



Gold Coast Health and Medical Research Conference

Pre-conference Workshop

Starting your Research: The Fuzzy Front End

PITCHING RESEARCH



Contents

This booklet contains a brief general explanation of the “pitching” concept, followed by a “cued” version of the pitching template (with clinical applications in mind), followed by three reverse-engineered pitch templates of representative papers drawn from health and medical research.

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“Pitching Research” to your clinical supervisor or an academic expert

– a difficult task made easier

Understanding research for the first time isn't easy. It's especially terrifying right at the onset of your research journey. After wading through the literature, you have some ideas you think might work, but it's easy to be overwhelmed. What is worth pursuing? Will it work? Will it be publishable? You're about to spend the next few years working on your research, but you have no idea where or how to start. You need a reliable plan. Of course, you would also love expert guidance. Let's say that you have identified an ideal research mentor and you have a 30 minute meeting with them to “pitch” (the academic merits of) your idea. Clearly, you want to impress them. What do you do? Panic? ... No.

That's where [Faff's “Pitching Research”](#) paper comes in. It's all about nurturing worthwhile fledgling research projects. This guide for the early stages of research development aims to produce a well-rounded, effective and achievable research project. It does so by providing a simple mechanism for sounding out a new idea and starting a conversation with a potential research mentor – an expert in the field. At its core, the paper proposes a [2-page template](#) tool which recognizes that the typical research mentor is heavily over-committed – they are extremely time poor, very busy and usually grumpy. They do not want to (and will not) read pages and pages and pages of rambling thoughts – the mentor just wants all the salient aspects, sufficient to make a call on the inherent academic merits of your idea. Something that they can read and digest in 15 minutes.

For an engaging proposal, here's what you need ...

Pitcher's Name		FoR category		Date Completed	
(A) Working Title					
(B) Basic Research Question					
(C) Key paper(s)					
(D) Motivation/Puzzle					
THREE	Three core aspects of any empirical research project i.e. the “IDioTs” guide				
(E) Idea?					
(F) Data?					
(G) Tools?					
TWO	Two key questions				
(H) What's New?					
(I) So What?					
ONE	One bottom line				
(J) Contribution?					
(K) Other Considerations					

Working Title: Put it down, however rough, however uncertain. Keep it succinct and make it catchy. Creating a meaningful working title is a non-trivial exercise that will force you to think deeply about what it really is that you want to research. The working title will evolve with your project.

Basic Research Question: Say it in just a sentence. You've got to be able to hook a supervisor and rambling just won't cut it.

Key Papers: Find three papers crucial to your project. If you can, nominate the most critical single paper. Ideally, these papers have been published recently in top tier journals by “gurus” in your field. You've got to start with the best.

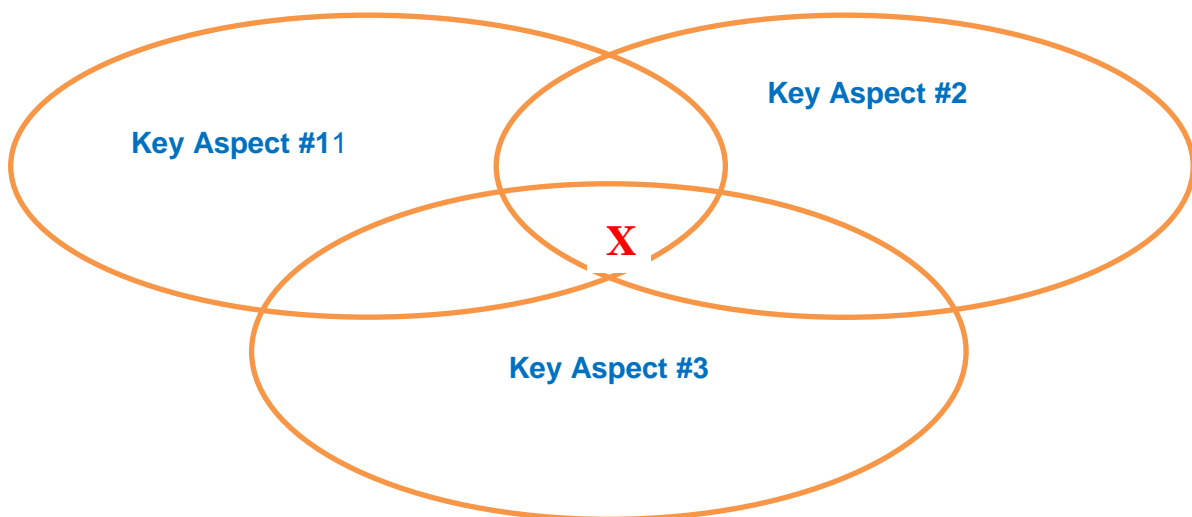
Motivation: What is fuelling your research idea? Depending on your research field, this should come from a combination of the literature, observed behaviour or industry patterns. If you don't know why you're doing it, no one else will.

