

1. What are some ways one can get involved in a project that will be published?

- a. Consider publishing papers while writing your thesis and dissertation
 - i. Use thesis material to get at least 1 manuscript published
 1. Publish thesis itself
 2. Should be able to get 2-3 additional papers from thesis
 3. Be first author on any material from your personal thesis
 4. Work closely and consistently with thesis advisor – put the time into the process (refer to question #4)
 - ii. Keep publishing papers post-graduation – do not lose momentum
- b. Make sure you know the co-authors you are working with – need to work with people equally motivated to get published
 - i. Acceptable to ask project collaborators if they have plans of publishing their work
 - ii. Speak to advisors as needed to make sure you are on publishable projects
 - iii. Know the intentions of the project you are working on before beginning any of the work
 1. Also acceptable to turn down a project if it does not meet your personal experience goals – however, as graduate students, it is important to gain as much exposure as possible
- c. Applied vs. Methods
 - i. Boston University provides a diverse mix of the two types of publications
 - ii. Applied manuscripts
 1. Tend to have a “team” of authors – several collaborators
 2. Clinical – fair amount of effort
 3. Especially easy when data is readily available (e.g. Framingham Heart Study)
 - iii. Methods manuscripts – more theoretical
 1. Small group of authors
 2. Take larger amount of effort than clinical papers – may take longer to publish
 - iv. Consider future career goals
 1. Focus time and work on papers that will build up your CV to the area you wish to be in
- d. Collaborative papers
 - i. Easier to get on
 - ii. More frequent
 - iii. Aim to get on as many as possible before graduation

2. How does authorship work? Who should be primary, secondary, etc.? What is the role of the biostatistician in drafting the manuscript?

- a. Order DOES matter within the first few authors on a paper – if can be first author, take it
- b. Important roles – first, second, third (arguably), and last
 - i. Any other position considered “other”
 - ii. Generally, last position is the senior project investigator – although not always the case
 1. Last position considered to have prominence
- c. Names generally listed in order of contributions to paper (descending – except final author)
 - i. Other fields of study list authors alphabetically so not as obvious who the primary author(s)
- d. Any authorship is quotable on a CV
 - i. A CV with publications is much more desirable than a CV without publications
 - ii. Discuss potential authorship before a manuscript is even written
 - iii. Some groups are known to place statisticians in the acknowledgements but not consider them for authorship
 1. Acknowledgements do NOT count on a CV
- e. Authorship varies based on experience
- f. Biostatistician (if not primary investigator) should fall in the 2nd – 5th author position (for running, reporting, and explaining analyses)
- g. Make sure you know what your name is appearing on
 - i. May not want to necessarily be on every paper – make sure meaningful and you can stand behind (more of an issue for non-students)
 - ii. Review manuscript if your name appears

3. **What is considered a “good” number of published papers I should be aiming for by the time I graduate (PhD)?**
 - a. Dependent on what you want to do upon graduation
 - i. Academia – First author publications important (thesis and additional)
 - ii. Industry – Some publications, more of a mix of first and collaborative work (to show capable of working closely with peers)
 - iii. Good idea to go for both first authorship and co-authorship (a couple of each before graduation)
 1. At least have some first authorship papers in the works at graduation
 - a. Harder to put together first authorship
 2. Definitely try to build up collaborative repertoire as much as possible before graduation
 - b. Make sure to publish thesis!!
 - i. This is a definite publication outside of other work
 1. In case projects you collaborate on are not completed until after you graduated
 - c. If not getting enough publications from assistantship, could reach out for extra work
 - i. However, make sure to stay focused on thesis work first and foremost
 - d. Publications = Research experience → Very valuable! Especially to students
 - i. Consider unpaid internships if needed – experience will pay off
 - ii. Consulting – another avenue
 - iii. Try to have at least one paper as a senior statistician
 1. Huge boost to be primary on choosing avenues for analytics
 - e. Research experience without publications is also important for students
 - f. Research assistants – should get at least a couple of papers before graduation
 - g. So much being published nowadays – Expectation is that students will have at least some publications under their belts before graduating
 - h. Unusual to graduate without any publications
4. **Is there a “normal” time frame between starting on a project and getting published occurring?**
 - a. Time frame for entire projects is quite variable
 - b. Goal should be to make manuscript as polished and clean as possible – focus less on rushing through and more on getting your paper correct before sending out for review
 - i. Good time investment – could minimize review time
 - c. Reviewer time – approximately 2 months (good!)
 - i. Somewhat variable, depending on field and journal
 - ii. Could take upwards of 6 months to a year
 - iii. When submitting to a journal, try to figure out the turn-around time for that particular journal
 - iv. If submit to a journal and do not hear back in 4-5 months, can e-mail journal to find out status
5. **Types of Journals:**
 - a. **Are there any differences between types of journals in terms of getting published? (i.e. What difference would there be between a journal focused on clinical trials compared to one focused on genetics?)**
 - i. Different journals = different audiences
 1. Wide spectrum – very applied to very theoretical
 - a. Mathematical journals – particularly hard to appeal to
 2. Specific subject matter journals
 - ii. American journals vs. International journals
 1. American journals tend to have a faster turnaround time
 - iii. Online journals
 1. Exclusively online vs. transitioned to online availability
 2. More publication costs due to advertising
 3. Impact factor – questionable if same as paper journals
 - a. However, many reputable journals have gone online
 - iv. As students, important to get a “flavor” of what different journals offer
 1. Try to explore journals in your own time to get a sense of what different journals look for in the publications they approve
 2. Review papers
 - a. Will see how vastly different papers can be written
 3. Scan table of contents of journals – can sign up for free “table of contents” e-mail alerts

