**2. “Pitching Research”**

**Robert Faff**

Now to part 2 of my talk. I'll give you a shortened version of "Pitching Research." Because 2 days ago, I had a very lovely trip to Nagoya and I thank Hideaki and his team for making that a very worthwhile occasion and I gave I think on that occasion the pitching talk lasted 1 hour and 50 minutes. So I don't want to scare you. We're not going to do that version today – it's too long. I just want to give you a flavor of what this is about and hopefully make those of you that are university researchers so excited that you need to get the details. So the details of these are contained in the paper available for free download from the SSRN:

[**http://ssrn.com/abstract=2462059**](http://ssrn.com/abstract=2462059)

So that will be a great reference for you, you can read it – I'm sorry, it's in English. Maybe we can have a Japanese version one day. But it's in English and it gives you all the details, all the advice about Pitching Research.

What's Pitching Research about? The easiest way to think of it is the novice researcher – the Ph.D. student who has just signed up today. Someone that's starting out research is totally, usually very lost. They don't know – they've got lot of good ideas, too many ideas, and they don't know how to convey that information to their research mentor. And one of the worst mistakes I've seen of such students sadly, because they're so enthusiastic, they write up all their ideas and create a very big document for their mentor to read. Okay, and I've seen this myself where there's too much too soon – say, 60 pages of stuff and it's usually with someone that's starting out – it's all over the place and disjointed. And as a mentor, I just kind of cope somehow. I often think of myself as a grumpy academic. So I get grumpy when it's not the fault of the student but the student feels like I'm unreasonable and I think there's a better way when you're starting out. So the first simple message is, “less is more.” So get your ideas down – minimum number of words. Now, I've to remind myself I think of this in terms of the English language and words and I don't know exactly how well this converts into – if you're doing this in Japanese language, how many characters, so I apologize for that. But my rule of thumb is, I don't want 60 pages, I want 2 pages. And in 2 pages I'll let you have a 1,000 words. If that were the total message/advice you would be entitled to think that's not helping me much at all. Anyone can tell you, "Oh just write more succinctly." The obvious reply is, "How? Can you give me some advice on what should I do to come up with the best set of a 1000 words?" So it's not like, you tear off the first 2 pages of your 60-page document – that's not going to work. And that's what this is about. It's a creation of a simple tool that's structured to deliver on this 1000-word contract, if you like.

So, normally I'd have five goals for this talk, but being a truncated version today I don't know how many of these I'll get to but, I'll give you some additional quick background to what I've already said. I'll explain a little bit more about the structure with some advice. I suspect we won’t have time to do the example. We’ll see how we go. I think we’ll run out of time. So there're many, many slides here, you've got printouts of the slides. The electronic version I think will be circulated to you if you're interested to have the electronic version. So right now in the time remaining, I want to give you enough of the “flavor” to be encouraged that this is the tool you should look at and you should use. And for those of you that have students of your own, research students – that you get your students to use it too. So I'm going to skip over.

I normally ask questions here, but we don't have time. This is the 176th time I've given a talk like this. The 37th country – so now, it's twice in Japan. We got the first time in Nagoya 2 days ago. I've presented at 35 of the 40 Australian universities. So my goal is to have a full set.

And there're a few countries that I've been to. Europe, I'm all over Europe and you know about that. I've got a present for you all – a soft stressball, in the shape of a baseball: you “pitch” a baseball, just like I want to help you “pitch” research. But I'm conscious of cultural issues and if you don't want to receive – if you feel uncomfortable for me giving you a present, then you don't have to take it. I'll lay it up. I normally throw these around. We don't have time for that. It's my business card, it's my alternative business card. It's memorable, but not very functional. So it won't fit in your pocket so easily. But it helps to release stress, a bit like the tool, okay? So can you get it to them? Okay, there we go.

So I went to the Tokyo Dome last night and I saw that style and so I – yes. One of the many reasons why I'm so excited to be in Japan but – I've been to plenty of countries and – many of them have no idea of baseball. So I come to Japan and it's like I know you're all over baseball.

All right. So normally I get the audience to make some suggestions on what is the hardest thing for them in doing research within and all sorts of things get thrown up like, "Oh, how do I make a contribution? How do I choose the right journal? How do I know when I've done enough?"

And all of these suggestions are really good and in your printout, we took out the answer that I have. There's no right or wrong answer but – my answer is “starting”. And the second hardest thing?