Three dimensions: Idea, Data and Tools (“IDioTs” guide).

- **Idea:** Get your core idea on paper. This is it. If possible, frame it as a hypothesis and identify any contrasting predictions from pockets of theory relevant to the research question.
- **Data:** Great. You’ve got that idea on paper. How are you going to explore it? You need data – whether quantitative or qualitative. What will those data look like and how will you get them? What are the core sampling characteristics? Are the data fit for purpose? Are there any important obstacles to create/obtain the sample?
- **Tools:** You have your idea and you know what data you need. Fantastic, but they will not magically “dance” together. How are you going to feasibly perform the analysis? Hint at the planned research method, but keep your description of the tools short – just give the big “signposts”, so that the expert reader can broadly see your main toolkit at this stage.

Two Questions: What’s New? And So What?

- **What’s New?** What’s the novelty? Make sure that you’re not simply replicating previous work. No one wants to read that. Use a “Mickey Mouse” diagram (below) to characterise the intersection of novelty for your proposed study (“X” marks the spot).



- **So What?** How useful and important will your novel research be? How will it advance knowledge in your research field? These are the questions journal editors will ask.

Contribution: This is the distillation of your entire research project. What is the primary end point? How will it impact understanding in your research area? It might be a cracker of an idea, or maybe your application of data and tools is truly unique. Whatever, you must identify a primary force that defines why your work makes the relevant academic community take notice.

Other Considerations: Here it’s time to consider a range of miscellaneous factors. Are there any deal-breakers or serious obstacles? Is collaboration necessary? What is your target journal? Is the scope appropriate? What are the (research) risks?

Having done a great job with your research pitch, the busy academic will be well placed to give you instant and insightful feedback – even in the short time remaining in your (first) half-hour meeting together. Moreover, they will not only be receptive to how you deal with the individual pieces of your pitch, the

succinct overall format will enable them to readily see how well linked are the component parts. “**Connectivity**” is crucial. Impressed by your serious efforts, the mentor will be encouraged to help you tweak your proposal and get your project underway. Thus, “pitching research” has not only helped **start a conversation**, it has potentially laid the foundations for a fruitful longer-term research collaboration.

Resources

- **TO** read the full “pitching research” paper [go to \(or simply search online: SSRN Faff\):](#)

SSRN: <http://ssrn.com/abstract=2462059>

- **TO** check out the expanding online library of worked pitch examples ([> 50 different areas](#)) [go to:](#)

<http://www.business.uq.edu.au/supplementary-material-pitching-research>

- **TO** register and access the “PitchMyResearch” web portal [go to:](#)

PitchMyResearch.Com

- **TO** access YouTube video [pitch talks](#) and [examples go to:](#)

General talk: <https://www.youtube.com/watch?v=DtT8pf06aHk&feature=youtu.be>
Sustainable Systems: <https://youtu.be/QBo2wU0z18o>
Accounting: <https://youtu.be/mjBBRnN6gwY>
Chemistry: <https://youtu.be/PmjM9XfxZ4E>
Archaeology: <https://youtu.be/AyIMABEq4Cc>

Or just follow me on LinkedIn or Twitter to catch the latest “Pitch of the Week”.



