go to events if you can as long as it's viable obviously with Covid not so many in person but actually in a lot of cases that makes things so much easier to do networking now that everything is online it's so much easier to speak to people at events, to attend these events which will often be cheaper now or even free. So, if you know you're interested, so say you're interested in cardiology then go to, listen to speakers and get your name out there, be inquisitive this goes back to the asking questions thing, be inquisitive at these networking events. Ask them is there an opportunity for me to talk to you about your work? People love that, no one's going to say no to talking about themselves for half an hour or whatever. So, do get yourself out there and start networking as early as you can. And be open minded as well. Understand that you might not get the perfect project or the project that you really want and it's ok sometimes to actually just take those because even if you were to get on paper your perfect project I can tell you from experience it very rarely goes exactly to plan, often projects can down a completely different route and a lot of the time it's out of your control, other times it can be your own decision to have moved it down another route. But be open minded and so be adaptable to change. So, I'm just going to talk about some examples about how you can get involved in your medical school. So obviously medical schools vary in terms of their opportunities that they have some of you will have research societies at your medical school. This is something that I'm involved in which is Remarxs. So, this is a little bit of a plug I will admit. So, Remarxs is an online research networking collaborative. So, if you just search for Remarxs.com, Remarxs with an x because it's cool, on this platform there's the opportunity to find research projects. So, at a lot of universities, not every university has Remarxs set up but at a lot of universities there are people who contact clinicians, researchers and ask them to upload any projects that they have. These can be audits, these can be organising data from NHS data but have a look on there if you know the specialty that you're interested in you can search via specialty. The advantage of this is that you don't just have to do opportunities at your university so if there are projects there that can be done remotely, most of these will have to be remote now, then there's opportunity for you to gain research experience at another institute which is a great opportunity. And yeah just at the bottom if you're university isn't listed as a collaborating university at that link there and you want to actually be the founder of your university notice board there's a contact mobile there for Lakshya, that's his WhatsApp he helps set up these collaborators at different universities. So, this is a great opportunity. Just go online, have a look if there aren't any projects on there at the moment that you're interested in come back after a couple of days, a couple of weeks and just check up because projects will be going on there all the time. And then

these are just some examples of national research opportunities so, hopefully a lot of you will have heard of STARSurg. Many of you will have heard of InciSioN as well both of these societies work on doing national and international audits, surgery-based audits. This is a very, very good opportunity to get your sort of foot in the door in terms of research. So for STARSurg you get added in as a data collector, so a collaborator and then through that experience putting that on your CV, you can then become a Regional Lead and then work to the Steering Committee and so this goes back to doing the small bits of research first, increasing your portfolio and then moving on to bigger and bigger things there. So, we're just going to move a little bit quicker now. In terms of making the most out of your intercalated degree there are posters and oral presentations, these are very important and great for points when you're doing your EPAs application. Think about awards. So, prizes are big money and travel grants also count as awards as well when you're doing your applications. In terms of publications here are some things that you should think about. I think a lot of people don't know that you actually have to pay an article processing charge if you're trying to publish in an open access journal. I won't go into the details about it now but if you just have a look up afterwards about the difference between open access and subscription only journals. Subscription only journals you don't have to pay as the author to get it published but in open access you have to pay for the whole processing charge. And that can actually come up to, it can be a couple of thousand pounds so if you haven't got the funding available that's something to consider whether open access journals are for you. So, The Royal Society of Medicine as I say I'm involved with them. There's a lot of great opportunities to win prizes and to present as well. It's much easier than you think to actually win an award with The Royal Society of Medicine so have a look on the website there. Wellcome Trust provide a lot of grant opportunities as well and so do The Physiological Society. So, I'm the Imperial College Representative of The Physiological Society and they have been fantastic for me, they've provided a lot of my travel grants for me to present all over the world and they're very generous but you need to subscribe to them early on, you need to be there for 12 months but I think it's worth it. And so those are just some examples there. Sorry I'm zooming through it quite quickly but I'm just going to close up now with just an overview about where I've started and where I am now. So, this was the first time I actually presented any research and this was my Bachelors of Arts my research from my time at Cambridge. I presented this at The Royal Society of Medicine. I was so scared but it was really great actually presenting this research and it was a real buzz. So, if you haven't presented before and you're worried about it I would really suggest you just go out there and do it. It's great to hear what people have to say about your research and also really nice when someone cares about what you've done. And then from there during the PhD the main thing I'll take away from my research in all my time doing research is the opportunities it provides to share my research around the world so this was with some members of my PhD group when we went to the American Heart Association Scientific Session in LA, I think it was 2017. It was great. Like I said this was all funded for through research grants and so that was fantastic. I've also been able to go Germany. So, the only time I ever leave the UK is to present at conferences and again this was all paid for which was fantastic. I've been to Nice. This was when I was in LA moments before I bumped into Kevin Bacon that was a real highlight of mine. And this was just last year, June last year when I presented at the International Society of Heart Research in China. You're allowed to stay a little bit longer after your conference or whatever you're presenting at and this was me with my cousin there and some of the other researchers on the Great Wall of China. And these are the things, the opportunities that actually doing research provides. So, if anyone was to ask me, I would definitely say give it a go. And so, I'm going to really, really quickly just mention as a lot of you will know research isn't the only part of your portfolio.