**Male Participant**

Complete?

**Robert Faff**

Completing. So, if you never start or if you have a very bad start, then finishing is not an issue. And so Pitching Research is all about starting.

So there are different concepts of conveying information about your research or what I'm calling pitching your research. So one that's really difficult is what we – I think all of us would have probably experienced in our personal lives, when there's big family gatherings. Big family gatherings, "Hi you, how are things going at the university? Are you really well?" "So what is it that you do at the university?" And you say, "Research." And they say, "What's research? Can you tell me?" And that's really hard. It's really hard to pitch your research to your aunty or your grandmother or your brother your sister – anyone that's not an academic – really hard, I can't help you with that.

That's not what this is about. What this – “pitching research” – is about that other situation that's as important and indeed for our careers and where we work – trying to explain your research to your mentor, your academic mentor. Your research mentor is an expert in the field. Don't give them 60 pages. That's not very helpful. Give them 2 pages – but I've got to give you some advice on how to structure the 2 pages.

So this is it (slide #24 shows the simple template tool). It's a simple tool. It’s deceptively simple, so the challenge would be to complete all the spaces in a meaningful way that when viewed in its entirety the mentor understands what you want to do with your research. When there are no words there, it fits on the one slide and I intentionally made it go on one slide, just to show you it is really simple and there are not too many parts to it – **Working Title**; **Basic Research Question**; **Key Papers**; **Motivation/Puzzle**; the **Idea**; the **Data**; the **Tools**. Answer the question, **What's New?** Wasn't novel, in other words? Answer the question, **So What?** So why does it matter? Why is it important? What's the **Contribution** and **Other Considerations**?

Okay? Very simple and anyone that's been in an academic setting would recognize, I believe, all of those indifferent aspects of – when you're doing research, what's new here and bringing it all together. Bringing it all together in a simple way and then giving it to us, primarily directed to someone who is new in – research and then giving heaps of examples and I'll show you or at least I'll point you in the direction of where all these example are available in my online library.

So the way I view the template is it has three zones – three distinctive zones. And I've circled the first four items (slide #25) in purple (which I believe is the color of this university, if I remember right?). And these first four in my mind serve the important role of “framing” the research. So from the mentor's point of view, they're getting a frame around – at least in a broad sense – what it is you want to do: Working Title, the Basic Research Question, Three Key Papers and the Motivation/Puzzle. And that has conveniently four elements. And in the current version of the paper I have this “3-2-1” countdown slogan that it's going to start with a four when I do the next version (i.e. “4-3-2-1”). So there are four things to think about there.

On slide #26, I've circled the next six items and this is the main part of the template. This is where the specifics are identified. But in terms of the countdown, the “three” part of the countdown, is the next three items, Idea, Data and Tools. So to me, they are a package. So the young scholar has to give answers to each of those – in fact, each of the 11 items. But in terms of those three and the answers, as a mentor, I would look at those three as a package. So what's the basic idea that that young scholar has in mind? What are the data that they think will be good for the purpose? And what are the tools that they will use to do the research?

We then go to the next two items. So we've had –the “four” piece [“framing” piece] , the “three” piece [“building blocks”] and now the “two” piece. Here we have two key questions: first, tell me what is new and novel? In a scholarly sense. But, also we don't want our colleagues to shrug their shoulders and go, "So what? I don't care." And whenever we hear or we think someone's saying that I don't care, it's easy to take it personally. It's easy to think, "Oh, they don't like me. They don't like my family. They don't like where I come from." That's natural. But really when they say effectively that “I don't care”, it's in the context of the academic community – the scholarly community won't see this as being important enough. Well, eventually, the bottom line is, to make a contribution. So “four”, “three”, “two”, “one” – the bottom line is, if we challenge any researcher to make one all-encompassing statement about their research, my suggestion is that statement should address the (incremental) “contribution”. How does and how will your research contribute to the literature of it?

And then we have the third part of the template (slide #27), which is the final item – is, “other considerations”. So it's – the way I think of this is that maybe there's something missing. So there are other things that we haven't had a chance to say something about and so this is where we will say those things.

Right. In the next bunch of slides (slides #29 to #42) and we won't dwell on these too much because they're reasonably self-explanatory. But I'm just trying to give a little bit more advice around what you would be doing or thinking about in trying to complete the template. So basic research question – giving you a sense. I've seen a case where there're two or three sentences and that's okay as long it will help us to paint the picture of what the basic research question is.