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SSRN You can access my papers on SSRN at: <http://ssrn.com/author=246387>

PMR Facebook page <https://www.facebook.com/pages/Pitch-My-Research/1036733033025659>

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International Accounting & Finance Symposium

http://www.iafds.org/index.php?option=com_content&view=article&id=2&Itemid=105



Cued Pitch Template for Clinical applications

Pitcher's Name	Your name here	FoR category	Field of Research	Date Completed	Insert date here
(A) Working Title	Succinct/informative title here				
(B) Basic Research Question	In one sentence, define the key features of the research question.				
(C) Key paper(s)	Identify the key paper(s) which most critically underpin the topic (just standard reference details). Ideally one paper, but at most 3 papers. Ideally, by “gurus” in the field and recently published in Tier 1 journal(s) or recent working paper .				
(D) Motivation/Puzzle	In one short paragraph (say a max of 100 words) capture the core motivation for doing this project– which may include identifying a “puzzle” that you hope to resolve.				
THREE	Three core aspects of any empirical research project i.e. the “ IDioTs ” guide				
(E) Idea?	Identify the “core” idea that drives the intellectual content of this research topic. Is there a theoretical framework that supports this idea? If possible, articulate the central hypothesis(es). Identify the key dependent (“explained”) variable and the key test/independent (“explanatory”) variable(s).				
(F) Data?	<p>(1) What data do you propose to use? e.g. country/setting; Why? Unit of analysis? Individuals, patient groups, organisations ...? Sample period; sampling interval? Daily, weekly, monthly, quarterly, annual; Type of data? Retrospective/prospective; descriptive (non-numerical); numerical (continuous, categorical)</p> <p>(2) What sample size do you expect? Will the variables being assessed exhibit adequate (“meaningful”) variation to give power?</p> <p>(3) Data Sources? Is the data already existing and accessible? Are novel data to be collected as part of an experimental process? Interviews, a survey to be created or existing, use of a device to measure an outcome, hand-collected?</p> <p>(4) Will there be any problem with missing data/observations? Data collection issues? Database issues? Data manipulation/”cleansing” issues?</p> <p>(5) Other data obstacles? e.g. valid (a test measures what it is purported to measure), reliable (consistency in collection) and external valid</p>				
(G) Tools?	Basic research design? Qualitative or quantitative? Comparing interventions or observational? Core resources required for the study to occur? Staff needed/appropriate for study- level of experience required? Resources required?				
TWO	Two key questions				
(H) What's New?	Is the novelty in the idea/data/tools? Which is the “driver”, and are the “passengers” likely to pull their weight? Is this “Mickey Mouse” [i.e. can you draw a simple Venn diagram to depict the novelty in your proposal?]				
(I) So What?	Why is it important to know the answer? How will major decisions/behaviour/activity etc be influenced by the outcome of this research?				
ONE	One bottom line				
(J) Contribution?	What is the primary source of the contribution to the relevant research literature?				

(Adapted by Greta Ridley from Faff, Robert W., Pitching Research (2015). Available at SSRN: <http://ssrn.com/abstract=2462059> or <http://dx.doi.org/10.2139/ssrn.2462059>)

(K) Other Considerations	Other relevant aspects not mentioned above
(k1) collaborations?	Is formal collaboration needed/desirable? – idea/data/tools? (either internal or external to your institution)
(k2) external advice?	External advice needed/desirable? If so, what type? e.g. statistical advice, study design, content expert
(k3) research ethics	“Risk” assessment: “low” vs. “moderate” vs. “high” risk to patients, staff, health service? Do you need ethical clearance? Are there other ethical considerations?
(k4) governance?	Is governance an issue for ongoing project management? If so, what critical elements need coverage?
(k5) funding?	Is funding essential/desirable/unimportant? What overall \$budget is required? What key items of expenditure are involved? Do you have a potential \$source?
(k6) target journal(s)?	Identify the most appropriate academic journal for this work.
(k7) deal breakers?	Are there any serious challenge(s) that you face in executing this plan? What are they? Where is the biggest challenge? Does it seriously threaten viability?

