

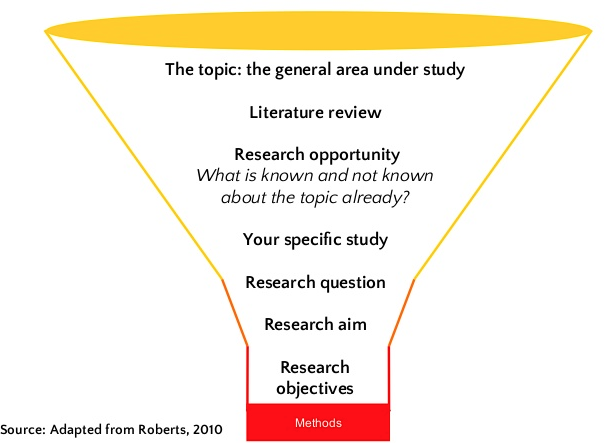
**Global PaedSurg - Research Training Fellowship**

**Session 1 - October, 26th 2018**

**Introduction to the Fellowship,**

**Developing a Research Question**

**and Undertaking a Literature Review**

1. **Fellowship Structure**
   1. 10 monthly one-hour webinars on BlueJeans every last Friday of the month
      1. One session for junior researchers
      2. One session for senior researchers
   2. All sessions are recorded and summaries will be circulated in multiple languages
   3. Mentorship provided for collaborators undertaking own project
      1. Matching of mentor to mentee over next month (by end of November)
      2. Mentor can be local – they do not need to be a member of Global PaedSurg (please email details to [globalpaedsurg4@gmail.com](mailto:globalpaedsurg4@gmail.com) if you already have a mentor or suggestion/ request for a mentor)
      3. Mentors are expected to have monthly meetings with mentee to support mentee to develop a research project
      4. The mentorship is aimed to be two years to allow for completion of a project
      5. Research projects can involve any subject – they do not need to be focussed on Paediatric Surgery
      6. You can use an existing project for the fellowship
   4. Certification will be provided at the end of the fellowship by the Global PaedSurg Research Collaboration, which is being hosted by King’s College London
      1. The certificate depicts how many sessions in total attended
      2. *Note*: the Research Training Fellowship is not a formal university course, so there are no credits from King’s College London
      3. Reward of presenting and publishing own research (not just ticking the box!)
   5. Global PaedSurg Prize Session
      1. Established individual research project abstracts can be submitted at the end of the 2-year fellowship
      2. Online video-conference to wider Global PaedSurg collaboration
      3. Top 3 of abstracts will win a prize
   6. Evaluation
      1. After each session, a brief feedback form (of 2-5 questions) will be sent to everyone, in order to evaluate and optimise sessions
         1. Forms are anonymous
      2. At the end of the entire course, an evaluation of research capacity building will occur
2. **Developing a Research Question**
   1. What is known and not known about your topic of interest already?
      1. Area of study ⇒ Literature review ⇒ research question ⇒ research aim ⇒ research objectives ⇒ methods  
         
      2. Literature review
         1. Databases: e.g., PubMed, MEDLINE, Google Scholar
         2. HINARI for collaborators in low- and middle-income countries (LMICs) to access articles for free or at low cost
            1. <http://www.who.int/hinari/en>
            2. Available in >115 countries
         3. (Inter)national surveys/ datasets (e.g., Global Burden of Disease Study)
         4. Institute for Health Metrics and Evaluation (IHME) website
            1. Country profiles showcasing existing demographic data and burden of disease (e.g., paediatric anomalies, child mortality)
            2. <http://www.healthdata.org/results/country-profiles>
            3. Global Burden of Disease Results Tool: <http://ghdx.healthdata.org/gbd-results-tool>
      3. Defining your research question
         1. Five core characteristics
            1. Is it feasible? (e.g., timeline, costs)
            2. Is it interesting?
            3. Is it important? (i.e., does it have a clinical impact?)
            4. Is it clear and concise?
            5. Is it measurable?
         2. Examples
            1. *What are the effects of childhood obesity in the United States?*

Not good: not specific enough (i.e., which effects? Which population?)

Better: how does childhood obesity correlate with academic performance in elementary school children?

* + - * 1. *Should women take hormones to prevent bone loss?*

Not good: not specific enough (i.e., which hormones? Which population of women?)

Better: is taking oestrogen associated with a lower risk of osteoporosis in women over 60?

* + - * 1. *Can a vegetarian diet reverse cardiovascular disease?*

Not good: not specific enough (i.e., all cardiovascular disease? What is a vegetarian diet specifically comprised of? What do we measure?)

Better: does a plant-based diet reduce serum cholesterol levels in patients with cardiovascular disease? (i.e the use of serum cholesterol as a proxy for atherosclerosis and hence cardiovascular disease)

* + - * 1. *Can diabetic patients be taught to control their blood glucose levels?*

Not good: too broad (all diabetic patients? Which type of diabetes? What type of teaching?)

Better: can a structured intensive diabetes education program help patients with type 2 diabetes control their blood glucose levels?

* + - * 1. What are the outcomes of patients with congenital anomalies globally?

Better: what is the mortality and post-operative complication rate for patients born with seven common congenital anomalies in low- and middle-income countries (LMICs) compared to high-income countries (HICs) globally?

* 1. Additional resources
     1. <https://airs.library.qut.edu.au/resources/1/1/>
     2. <http://www.socscidiss.bham.ac.uk/research-question.html>

1. **Action Plan**
   1. Session 2: Choosing your study design
      1. **Friday November, 30th 2018**
      2. **TO DO**
         1. Undertake a literature review of your topic
         2. Write a 500 word summary
         3. Draft your research question
         4. Send a copy to your mentor and a copy to [globalpaedsurg4@gmail.com](mailto:globalpaedsurg4@gmail.com)

Of note – this is simply a draft to get you thinking about the research topic and to share ideas with your mentor. It does not need to be a finished piece of work.