Key papers – identify the key papers. Well, this one – the reason I've embedded this into the template is, if we go back to the hypothetical 60-page example – I've seen that many times, it's frustrated me terribly because the student will have read a 100 papers, for example. So they list all thses in the references. And most of the time I had no clue – I had absolutely no clue which of those papers they think are really the most important. They write as if they were equally important and I think that's a bad strategy. I think the challenge should come sooner, of course you can change your mind later, but let's make a call, what are the key papers? You know, I love the number three. So for me, three should be able to do it all, in terms of identifying the most influential papers that you have in mind that will help give a context to your own research.

In the fourth item it's basically now, motivation – "I'm happy to give you a 100 words maybe even more," and it should be a motivation that is grounded in academic, scholarly literature – with perhaps a real world angle too. It's not your personal motivation. So of course, we have personal motivations about doing a lot of things in our lives including our research. But for this exercise (i.e. the exercise of “pitching research”) what I'm after is the motivation that really reflects in a sense that broader “Cocktail Glass” literature (see slide #30) without naming too many of the papers but possibly would have some articulation to one or more of the papers that are identified as the key papers. So I think, I've seen really good examples where the motivation picks out some of the work that one of the key papers has delivered to the literature – or does it in a way that basically says, "Well, at least viewed in isolation, this paper leaves open the door for the next piece of research, which is mine."

We don't have time to talk about the Cocktail Glass [slide #30], a “slogan” or metaphor for coping with an overwhelming academic literature - that's something that you will find incredibly useful if you get my paper from SSRN with that.

Idea, Data and Tools (slides #32 and following). We've got idea, I guess my main interest here is to challenge the young researcher, if possible and if relevant – because sometimes it isn't possible and sometimes it isn't relevant to state a central hypothesis – so with qualitative research for example. And some of us do qualitative research and writing a hypothesis is not appropriate – you're trying to describe the world in a particular setting. So it's often descriptive in case study setting. So in that situation, rather than articulating a hypothesis you would say something that's relevant to that qualitative angle, to the case study or whatever it is that you're trying – the phenomenon that you're trying to explain.

If possible, identify tension, a theoretical tension in the literature. It's not always possible and this is probably a minority situation where you can really point to a relevant tension that can help give your idea strength.

I've clearly got an empirical type of research in mind, so data are important. And in the next few slides (slides #34 to #36) I give “cues” to what I would want you to think about in terms of a quantitative – largely a quantitative approach. So things like, "Give me your view on what the likely sample-size would be." And if the sample-size is very small, in some circumstances that could be a “deal breaker” and it's best to find that out sooner, rather than later.

So we talk about data sources where there are missing observations. The cleanliness of the data, the reliability of the data – the credibility of the data, if you like and so on.

And then in terms of tools (slide #37), say something that's helpful to your mentor for them to understand the way in which you are going to – you plan to do this work. Are you, for example planning to use a regression based – what software that you have in mind? Are there any implementation issues around your knowledge and skill level? And will the tools be compatible with the data? So we don't want the students saying, we are going to use a particular set of tools that we know are not designed for that type of data.

So the next part of the template, so we are past “four”, past “three”, now to the “two” key questions, "What's new?" and ""So what?" (slides #38 to 40) We've got to first of all be convinced there's novelty in our research. We should avoid doing research that will simply replicate what's already known. I think a lot of students and a lot of early career researchers understand how important this one is. Indeed, my feeling is, they see it as being so important, they can't see beyond this novelty aspect or this "What's new?" question. So let me express that another way. I've seen students literally so excited when they come up with an idea that we agree, "Yes that's new," and so it's almost like they are going to have “party and celebrate”, because they've identified something new and this is like "big breakthrough." The problem is that quite a number of cases where something is literally new, the scholarly community don't really care. It's not because they don't like you or your family or where you come from, it's just they're making a judgment that irrespective of the outcome of the research we won't really learn too much. We'll learn something that's new, but it's not going to matter too much and that's not a good place to be. So we need to judge these two items together.

It's quite possible to have the contrary [ph] situation where you can identify something that's incredibly important – incredibly important, but it's been done before, it's not new. So we again have a big problem. And this all then gets us to the most important thing that we have to demonstrate and convince our research mentors, our examiners, about – the contribution. It is never too early to take the challenge to write in a very brief way, what we believe the likely contribution will be.