Pitch Example #1: First Aid

This pitch is reverse engineered from the paper: Jeremy S Furyk, Carl J O’Kane, Peter J Aitken, Colin J Banks and David A Kault, (2009), “Fast versus slow bandaid removal: a randomised trial”, MJA, 191, 682-683. This pitch is Internet Appendix A53 linked to Faff (2015, SSRN).

Pitcher’s name	Marita Smith	FoR category	First Aid	Date completed	3/11/15
(A) Working Title	Fast versus slow bandaid removal				
(B) Basic Research Question	Is it less painful to remove bandaids quickly or slowly?				
(C) Key paper(s)	<p>Dykes, P. and Heggie, R. (2003). The link between the peel force of adhesive dressings and subject discomfort in volunteer subjects. <i>Journal of Wound Care</i> 12, 260-262.</p> <p>Woo, KY., Harding, K., Price, P. and Sibbald, G. (2008). Minimising wound-related pain at dressing change: evidence-informed practice. <i>International Wound Journal</i> 5, 144-157.</p>				
(D) Motivation/Puzzle	Dressings are routinely applied to wounds around the world in household and medical institution settings. There is often significant pain and discomfiture for the patient during dressing removal. Methods of alleviating and minimizing this pain have not been well explored in the literature. Previous studies have focused largely on the discomfort induced by a wide range of dressing products. Although the speed of dressing removal has been identified as a factor, it has not been explicitly studied, nor has an appropriate speed been identified. By focusing on a widely available wound dressing (the typical bandaid) it should be possible to identify a preferred speed of dressing removal.				
THREE	Three core aspects of any empirical research project i.e. the “iDioTs” guide				
(E) Idea?	<p>The most ubiquitous methods of bandaid removal are slow and fast. There are proponents for both techniques in schoolyards and hospitals:</p> <ul style="list-style-type: none"> - Slow technique - longer exposure time to unpleasant stimulus may minimize pain as it engages receptors gradually - Fast technique - short exposure time to unpleasant stimulus may minimize pain as it engages a short, intense stimulation of pain receptors <p>The perception of pain can be complex as it involves culture, prior pain experiences, beliefs, mood and ability to cope. By assessing the pain experienced under both slow and fast conditions in a randomized trial, it should be possible to statistically differentiate the two methods.</p>				
(F) Data?	A random sample of healthy volunteers (minimum sample size of 60 for statistical purposes) will be tested using slow and fast removal methods over multiple body locations. Subjects will rate the pain experienced using an 11-point verbal numeric scale. Additional data will also be gathered on age, sex, ethnicity, amount of body hair and preconceptions on which method is expected to be more painful.				
(G) Tools?	Will require a decent sample size of willing volunteers (and possibly some impetus), access to a large number of sterile dressings, consistent bandaid removal technique by operators, and simple statistical analysis software.				

TWO	Two key questions
(H) What's New?	Novel study that compares the leading methods of bandaid removal to answer the age-old question: fast or slow?
(I) So What?	This study will inform future wound care practices at all levels of patient care, from households to large medical institutions.
ONE	One bottom line
(J) Contribution	This study aims to identify a method of dressing removal that reduces patient pain and discomfort.
(K) Other considerations	<p>Is Collaboration needed/desirable?</p> <ul style="list-style-type: none"> -Idea: no; -Data; yes – will need multiple dressing removal operators plus at least one observer -Tools; no – simple software <p>Target journals – <i>Medical Journal of Australia, International Wound Journal</i></p> <p>“Risk” assessment:</p> <ul style="list-style-type: none"> -“no result” risk: low. It is highly likely that one method will be more painful; if both are similar, this is still a novel result. -“competitor risk”(i.e. being beaten by a competitor): low. The simplicity of this study means it is unlikely to be duplicated. -risk of “obsolescence”: Low. Dressing removal is inherent to the human condition.

Pitch Example #2: Emergency Medicine

This pitch is reverse engineered from the paper: R. Smith-Bindman et al. (2014), “Ultrasonography versus Computed Tomography for Suspected Nephrolithiasis”, New England Journal of Medicine, 371; 12, 1100-1110. This pitch is Internet Appendix A54 linked to Faff (2015, SSRN).