4. Wide range of costs for subscriptions to journals
 - a. Price increases once no longer a student
 - b. Join American Statistical Association
 - c. BU gives students free access to many publications – need to login through BU with ID and password
 - d. Many student journals are free
 - i. IMS journals
 - v. See Article on journal ranking**
- b. How are “tiers” of journals defined?**
 - i. Higher tiers = higher impact factor of journal on public
- c. How do you choose an appropriate journal to submit to?**
 - i. Students – advisors should help you decide which journals to submit to
 - ii. Broad range of journals – depending on work focus, important to work on getting into as many different journals as possible
 - iii. Aim high when choosing a journal to submit to but be realistic
 1. Realistically look at your paper and decide which audience will be most receptive to my research findings
 2. Not every topic is worthy of a top tiered journal
 - iv. Be familiar with the types of articles that appear in each journal and submit your manuscript to one that is most appropriate
 1. Visualize a journal of interest and decide if your article would fit among its usual content
 2. If your topic is similar to topics in one journal, go for it – journal may be more likely to pick up your research
 - v. Balancing act between the need to get published (so may be willing to publish in any journal) vs. getting into a highly reputable journal (more difficult)
- 6. What are the steps in the review process? How long do you normally have to wait to receive feedback on a submitted manuscript?**
 - a. Once paper is submitted somewhere, cannot submit somewhere else simultaneously
 - b. Ask advisor to do a “practice review” with him/her
 - i. Practice reviewing actual articles to understand how to read, review, and discuss
 - ii. Gives an idea what review process is like
 - iii. Statistical reviews – look at methods and results mostly
 - c. Reviews
 - i. Potential outcomes
 1. Flat out rejection – now what?
 - a. If from editors, usually comes very fast (may have to do with your article not appropriate for that specific journal)
 - b. Try to submit elsewhere
 2. Reviewed again after substantial revisions (no guarantee of acceptance)
 3. Accepted with minor revisions
 - ii. Typically one review cycle, sometimes two
 - iii. Comments to the author (you) vs. comments to the editor (which you will not see)
 - iv. **Helpful reviews vs. highly negative reviews (What do you do when you disagree with the reviewers’ comments/requests?)**
 1. Some comments are constructive while others may not be
 - a. Some journals have higher caliber statistician reviewers while others (more topic specific) may not
 - i. Some journals have a team of statisticians while others do not have any
 - b. Non-statistical reviewers may be reviewing statistics
 - c. Write a response
 - i. Need to be polite and formal when responding to comments from reviewers
 2. Balancing act of making reviewers happy and staying true to content of paper
 - a. Psychological process with reviewers
 - b. Most feedback is worth considering and listening to

- c. Need to consider if reviewer's requested revisions are worth the effort – if not retract from journal and submit somewhere else
- d. Two avenues
 - i. Make changes as reviewer requests
 - 1. Important to make reviewer “feel good” by reading your responses and changes
 - ii. Explain why analyses or study was done a certain way and see if feedback changes (may need to add explanation to paper if asked to)
- e. Answer as many questions as possible but could cite page or scope limitations as to why content is not in paper
 - i. Cover letter
 - ii. Address concerns

** http://www.acadiau.ca/~pranjan/links/journal_ranking.pdf