In terms of the other considerations, on this slide (#42) I talk about or identify a few things that occur to me as potentially of interest. First, the issue of collaboration. So it's not just a reflection for a researcher whether they're able to do the research themselves. Even when you feel you have all the skills and you can do that research by yourself, there's still the question of, should you do that by yourself? Is it worthwhile collaborating with someone else that has a similar interest? There's the old saying in English, "Two heads are better than one," though there is not a guarantee that will be the case. But there's a high likelihood that two people or two or more people working on an area will get a much better product and by sharing a project you're then freed up to work on other projects too. So you're able to diversify and to develop a “pipeline”. So collaboration is something to think about.

The target journals – well, we had a very good introduction to thinking about target journals that is, the first-half of my talk, when we talked about the rating of journals. So a lot of that is sort of relevant from an end user's point of view. So what's a good target for this research? Is it at a quality level that we believe justifies investing a lot of time? And this would be incredibly important to mention to a mentor. They can give advice on whether it's a good target. If they agree it's a good target that agreed target will then identify a threshold over which advice will be given on other items in the template. So if you have a very aspirational journal, then the mentor will be pushing very hard to get strong and convincing answers to all items in the template.

And then there's a bunch of “risk-assessment” items that I've mentioned here and try and keep it simple but I suggest well, why don't we just characterize it into three categories of risk – is it “low-risk”, “moderate risk”, “high-risk”? And then, you can tell that I like the number three because there're not only three categories of risk I'll give you three dimensions of risk to think about. “No result” risk – we don't want to be heading down the path of doing research where we feel there's a reasonably high chance we'll find nothing. While that “no result” could be quite useful to the scholarly community to find out, because journals are not really interested in statistically insignificant results, we shouldn't choose topics that we feel is a high-risk of no result.

What about competitors? What about “competitor risk? Well, if we choose a topic that's really hot, there will be a lot of competitors. And this will introduce a risk for us. If the competitors are strong, and they're advanced in terms of already starting a line of research and we are now thinking about following that line too, do we feel we can successfully compete with them? Do we feel we have a sufficiently different angle that we can both coexist?

And then finally I also think about the “risk of obsolescence”. Is the hot topic we choose today resilient? Now a lot of these things in a sense require a "crystal ball." Of course, crystal balls don't really work, but we would need to look into the future to know for sure, which we can't. So we could say, "Well, we can't look into the future so there's no point worrying about this." And I think that's a very bad strategy. I think even though we haven't got a crystal ball, we can make some sense of whether a topic might be enduring or not. So it's really, at the end of the day, is it going to be still a “live” topic in 6 months or more from now or for a Ph.D. student, in 3 years?

For example: if you take – and it's a controversial example but I guess it's pretty relevant – if you take all those many researchers that have been investing a lot of time and effort into climate change research, there's been a fairly significant disruptive event in terms of the change of presidency in the U.S., because the U.S. is a dominant economy, globally. And, so when the U.S. dramatically changes focus (like it has on climate change), maybe at least in some of the lines of research that were climate change focused, they have to “pivot” somewhat. Because, at least for a little while they've – I won't say, became obsolete – but they began to have a much more difficult time trying to pursue a particular angle.

All right, so we have come to that part of my talk where I am just not going to have the time – there's a worked pitch example here, which is somewhat humorous/ light-hearted (slides #43 to #55). It's one that, with more time, I would paint a picture for you – it would be a bit like a “fairytale” and I would play the role of the young scholar, you would play the role of the senior mentor and I'd be pitching you this area of research which – in the fairytale we are in orthopedic medicine because it's going to be a pitch about a head and neck injury risk for youth. But the context of the head and neck injury is those young people that go to music concerts a lot and they do a particular “violent” dance, which in English we call it "head banging." So there's a whole bunch of stuff I would have said, we just don't have the time to do that. But I'll quickly just say a little bit about the pitch. Please don't be offended by it because it's describing behavior of young people that “not so young” people like me, we might find not very good – not a good thing at all.