Pitcher's name	Marita Smith	FoR category	Emergency Medicine	Date completed	3/11/15
(A) Working Title	Ultrasonography versus Computed Tomography for suspected Nephrolithiasis				
(B) Basic Research Question	Should the initial screening method for patients with suspected nephrolithiasis (ureter stones) be ultrasonography or computed tomography?				
(C) Key paper(s)	<p>Westphalen, A.C., Hsia, R. Y., Maselli, J. H., Wang, R. and Gonzales, R. (2011). Radiological imaging of patients with suspected urinary tract stones: national trends, diagnoses, and predictors. <i>Academic Emergency Medicine</i> 18, 699-707.</p> <p>Fwu, C.W., Eggers, P. W., Kimmel, P. L., Kusek, J. W. and Kirkali, Z. (2013). Emergency department visits, use of imaging, and drugs for urolithiasis have increased in the United States. <i>Kidney International</i> 83, 479-486.</p> <p>Dalziel, P. J. and Noble, V. E. (2013). Bedside ultrasound and the assessment of renal colic: a review. <i>Emergency Medicine Journal</i> 30, 3-8.</p>				
(D) Motivation/Puzzle	Pain associated with nephrolithiasis (the process of forming a urinary/kidney stone) is a common presenting factor in emergency departments. Computed tomography (CT) is widely used as the initial imaging test because of its high sensitivity. However, its widespread use as a screening tool has recently come under scrutiny as it exposes patients to ionizing radiation (and thus long-term cancer risk), is associated with a high rate of incidental findings requiring follow-up, and is more expensive than other methods. The literature fails to demonstrate that increased CT use has improved patient outcomes.				
THREE	Three core aspects of any empirical research project i.e. the “iDioTs” guide				
(E) Idea?	A multi-centre, randomized trial comparing ultrasonography with CT should indicate whether there is any benefit in continuing to use CT as the primary diagnosis tool for patients presenting to emergency departments across the USA with nephrolithiasis symptoms.				
(F) Data?	<p>By examining patients that merit imaging by the emergency physician to rule out/establish a primary diagnosis of kidney stones (and are not pregnant, obese, or with prior kidney problems) and randomizing their screening, it should be possible to track several key outcomes over a six month follow-up period:</p> <ul style="list-style-type: none"> - High-risk diagnoses with complications linked to missed/delayed diagnoses - cumulative radiation exposure - cost analysis - secondary outcomes e.g. serious adverse effects, patient-reported pain scores, return emergency department visits/hospitalizations 				
(G) Tools?	Participating physicians and eligible, participating patients over a set time period; suitable ultrasonography and CT equipment; follow-up monitoring and patient interviews.				

TWO		Two key questions
(H) What's New?	This study is the first large-scale examination of a diverse range of emergency departments to compare ultrasonography and CT for diagnosis of kidney stones. The proposed randomized design aims to assess clinically relevant outcomes that exceed simple diagnostic accuracy.	
(I) So What?	This study will identify whether ultrasonography or CT is most beneficial as a screening tool for kidney stone diagnosis, aiming to minimize patient exposure to potentially harmful ionizing radiation and ensure accurate diagnosis and follow-up treatment.	
ONE		One bottom line
(J) Contribution	This study aims to assess the relative benefits of ultrasonography versus CT in the environment of an emergency room diagnosis of suspected kidney stones.	
(K) Other considerations	<p>Is Collaboration needed/desirable?</p> <ul style="list-style-type: none"> -Idea: yes – physicians from multiple institutions should be involved in study design/execution -Data; yes – will need multiple participating physicians and data analysts -Tools; yes – participating institutions will use their own imaging equipment <p>Target journals – <i>Kidney International</i>, <i>The New England Journal of Medicine</i>, <i>Journal of Urology</i></p> <p>“Risk” assessment:</p> <ul style="list-style-type: none"> -“no result” risk: low. A study of this size is unlikely to return a null result. -“competitor risk”(i.e. being beaten by a competitor): low. The scope of this study makes it difficult to replicate easily. -risk of “obsolescence”: Low. Diagnosis efficiency is of key importance to emergency departments worldwide. 	