People will also be looking for you to show that you've been able to work in a team, maybe show leadership, and try and take up any teaching opportunities that you can at medical school because you can learn a lot from it and it looks great on your portfolio. And this is just a little quote from Alice in Wonderland that I really liked and this is how I feel about research. And this is my final slide so this is just a quick thank you to the societies that have helped me to get to where I am at the moment. So that is everything from me. Thank you for listening. Do we have any questions? Sorry I overran a little bit.

ELIOT

Thanks Brian that was great. So yeah, I think we can spend a few minutes for questions if people are interested, I know we're meant to be finishing up shortly but we can go on for a few more minutes with some questions. I think there's a few in the chat already so I'll just highlight a couple that have come up. So, Zaina Aloul has asked how do you get involved in lesser research? And I guess just to expand on that from my perspective it would be useful if you were able to define what you mean by lesser research.

BRIAN

Yeah so I think in terms of lesser research what I mean is that often it's good to, obviously the aim is to have your name as first author on this nature paper which would be fantastic but often it's the case that you have to do other things like take up any audit opportunities you get offered when you're in clinical rotation. Also like I was saying about STARSurg and InciSioN being involved in those as a collaborator so that doesn't mean that you're an author but you can add it to your Google Scholar account, you've been involved in that research but not as an author but that's often a good way of one year you're a data collector or collaborator, then next year you're the regional head. And then you just get used to the process, you learn about research, learn about publication, learn the pitfalls and what works well for you. And then that's how you build it up. It's very difficult to stumble across a supervisor who will give you a fantastic project on first time of asking.

ELIOT

Ok. We've got a question from Ramya Rathan who has asked if you're aware of any funding agencies for small projects that you might be able to suggest.

BRIAN

Yeah so, I've put the Wellcome Trust there, The Physiological Society a lot of medical schools will also have some sort of funding available for projects that you're interested in if you just talk to perhaps the teaching fellows at your university. Also, if you know the field that you're interested in say you were interested in cardiology if you were just to Google 'cardiology research grant undergraduate' often some things will pop up. There's often with the big societies there's often some pot of funding on the side. Because everyone's very, a lot of the societies would love to encourage, there's a big push to get people into research earlier on in their career so I think just have a quick Google. There's no absolute list, I get asked this quite a lot but there's no list of research funding agencies that are available. It's also harder now because a lot of them aren't doing it because of Covid because as you know a lot of conferences won't be taking place. So, it takes a bit of digging.

ELIOT

Ok. And also, just to highlight there for any participants who are interested in medical education research obviously ASME has funding available. There's loads of different awards and research grants available and you can see all of them on the website. So, another question from Rohan Mehra is do you have any advice for intercalating students on how to get their project published?