But basically the working title of this pitch is, "Head and neck injury risks: the link between head banging and heavy metal." And it asks the question, "Is there a measurable injury risk in rhythmic head-snapping dance?" which is this head banging event. I apologize about cultural ignorance but I gather that it's a worldwide phenomenon that the youth of all nations including those in Japan would – at least some of those youth would find – heavy metal music very exciting and they would want to go to the concerts to have a good time. Now, this is drawing attention to a possible problem, a health problem a head and neck injury problem with young people that – maybe some of them that are susceptible to injury. And so what this mythical pitch is doing is say, "Well, let's actually do a study on this," and, in reality, there is a literature.

So the two key papers here, Ferrario and “friends” and Kunin and “friends”. The first one, a 2002 paper, and the second one a 2007 paper. And we can see from the titles of the papers they're very relevant to the question that we set, "Is there a measurable injury risk in this violent dance that the young participate in?" So the first one, "Active range of motion of the head and cervical spine: a three-dimensional investigation in healthy young adults." And the second one, "Rotation axes of the head during positioning, head shaking, and locomotion." I've always got to remind myself that people at my age – should not give you a demonstration of the dance, but just thinking about it gives me a headache. So if I try to give an example I think I might have an injury risk myself.

So in terms of the motivation, it starts off by just I guess making a simple statement about what this dance is, "A rapid, rhythmic head movement." It then draws our attention to two very famous heavy metal musicians – well-known to the youth – I'm sure most of you are like me – we don't know these people, Jason Newsted and Terry Balsamo. But they are both – I think they're lead-guitarists or the like in these two bands. I've certainly heard of both those bands – "Metallica" and "Evanescence." I'm not sure the extent to which they were a phenomenon in Japan, I think they were somewhat of a worldwide phenomenon?

But, what Item (D) of the template draws attention too is that these two high-profile musicians are asserted to suffer such injuries – in a real situation, you as my mentor would know whether these claims are true and if they aren't or you have a suspicion that they might not totally be true, well you would ask me about that. Because I'd be trying to pitch you this idea and this is part of the motivation. And these two gentlemen had some type of head and neck injury problem. And the implication here is that they to some extent they had these injuries because of their role in the bands where – and I think a lot of concerts would have this common characteristic where the musicians are up on stage, not only providing the music but they're providing I guess, a coordinated set of movements that the crowd mimic, okay?

And so if you've got to do this in an old man's style or a not so young person's style – if they were, as they're playing their instruments, doing that dance then of course it would be mimicked and replicated in the audience by those youth, but probably in a much more violent potentially injury risk way. So the motivation here is trying to use that as a high-profile, anecdotal, real-world connection. The next thing that this pitch does in terms of motivation is, link it to headaches. And while head and neck injury is a much more serious problem than a headache, we all can relate to headaches.

Everyone in the audience has had a headache and everyone probably has a similar approach to dealing with a headache, which is a combination of drink a whole bunch of water, maybe with some aspirin, go to bed early and hope that when you wake up in the morning or first of all, you do wakeup and that the headache is gone, okay? But we know that in a small percentage of cases at least, it's something more serious and so we don't want to think about that too much. But it's linking to that very common problem and the response that's also common, which is to assume there's no major problem.

But what the motivation is trying to get us to think or contemplate is, and in this setting the headaches that youth would have when they're going to concerts a lot and they do this kind of dance a lot, its part of a signal that maybe it could link to serious injury risk. And its then – as my mentor, I'm trying to tell you or suggest to you that this really needs to be researched and that I think I can model this in a way that looks at thresholds in terms of – there's two main factors here – and I'm not going to show you both in combination, but one is the speed of the head-movement – again, it's a speed intuitively that's going to give you a real chance of a blistering headache – the second that mentions the angle of movement of the head and neck, relative to the shoulders.

So when you combine those that's when you're likely to get the biggest problem – I'm not going to demonstrate combined speed with angle. But that's really what would be behind this and we'll see very quickly in a minute, I'll speed-up now – that those two elements are indeed key parts of this pitch and it is a research pitch as opposed to something that is just totally trying to be humorous.

So in terms of the idea, it talks about modeling the process and identifying these threshold levels. So now we're getting to more specifics on this research that I want to do and I'm trying to convince you. And maybe you'll buy this, maybe you won't. As my mentor, you can ask me questions – if there's anything here that you are not sure about or you disagree with, you would ask me, you would challenge me and I would have to respond. The pitch template is “seeding” a meaningful conversation.

