

## Thesis by publication - how to structure your paper - how to get the paper written.

Summarised by Les Irwig - Sept 07

This summary arises from discussion among the two dozen people who attended this session -mostly PhD students - in response to the pre-circulated questions given as bold headings below. Please email any additional ideas or information to Susan Martinez: [smartinez@health.usyd.edu.au](mailto:smartinez@health.usyd.edu.au)

### **1. Are you intending to use published (or accepted) papers for at least some of your thesis chapters? Why did you make that decision?**

Information about thesis by publication given at:  
[http://www.chs.usyd.edu.au/PG/Thesis\\_by\\_pubs.pdf](http://www.chs.usyd.edu.au/PG/Thesis_by_pubs.pdf)

Theses by publication that have been approved by the Faculty of Medicine and are available from the Rare Books section of the Fisher Library are listed below:

- *Psychosocial variables in the development of breast cancer*, by Melanie Anne Price
- *Social Determinants of End-Stage Renal Disease (ESRD)* by Alan Cass
- *Tobacco industry communication strategies: an Australian analysis of tobacco industry documents and other sources* by Stacy Carter.
- *Risky driving and car crash injury* by Stephanie Blows.
- *Visual impairment in Australian school children : prevalence, causes and associations* by Dana Robaei
- *Driver distraction and road crashes* , by Dr Suzanne McEvoy
- Sureshkumar P, Cumming RC, Craig JC. *Validity and reliability of parental report of frequency, severity and risk factors of urinary tract infection and urinary incontinence in children*. The Journal of Urology 2006; 175, 2254-2262. [one journal in the chapter format by Premala Sureshkumar]
- *Cold thermal processing in the spinal cord* by Paul Wrigley [not Public Health but others have found it useful]

### **2. How do you decide what papers are worth writing and what they should contain?**

Ask yourself:

- **What is the message?** You should be able to describe it in one sentence (which could make an informative title). What is new about your message? Deciding this requires a look at the literature - there may be publications since you last reviewed the literature when you were designing the study. You should highlight how your work extends knowledge.
- **Who is the audience?** The answer to this question should then guide you to decide.
- **What is the target journal?**

### **3. Which parts of the paper do you write first?**

There are many approaches. One approach that helps to focus your thinking on the message of your paper is the following sequence:

- Title (describing the main message)
- Abstract
- Tables and figures for results
- Results
- Discussion
- Introduction

For tables and figures, think of these in two phases:

- Exploratory: to help you and your co-authors understand the results
- Explanatory: to communicate the results. These will usually be simpler than the exploratory ones.

Think through the content and organise your thoughts before you start. A useful way of doing this is to jot down each issue on small post-it notes. These can then be reorganised in sections corresponding to those in your paper. Keep a spare sheet on which to stick post-its with issues which you decide not to address in this paper; this helps to avoid the problem of trying to put too much in one paper while preserving a list of issues you may decide to use elsewhere.

### **4. Have you ever had writer's block? What strategies have you used to avoid or overcome it?**

Some techniques for dealing with writer's block are:

- Make appointments with yourself - and keep them. Make them short, with easy to achieve goals and reward yourself when done. Timing of appointments depends on your style of working and the stage of writing. Schedule writing sessions close together if you need continuity - there are often 'set-up costs' if the gap is too long. Schedule them further apart if you need time to gain some distance from the work - a gap may help you have better perspective.
- Make appointments with your supervisor with agreed goals about what you will give your supervisor to read before the meeting.
- Ask others to read and comment. These may be experts if you are at the stage of ensuring content is appropriate or non-experts if you are at the stage of ensuring that you are communicating clearly.
- Work with someone else.
- Prepare tables and figures and dictate text for them.
- Do the easiest bits first to overcome the inertia.

## **5. Have papers ever taken longer to write than you had intended? What strategies have you used to prevent or solve that problem?**

- Make a table listing what papers/chapters you are working on and the timing of each stage. Common problems are:
  - only giving the hoped-for final timeline rather than breaking down the tasks into steps. Aim to do only small bits for each timeline.
  - scheduling too many timelines on different papers simultaneously.
- Offer to do a presentation. This will:
  - create a timeline
  - make you think about how to communicate your message
  - give you feedback on whether your communication worked
- See ‘writers block’ in previous section

## **6. How can you improve your writing style?**

Some ideas to help you are:

- Read your paper aloud. It will help clarify which parts don’t read well.
- Choose a paper you like and look at:
  - How it is structured
  - What makes it good for you
  - How the authors develop ideas or themes
  - How they sequence and link sentences
  - How paragraphs are delineated.
- Write your paper, starting just with a heading for each paragraph. These can be retained until the paper is near completion. Some will become sub-headings. The others can then be removed.
- Count how many pages you use for each section/sub-section. Is this the best balance between sections for the intended audience?
- Decide the level of detail that is necessary for the audience you are trying to reach. Many writers over-include detail and cautionary comments. It may be better to be understood than for all your arguments to be fully explained and justified.
- If the paper is in “IMRAD” style, put the Introduction in introduction, methods in methods, results in results and discussion in discussion.
- Check that each item in intro, methods, results and discussion has something in the other sections. Items which do not follow through between sections either need information added or deleted. Omission is often the solution to the problem: it is surprising how often one finds methods described which then have no results, or results about which there is no discussion, raising a question about whether it is worth reporting them.

Discussion can be structured in different ways. One example is:

- Summarise results
- Potential limitations (validity, generalisability)
- How it adds to previous research
- Implications for research
- Implications for practice

### **Some useful references**

#### ***On writing:***

Booth W, Colomb G, and Williams J. *The Craft of Research*. Despite its title it is largely about writing -and is marvellously readable and full of tips.

Peat J. *Scientific Writing: easy when you know how*. 2002

*BMJ Style book*. <http://bmj.bmjournals.com/advice/stylebook/start.shtml>

Docherty M, Smith R. The case for structuring the discussion of scientific papers. *BMJ* 1999, 318:1224-1225. <http://bmj.bmjournals.com/cgi/content/full/318/7193/1224>

#### ***On graphical display:***

Cleveland W. Several books such as *Visualizing Data* or the *Elements of Graphing Data*

Tufte E. Several books, such as *The Visual Display of Quantitative Information*

#### ***On organising your thoughts:***

Straker D. *Rapid problem-solving with post-it notes*. Vermont, USA: Gower; 1997