BRIAN

Yeah so, unfortunately a lot of this isn't down to you as the student. What happens often with an intercalated degree is that you are working under a PhD student or a postdoc. So, a lot of it depends on what sort of direction they go down with a project. It can take years for them to have a full project put together and it might be the case that the work that you're doing during the BSc takes months, years before it becomes a full paper. But when you're doing the BSc what I will suggest is use that opportunity to learn about other researchers in that group. People that they're collaborating with, get to know what they're doing and see if you can also help them out, be involved in their research as well. So, even though it is a bit cheeky but if you work under a PhD student but you know you're interested in research there might be someone else in their group that wants someone who can do the pipetting and stuff like that and help out at analysing data. So, there's no secret formula to getting it published. It's frustrating and often it's out of your control but the more you throw yourself into it the more opportunities you go looking for the more likely that things will hit. So, it might be that your BSc project that you did doesn't actually even get published at the end because your supervisor just says look I don't want to publish this but it might be that some other researcher that you just helped out randomly for two days, because you asked them if there was anything you could help them with, they then get their thing published and they credit you. So, that's how it can work sometimes. Unfortunately, there's no hard and fast rule about publishing.

ELIOT

Ok. Question from Sanya Trikha can I get funded for any research even if I'm an international student?

BRIAN

As far as I'm aware yes if you're studying in the UK, you're a medical student here I don't think there's any form of discrimination against where you're from. I might be wrong there, there might be some funds that are a bit picky about that but as far as I'm aware that wouldn't be a major issue being an international student.

ELIOT

Question from Ed Whittaker; any advice on getting involved in medical education research specifically and is it difficult to transfer skills from quantitative clinical research to more qualitative research?

BRIAN

Well in terms of medical education I don't know, Eliot I think you're the expert on this.

ELIOT

Yeah, I guess I'm happy to take that one. So for getting involved in medical education research I guess one of the best things to do would be to, if you've got a project in mind or something you're interested in, a topic you're interested in researching, would be to start by doing a bit of a literature search to see what's been covered on this topic in the past. And then I would just encourage you to get in touch with someone early and have a conversation. You know researchers are usually supportive of those kinds of things. So, either someone in your institution who you know is involved in medical education research, you can look on their institutional profiles and see who's publishing stuff. Or even you know, if it's a particular topic that you're interested in and out with your institution it might still be that you're able to get involved in some research in some way so there's no harm in dropping them an email and you know they might be able to support you remotely to do some research even at your institution. So, I guess the main message I would say is just reach out to people. More often than not people will be supportive and it's very rare that they'll just dismiss. And sorry the second part of that question Ed about transferring skills from quantitative clinical research to qualitative research I guess some of the aspects of it

are quite transferrable so the academic writing, critical appraisal things like that are transferrable. The actual, you know some of the research, design stuff is fairly similar. Obviously, the methods that you're using are different but it's really useful particularly at the earlier stages of your career to just dabble with a few different things and see what you seem to get on with and what you enjoy doing. Do you have anything to add on that Brian?

BRIAN

No, I agree with both your points. I think the medical education research I think as you were saying just go out there, ask. I think everyone here is in a great position as a medical student you have that experience, you know what can work well, what is missing in your curriculum. I know a lot of people at Imperial have asked about actually getting involved with helping shape the curriculum, adding, teaching. Someone has asked at Imperial can we do a teaching course where we teach medical students how to teach. And you know that's a great opportunity so yeah, I agree with you Eliot just ask, be inquisitive, ask if there's any opportunities out there and your medical school I would like to think would be more than happy to have any students involved.

ELIOT

Brilliant. So, I can't see any more questions. But just towards the end I was rushing Brian a little bit so I just want to highlight his last slide and reinforce that message about you know it's not all about the research, developing an academic career is about a mix of research, leadership, and education. And you'll see that on the academic foundation programme applications, academic clinical fellowship and you know throughout your career. So, do try and tend to all of those. Ok so, if there's no further questions I think we'll close the session. Thank you all for joining and thank you very much Brian for your talk.

BRIAN

Thank you everyone for attending and for your questions.

ENDS