Resident Research Guidelines

How to get involved in a research project:

- 1. Check out the Research During Residency web page: < Research During Residency | Department of Medicine (vumc.org) >
- 2. Check out the Center for Health Services Research resource: https://www.vumc.org/hsr/vanderbilt-research-resources-health-services-research
- 3. Schedule a meeting with a liaison committee members Plan to have this meeting before your first research block.
 - a. Each Division in Medicine has a resident research liaison
 - b. List is available on the Research During Residency web page and below
 - c. Be prepared to discuss:
 - i. Any prior research experience.
 - ii. Any specific interests (eg. Pulmonary hypertension, transitions of care, etc)
 - iii. Any specific research questions if you have them
- 4. No idea what you want to do?
 - a. Don't panic. Contact me (andrew.defilippis@vumc.org)
- 5. Reach out to the 2-3 faculty suggested by the Research Liaison
 - a. Be prepared to discuss:
 - i. Any specific research questions or interests you have
 - ii. Your timeline (schedule, research blocks, etc)
- 6. Characteristics of a good resident research project
 - a. Can be done in your off hours and free time
 - Wet lab work and prospective clinical studies are VERY difficult to do during residency.
 - b. Resident projects that are predicated on the analysis of existing data (existing cohorts, synthetic derivative, etc) are typically most successful
 - Check out Biovue: https://victr.vumc.org/biovu-description/
 - c. Addresses a very specific, focused question

Once you find a mentor and project (Goal: by end of PGY-1 year):

- 1. Establish expectations:
 - a. Expectation setting and management are vital to any successful research partnership/mentorship.
 - b. Establish need / plan for IRB approval
 - c. It is very important to sit down with your mentor to explicitly review their expectations regarding project timelines, responsibilities, abstract/manuscript submission deadlines etc. EARLY in the project planning phase.
 - d. Make sure you understand your role in the project and know exactly what you are going to be doing so that there are no misunderstandings. Etablish who will be doing the statical analysis. Some mentors will have there own statistical team, others will not. Vanderbilt biostats clinic is an excellent starting point < <u>Clinics < Main < Vanderbilt Biostatistics Wiki (vumc.org)</u>>. Email: <u>biostat-clinic@vanderbilt.edu</u>
 - e. It is very important to ask your mentor about their requirements for authorship order (1st/2nd/3rd author). Remember, the authorship order is largely determined by each person's contribution to the project and relative weighing of different aspects of project completion (data gathering, statistical analysis, manuscript writing etc.) and should be discussed UPFRONT.

- 2. Discuss timeline and milestones
 - a. Set clear timelines and milestones
 - i. Be realistic about how long it will take to do the work
 - b. Plan to attend a national meeting
 - i. Presenting an abstract at a national meeting is a great way to get something concrete on your CV/fellowship application
 - Remember that abstract deadlines are many months before the meeting (6-9 months for most meetings) so you should discuss this with your mentor early on
 - iii. The DOM has money for you to attend a meeting
- 3. Get to work!

Pro-Tips

1. <u>Start early.</u> Getting a project up and running takes time, often several weeks or months. Clinical projects require IRB training and approval and can take 4-6 weeks. Allow about 3 months to get all of this done before your research blocks.

Choosing a Research Project and a Research Mentor. Circulation 2009;119;1832-1835

2. <u>Be prepared to do the work.</u> Research is time consuming and can be tedious. Be realistic about what you can accomplish in the time you have to dedicate to research. If you say you will do something, make sure you deliver in the agreed upon time frame.

PubMed Health – PICO framework:

https://www.ncbi.nlm.nih.gov/pubmedhealth/PMHT0029906/

Duke guide to searching PubMed:

https://guides.mclibrary.duke.edu/ebmtutorial/home

3. <u>Be pro-active.</u> It is your responsibility to keep the momentum going on your project. Check in with your mentor on a regular basis to provide updates, schedule meetings, plan next steps. You are in charge of making your project happen. Don't wait for your mentor to contact you.

Mentors are busy, responding to tasks in a timely manner allows for efficient feedback—a response to a question in 48 hours does not require the mentor to relearn the question.

4. <u>Plan ahead.</u> Preparing research products (abstracts, posters, manuscripts, presentations) takes time and requires input from all authors. For initial review, send first draft to co-authors at least a 4-6 weeks before the deadline and allow for a 1 week turnaround time. Expect at least two rounds of edits for each item. Larger products (manuscripts) take longer than smaller products (abstracts).

BRET Link: https://medschool.vanderbilt.edu/bret/self-paced-scientific-writing-training/

5. <u>Use Institutional Resources.</u> VUMC has many resources available to help you get your project done. These include Biostatistical support through weekly Biostats Clinics and a host of core laboratory facilities.

Biostats clinic: <u>biostat-clinic@vanderbilt.edu</u>

REDCap training videos: https://redcap.vanderbilt.edu/index.php?action=training

6. <u>Get approval.</u> Ensure all final documents submitted for consideration for publication have been approved by the mentor.

Don't hesitate to contact me if you have any questions or concerns.

Andrew DeFilippis, MD, MSc < Andrew.defilippis@vumc.org >

LIAISON COMMITTEE MEMBERS

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