Writing up the Results

The finish line is in sight. All that is left to do is to interpret and write up the results of your research study. If you took the time to include all the necessary components in your research proposal then all that is left to do at this point is to include the write up of the results and a concluding section in addition to making certain the literature (background section) is up to date.

If you are planning to submit your study for publication then your first step is to think about whom your target audience is and the journals which might favor the type of study you have done. This is something you want to discuss with your faculty mentor and possibly other faculty and colleagues. The literature you reviewed for your research project will also provide you with some insight into what journals might be interested in publishing your work. A couple of questions you need to ask yourself and keep in mind when selecting a journal are:

- What is the target audience? What were the study outcomes and what was measured?
- Who will benefit from the study results?
- Will it impact practice management?
- Does the specialty college have a journal interested in publishing Resident research?

Determining where you want to submit your manuscript for publication is important as each journal has slightly different publication requirements. If you want to make this a 1-step process and kill 2 birds at once (fulfill your residency research requirement and publish your manuscript) you want to write up your final report according to the selected journal’s specification.

Using a reference management software program such as EndNoteWeb makes the writing process a lot easier. If you have kept track of the references you found early in during this research process then you have your Endnote Library readily available. A great advantage is that this program incorporates the reference instructions for most of the journals and it only takes 1 click to change the reference style by selecting the specific journal you would like to submit your article to. Most of the hard work with respect to references is done for you!!

Each journal will have specific requirements in terms of manuscript style, electronic submission, cd or hardcopy form, length of article, number of tables and/or figures, etc. Once the article has been submitted, it will be sent to reviewers. Questions, comments, revision requests will be returned and your
submission can be accepted, accepted with revisions, or denied. As the author(s) you have the opportunity to respond to the initial review. The revised version is then resubmitted. You may disagree with the reviewer’s suggestions but would need to address their concerns in a letter to the editor. The journal editor then decides whether to accept or reject your manuscript. When accepted, the author(s) will be sent “galley proofs” from the copy editor. The author is responsible for reviewing style, flow and typographical errors. Upon completion, the article is then sent back to the journal and published!!

Whether or not you are considering submitting your research for publication there is a defined format according to which research papers are written. The acronym “IMRAD” stands for Introduction, Methods, Results, and Discussion, and is the format expected of most observational and experimental articles.

**Acronym for sections of a research manuscript:**
- Introduction
- Methods
- Results
  And
- Discussion

A great resource to consult when writing and publishing your article is: International Committee of Medical Journal Editors. *Uniform Requirements for Manuscripts Submitted to Biomedical Journals: Writing and Editing for Biomedical Publication*. 2007. This can be accessed online at: [http://www.icmje.org/](http://www.icmje.org/).

This site really covers everything you need to consider regarding your article: publication ethics (such as authorship, sponsorship and accountability), copyright issues, format, manuscript preparation and submission, overlapping publications, reference citation, editorship, etc.. Their recommendations and instructions for
preparing a manuscript for submission to a biomedical journal are included in Appendix 9.

Even if you do not yet know where you would like to have your results published, making certain your manuscript meets these uniform requirements set by top scientific journals, such as *JAMA*, *The New England Journal of Medicine*, *The Lancet*, *Annals of Internal Medicine* will give you a headstart. Think about it this way: if your article meets the requirements set by the top medical/scientific journals in the world, any and every journal with less strict guidelines will accept it as well with minor changes and effort needed to meet their publication requirements.

Last but not least – SHARE the good news when your abstract, poster and/or presentation is accepted at a conference. And SHARE the great news when you are the author or co-author of an article accepted for publication. We acknowledge these accomplishments in the MWU-OPTI Research Newsletter and in order to do so we need to hear from you!! Please share this information with your Program Director, the OPTI administrative offices on either campus (for Arizona contact Cheryl Kibarian at ckibar@midwestern.edu, phone (623) 572-3836; for IL contact Lisa Szymanski at lszyma@midwestern.edu, phone 630-515-6178) and the Office of Research and Sponsored Programs (Lindsay Goboly for AZ at lgobol@midwestern.edu, phone: (623) 572-3728; Barb LeBreton for IL at blebre@midwestern.edu, phone (630) 515-6394).