Pitch Example #3: Orthopaedic Medicine

This pitch is reverse engineered from the paper: Patton, D. and McIntosh, A., (2008), “**Head and neck injury risks in heavy metal: head bangers stuck between rock and a hard bass**”, BMJ 2008; 337 doi: <http://dx.doi.org/10.1136/bmj.a2825> (Published 18 December 2008)

This pitch is Internet Appendix A55 linked to Faff (2015, SSRN).

Pitcher's name	Marita Smith	FoR category	Orthopaedic Medicine	Date completed	4/11/15
(A) Working Title	Head and neck injury risks: the link between head banging and heavy metal				
(B) Basic Research Question	Is there a measurable injury risk in head banging?				
(C) Key paper(s)	<p>Ferrario, V. F., Sforza, C., Serrao, G., Grassi, G. and Mossi, E. (2002). Active range of motion of the head and cervical spine: a three-dimensional investigation in healthy young adults. <i>Journal of Orthopaedic Research</i> 20, 122-9.</p> <p>Kunin, M., Osaki, Y., Cohen, B. and Raphan, T. (2007). Rotation axes of the head during positioning, head shaking, and locomotion. <i>Journal of Neurophysiology</i> 98, 3095-108</p>				
(D) Motivation/Puzzle	Head banging is a violent dance form associated with hard rock and heavy metal music. Because it involves moving the head rapidly and rhythmically, head banging enthusiasts may be at risk of head and neck injury. Several musicians within the genre have experienced such injuries, e.g. Jason Newsted (Metallica) and Terry Balsamo (Evanescence). Head banging is frequently associated with severe headache symptoms, for which enthusiasts rarely seek treatment as they typically resolve naturally. However, it is possible that head banging may lead to serious, silent damage that goes unnoticed. There has been no prior examination of the risks of mild traumatic brain and neck injury from head banging activities in the literature. Considering the ubiquitous nature of this dance form and its popularization in the media, a comprehensive study is desirable.				
THREE	Three core aspects of any empirical research project i.e. the “iDioTs” guide				
(E) Idea?	By examining the range of motion typically achieved in head banging, it should be possible to model the process and derive threshold levels to minimize injury risk.				
(F) Data?	<ul style="list-style-type: none"> - Observational studies: identify popular head banging techniques by attending various heavy metal concerts. - Focus groups: work with heavy metal musicians to identify key head banging songs and their tempos. - Biomechanical analysis: Create a theoretical head banging model based on angular displacement of the head (sinusoidal motion) to enable the definition of parameters defining head and neck injury risk (Head Injury Criterion, HIC; Neck Injury Criterion, NIC). 				
(G) Tools?	Funding for concert tickets, participating heavy metal musicians for focus groups, modeling software				
TWO	Two key questions				
(H) What's New?	While case studies indicate that head banging might cause brain and neck injury, this will be the first study to explicitly examine this link via				

	biomechanical methods.
(I) So What?	This study will identify exactly why heavy metal fans are often dazed, confused or incoherent at festivals and provide safe tolerance thresholds for head banging activities.
ONE	One bottom line
(J) Contribution	This study will provide safe head banging guidelines so as to minimize the risk of head and neck injury.
(K) Other considerations	<p>Is Collaboration needed/desirable?</p> <ul style="list-style-type: none"> -Idea: no; -Data; yes –will need input from musicians in the genre -Tools; yes – funding for concert attendance and software <p>Target journals – <i>Journal of Neurophysiology</i>, <i>Journal of Orthopaedic Research</i></p> <p>“Risk” assessment:</p> <ul style="list-style-type: none"> -“no result” risk: low. The case study history of injuries suggests there will be a link between head banging and head/neck injury. -“competitor risk”(i.e. being beaten by a competitor): low. This is not a typically defined “hot topic” area. -risk of “obsolescence”: Low. The outcomes of this study will be extremely important for the general public, especially heavy metal enthusiasts who regularly engage in head banging.

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