

Helping Junior Clinicians and Students Find Their Research Niche

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Disclosures

- *I have no conflicts of interest associated with this presentation.*



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Objectives

- The attendees will be able to determine reasons why a mentee wants to do research.
- The attendees will understand the importance of assessing their own strengths when developing a mentoring team.
- The attendees will be able to develop a mentoring plan based on the needs and strengths of the mentee.



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Why Does A Mentee Want to do Research?

Some potential reasons:

- The desire to understand why something happens
- The desire to improve patient outcomes
- The desire to help patients in your practice
- The desire to develop new treatment paradigms
- Because its fun / mentally stimulating
- Because I have to



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Why is Important to Know This?

- Your approach to mentoring should be based on what the end goals are for the mentee.
- If you understand this you will know:
 - If you are the correct mentor for them
 - Examples:
 - If a clinician wants to understand why his patients with disease x are particularly sensitive to drug Y. As a Basic Science Pharmacologist I can add value to the research mentor role.
 - If a clinician wants to do a quality improvement study in the treatment of patients with scoliosis. I would add minimal value as a research mentor.
 - The best way to mentor them
 - The depth and type of mentoring will differ based on their reason.
 - Examples:
 - If someone is interested in understanding the basic science of a disease process and eventually leading a research team.
 - The mentoring process will have a lot more in depth interactions and probably involve more time commitment. Ultimately (for me at least) is more rewarding.
 - If the reason is that the department requires some form of scholarship for promotion and the mentee does not want to spend that much time on research.
 - The approach will be somewhat different
 - However, with the correct mentoring approach you can often help this person become more interested in research.



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Some of the Perceived Barriers to Overcome

Perceived barriers to research amongst residents

- Lack of experience / skill
- Lack of time
- Lack of resources
- Lack of interest

We can help with these

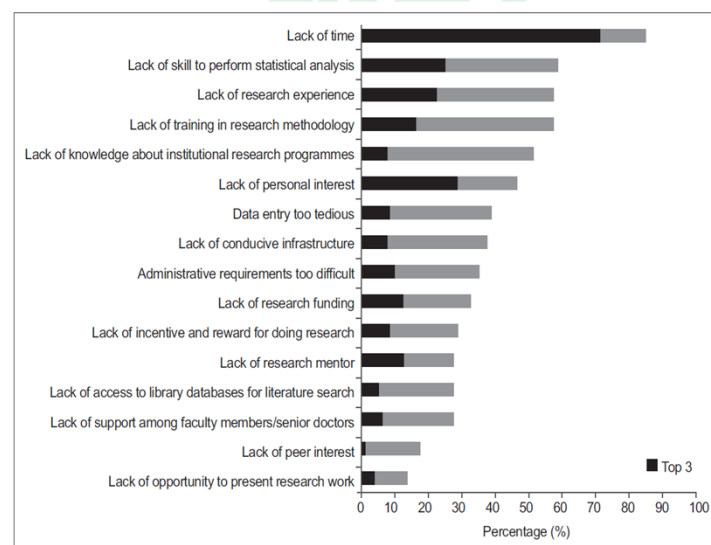


Fig. 1 Bar graph shows the barriers to performing research among the residents (n = 80), including barriers to starting or continuing with research during residency training. The top three most important barriers to each resident are cumulatively represented by the bars in black.



Mentoring Conversations

- Find out what the career goals of the mentee are
- Discuss the research area of interest
- Discuss the institutional requirements (do they even know what track they are on?)
- Share your CV and discuss your pathway as an example
- Find out the research strengths and weaknesses
- What is the mentees time commitment and interest for the research



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Are you the Correct Mentor?

Once you have found out what the mentee needs, you have to have a frank discussion (and some self reflection) on what you can provide.

- Are you
 - A content expert
 - A writing expert
 - An institutional expert
 - A career expert
 - A supportive voice
- Do you have the time commitment required to mentor
- Being coupled with the wrong mentor or with a mentor that can not provide the time needed can significantly impair the mentees growth.
- Its ok to say no (though you should help the mentee find a more appropriate choice)



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Mentoring Networks

- If you can't help with all of the aspects a mentoring network is the best way to go
- In a study by DeCastro (2013) K-awardees at the University of Michigan stated the following benefits when describing their mentoring network
 - **“Everybody knows different things”**
 - **“Safeguarding against inadequate mentoring”**
 - **“Women sometimes need to talk to women”**
- For PhD and MD/PhD students, this is the approach we take with the graduate committee made up of 5 individuals



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What Should a Mentoring Network Include?

Depending on the type of research and career goals could include:

- A clinical mentor
 - A basic science mentor
 - A teaching mentor
 - A tenure mentor
 - A life mentor
 - A writing mentor
-
- A individual mentor can fill multiple hats
 - The network is should to evolve over time



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Once you have a Tentative Agreement

- Its always best to formalize this with a mentoring plan that you all agree on
- Should outline
 - Mentor responsibilities
 - Mentee responsibilities
 - Regularity of meetings
 - Expected outcome timelines
- Should have
 - Realistic sets of goals
 - Remember confidence can be built by hitting multiple targets along the way



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Remember as a Mentor

- Be prepared to look at things from the Mentees view point.
- You are not aiming for the goals that you want, but for the goals of the mentee.
- Think about what is doable based on what they have told you about their own work, research, and life goals.
- Be constructive, especially when explaining if a goal is unrealistic.
- Use motivational interviewing techniques.



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Developing the Niche

What content areas are of interest to the Mentee?

- Are they Interested in:
 - Understanding the mechanism of disease / treatment?
 - May be interested in clinical and translational / basic research.
 - Improving how they practice?
 - May be interested in quality improvement initiatives.
 - Interested in teaching?
 - May be interested in exploring the best ways to teach medical students or residents.
 - Health disparities?
 - May be interested in pursuing activities around health policy, advocacy or clinical research.
 - In evidence-based care?
 - May be interested in conducting evidence-based reviews on specific clinical content areas.



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Start Small

- Many junior clinicians and medical students are clueless how to start and are looking for the “perfect” project.
- Try to get them to think about projects that can start small but can scale to what ever their eventual goal is.
- Help them find collaborators and prepare their pitch.
- Help provide research support
 - Summer medical school research programs
 - Interactions with graduate programs
 - Identify potential small grant mechanisms
 - Introduce them to institutional grant officials
 - Identify conferences / journals



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Scaling up

- Develop a realistic time line
- Remember this should include time for all career aspects.



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What That Could Look Like

	Year 1	Year 3	Year 6
Clinical	Gain clinical experience		Develop expertise in clinical niche and give talks
Teaching		Gain teaching experience (Didactic and preceptoring)	Refine skills, workshops etc
Skill Building		Attend topic based and faculty development workshops	Consider longitudinal training (master's etc)
Mentor / Sponsorship		Meet regularly with mentoring team	Become a mentor (medical students / graduate students / residents)
Networking		Engage with local clinicians and basic scientists at your institution	Join relevant national societies Volunteer for speaking and service opportunities
Scholarship and Research	Develop project idea	Regular Papers	Conference abstracts Grant applications (Initially small institutional)
Administration		Department responsibilities	Institutional responsibilities National responsibilities

Essential Points

- Frank and honest bi-directional communication is key
- Regular constructive meetings are essential
- Do not project your research and career goals onto the mentee
 - This is about their goals not yours
- Be realistic with the career plan
 - There will generally be more than research to consider
- Motivate not denigrate
 - You are all trained in motivational interview techniques, this is a good time to use it



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Some References and Reading

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