# How to Write a Manuscript the Painless Way

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For: The Pacific Northwest Journal of Surgery

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Step 1: Develop a Thesis. Publishing a manuscript is about dissemination of your idea or concept. What is the MAIN POINT you are trying to convey (i.e. thesis)? Write this down as a bullet point. No laundry lists. You're only allowed one overarching concept/idea per manuscript. For Basic Science: Are you reporting a new discovery? What knowledge gap in the literature are you filling? For Clinical Studies and Case Reports: Is your study or case record supporting or challenging the status quo in the current literature? Is there a new connection made between seemingly unrelated phenomena? Is this a very rare manifestation of a common disease? Or a common manifestation of a very rare disease? Or is there an aspect of this case that gives it particularly high educational value (e.g. a novel surgical technique that was effective)? Here are some illustrative examples:

## **Basic Science Examples:**

- Cyclic stretch is involved in pulmonary extracellular matrix remodeling.
- Co-culture of osteoprogenitor cells with endothelial cells may allow *in vitro* bone creation.

#### Clinical Study Examples:

- Lap appy performed by junior residents is not associated with increased complications.
- 81mg aspirin daily is associated with fewer strokes in women.

#### Case Report Examples:

- A laparoscopic sleeve gastrectomy developed postop portomesenteric vein thrombosis.
- An HNPCC patient has a novel mutation in MLH1 and had a severe presentation.

#### **Step 2: Get Permission.** Is your thesis worth publishing?

If so, get the Patient Consent Form signed (Case Reports) or IRB Approval (All others).

# Step 3: Download EndNote, Refworks, or other citation manager software of choice.

This is usually for free through your institution.

Step 4: Plan your Figures. Sketch out your figures by hand on a blank sheet. Figures and tables should follow a logical sequence. Each figure should support your MAIN POINT. Case report figures must be de-identified, and may include clinical photos, radiographs, pathology micrographs, tables with laboratory data, graphs with plotted data over time, and others. Sketch out Figs. 1, 2, 3, ...Narrate your story verbally so anyone can understand without reading anything. What you say now will later be formalized in captions.

## **Step 5: Start a Template.** Download our Word doc template for **Case Report:**

## http://pnwjs.org/PNWJS Case Report Template.docx

<u>Step 6:</u> Local File Management. Create a Folder on your computer for your project. Put your .docx manuscript drafts directly here. Arrange by "Date Modified." Start all file names with the date: "6-2-2017 XXXX," and create a new copy for each day you work. Retain old copies—they'll sometimes come in handy. Start with one of the blank templates from Step 4, and you'll flesh it out over time.

Then, create subfolders for: "Figures", "References", and "Supporting Files":

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5-14-2017 Revised Figure 1 600dpi.tiff	5/14/17, 11:54 PM	53.8 MB	TIFF image
6-2-2017 Revised Figure 1 300dpi.tiff	Yesterday, 8:37 PM	12.9 MB	TIFF image
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23898174 EETs promotion pnas.201311565.pdf	4/3/16, 6:30 PM	877 KB	PDF Document
24539719 Hamilton Clapaper also 1304821.pdf	8/14/16, 2:37 PM	3.8 MB	PDF Document
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Screen Shot 2017-06-03 at 1.09.43 AM	Today, 1:09 AM	325 KB	PNG image

<u>Step 7:</u> Make your figures and write the captions. Save as high-resolution TIFFs (600dpi). Insert them into the manuscript template word document on separate pages at the end of the file as lower resolution to keep the file size low (300dpi).

<u>Step 8:</u> Collect your References. By now, you should have an idea of what's out there in the literature that pertains to your topic. So you need to collect references for your manuscript on your hard drive.

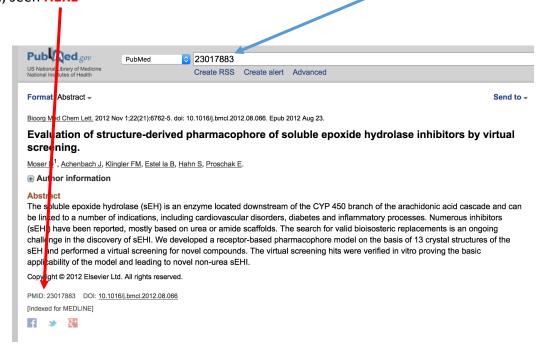
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Solution: Log into pubmed through your medical institution library website, and this should get you past most paywalls...You should see a proxy http address in the URL bar instead of the usual <a href="https://www.pubmed.com">www.pubmed.com</a>

By the way, now you're ready for two golden rules of scientific writing:

- (1) Read all articles you intend to cite. You don't need to read them word-for-word, but read them well enough to be really sure you're not misrepresenting the point you're trying to make.
- (2) Don't cite review articles. Citing review articles is sign of laziness and intellectual weakness. Instead, use them to learn the topic, and to find the original articles for the primary data. Cite those original studies instead. Don't be afraid to cite 100-year old articles if necessary.

<u>Step 8 (References, continued):</u> Download each article PDF into your References folder. Begin the file name of each with the Pubmed ID (PMID) (see above). The PMID is a <u>searchable</u> unique identifier for every indexed article, seen <u>HERE</u>



<u>Step 9</u>: Write! If it's Basic Science: Write the Results & Methods sections first. Then Introduction. Then Discussion/Conclusion. If Case Report: Write Case Presentation first, then Background, and then Discussion/Conclusion. <u>For all manuscripts: Write the abstract LAST.</u>

Step 10: Work with References Efficiently (EndNote, Refworks).

- <u>Do Not</u> manually enter or type in references into your manuscript file!
- This will save you countless hours of work.

<u>Step 11:</u> Revise your work. Writing is re-writing, they say. After you have a first draft, print a copy and keep it in your pocket. Go through it during those random short periods of down-time on the wards. Check author guidelines for your target journal and adapt your manuscript to fit those size/format requirements.

**Step 12**: Submit for Peer Review! (Good luck!)