In terms of the data for this pitch example, there are three elements or “three-prongs” – observational studies, focus groups, and biomechanical analysis. Now it turns out that the first two are qualitative and they don't really match what – in terms of the idea, now seems to be pointing to a quantitative study. It's the third dimension that really is the connection, the biomechanical analysis. So creating a model that takes account of the angle of displacement and also it's going to capture the speed – so the angle and the speed are key.

There's a very brief piece here about tools. This is, I would say a very weak example, but in fact, it was done like this intentionally – just two words that don't really help the mentor much at all. So you can imagine, you as my mentor, you say, "Modeling software? What do you really mean by that?" Now, one scenario could be, I don't really know and I should be honest and say, "You know, I'm sorry. I just haven't had a chance to work this out yet." Or, the alternative positive scenario is: "I can now tell you. I wanted to keep it brief but I'll tell you what I mean by the “modeling software”." And so the “conversation” ensues.

Okay, "What's new?" While case studies indicate that this violent dance causes brain and neck injury, this will be the first study that does it quantitatively – the biomechanical method. And then the pitch makes a statement about why it's important. So we're really trying to get safe tolerance thresholds.

This is my “Mickey Mouse diagram” (slide #50). There's a silhouette of Mickey Mouse here, with the 3 overlapping circles To me, it's not a Venn diagram – it's Mickey Mouse and to me it's just a simple way of conveying to you my mentor, what the novelty is that I'm trying to achieve. The novelty is in the sweet spot. This sweet spot gives a focus on head and neck injuries, musicians and head banging.

All right, there is a very brief attempt here of defining a sentence of contribution, "This study will provide safe head banging guidelines so as to minimize the risk of head and neck injury." So, we have “guidelines”, something about minimizing risk and it's to do with injury. So it seems to be capturing a lot of the key elements that have been highlighted throughout the pitch. There's a whole bunch of stuff there that addresses other considerations, – I'll leave it for you to read, we're pretty much out of time, so I'll skip over that (slide #51). The bottom line of this little example is, in a very non-stressed way, without having too much technical stuff, I think it allows in my view, a diverse audience to all get a feel for how the “pitching research” tool might work. And so if I've achieved that in your mind then, I've succeeded with my goal!

This is actually a reverse engineered pitch of a paper that exists (slide #53). So it's in the – I believe, "BMJ" stands for the British Medical Journal. So if you want to find that paper and have a look, it does exist. So the study was actually done. Now I've developed a whole bunch of resources and so the pitch that I've just shown you in PowerPoint slides is actually in the online library. There's a big online library of examples and it's actually Example A55. There're about 160 examples that span a huge range of disciplines – I'm going to skip over that. And I think I'll have to skip over a whole bunch of Mickey Mouse guidelines for you here (slides #60 to #78).

I'll just give you one example (slide #61). If I had to tell you three things to think about when trying to come up with a Working Title, that's going to help your mentor, make your Working Title, informative not cryptic, brief and simple. So there's a whole bunch of Mickey Mouse diagrams here. So I think I'm going to skip right through to leave you with a parting message. So there's a whole bunch of benefits that I see that come from using this tool – not the least of which is saving of time and efficiency (slide #85). Anyone that uses the tool has to be willing to invest some time to do a decent job. So if you don't invest the time or you do quite a substandard job then you probably are wasting your time. But my belief is, a good investment of that time in creating a pitch will be rewarded many times over in getting started in your research.

There are – in terms of the pitching research there's all sorts of resources (slide #88) – weblinks on my webpage at The University of Queensland. iI you get these slides and I'm very happy for these to be circulated – all of these light, underlined pieces are public. So in this mode, if you click on those hyperlinks, they'll take you to the designated resource. There's a web portal, PitchMyResearch.com. There're YouTube videos if you want to see some students pitch. I've got a recorded students pitching. There are a number of SSRN Papers. The main one I want to convince you on however, is the first one, the one that I'm now working on Version 14 of this "Pitching Research." (see weblink identified above) There's a lot of detail in there and it's a one-stop-shop for all resources and all the links. So I urge you to get that paper. It's a good reference piece and if I've convinced you, get your students to use it, if you have students or your colleagues if you think that it will help them.

I've gone 2 minutes over but I squeezed-in two topics that I'm very passionate about. Thank you for staying with me the distance and I will now hand it over to Takahiro for a final wrap-up – thank you very much.