



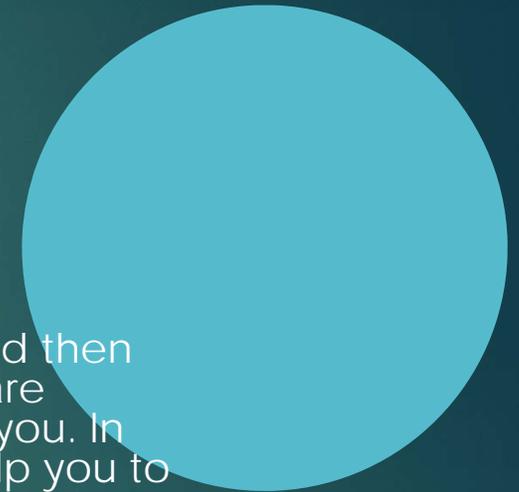
How to Choose a Research Mentor

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What is a mentor?

- ▶ Someone who makes a long-term commitment to your career
 - ▶ Advisor
 - ▶ Advocate
 - ▶ Critic
 - ▶ Instructor
 - ▶ Counselor
- ▶ “A good mentor will help you define your research goals, and then support you in your quest to achieve them. He or she will share knowledge, provide encouragement, and hopefully inspire you. In addition to promoting your research, your mentor should help you to develop your career goals and construct a scientific network. Above all, your mentor should be someone you trust to always keep your best interest in mind.—from Thoughts on Choosing a Research Mentor”

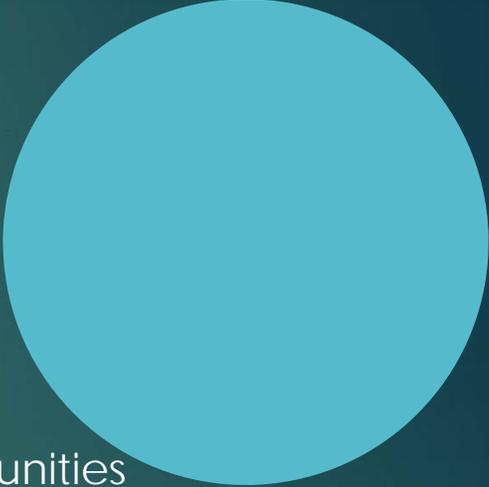


Three Major Factors in Selecting a Research Group

- ▶ The research program
- ▶ The personality and mentoring style of the PI
 - ▶ More junior may need more guidance/support, more senior is more about success of the program
- ▶ The research environment



Qualities of a Good Mentor



- ▶ Well-known and well-respected in your field
- ▶ Open-minded, supportive, good listener
- ▶ Communicates clearly
- ▶ Fosters independence
- ▶ Expresses expectations initially and often
- ▶ Dedicated mentor, makes time for you
- ▶ Acknowledges your contributions
- ▶ Advocates on your behalf, supports external training opportunities
- ▶ Introduces you to researchers in your field at meetings or conferences

Remember that no one is perfect! May not meet all of these criteria

Qualities of a Good Mentee

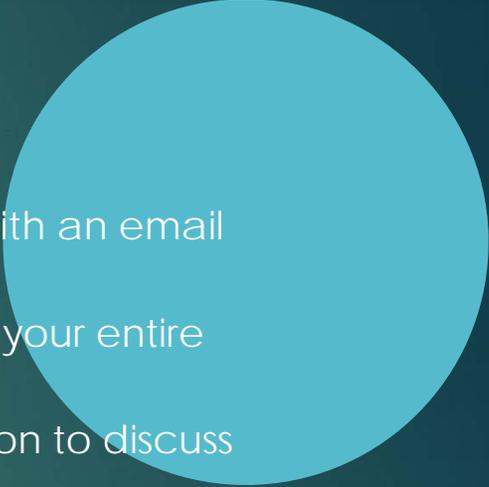


- ▶ Clear definition of the support and help you think you need
- ▶ Recognition that one person cannot help you meet all your mentoring needs
- ▶ Understanding that your mentoring needs change over time
- ▶ Ability to accept and work through meaningful criticism
- ▶ Interest in working with mentors to help yourself grow
- ▶ Commitment to make an effort to enable the relationship to develop and function

Do Your Homework Before You Begin

- ▶ Talk to other students/fellows/trainees to get feedback on these qualities
- ▶ Do they receive enough direction, feedback/advice?
- ▶ Is the mentor accessible and available?
- ▶ Read up on your possible mentor's work, manuscripts.
 - ▶ Topics should be of interest to you
 - ▶ Recent, high-quality journals needed
- ▶ Understand the mentor's current research funding
 - ▶ Important for career development awards

First steps



- ▶ First and foremost, take the initiative
 - ▶ If introduced at a meeting, you can give them your card
 - ▶ But better to get their email and followup the introduction with an email from you
 - ▶ Any email should be short and to the point, do not describe your entire research agenda here!
 - ▶ Ask for their assistant's email to set up a call/meeting in person to discuss if they agree to the meeting
- ▶ Things not to do:
 - ▶ wait for them to email you after handing them your card
 - ▶ Call them out of the blue
 - ▶ Make an appointment and not show

The First Meeting



- ▶ Be prepared. Be prepared. Be prepared.
 - ▶ Bringing a bulleted list of questions and thoughts to a meeting is perfectly acceptable
 - ▶ Taking notes during your meeting is acceptable and frankly, expected
- ▶ Some questions to consider asking:
 - ▶ Will you have your own project?
 - ▶ Will you be able to publish the results?
 - ▶ How does authorship work in their research program?
 - ▶ If your work is selected for presentation at conferences and workshops, will you be given the opportunity to attend?
 - ▶ How often will you be meeting one-on-one? (should meet at least monthly)
 - ▶ What expectations do they have of you? What is the timeline of this project?

SAMPLE QUESTIONS FOR POTENTIAL MENTORS:

When meeting with potential mentors, you need to determine whether their research programs and mentoring philosophies match your own interests and needs. We've divided sample questions into categories. We recommend that you start with questions about the research program before addressing your potential role in the research group.

QUESTIONS ABOUT THE MENTOR AND HIS/HER RESEARCH PROGRAM:

- How often do you meet individually with your students and fellows?
- Does your research group have regular group meetings? If so, how frequently?
- What qualities do you value most in a student or fellow?
- What are your current research projects, and at what stage of completion are they right now?
- Do you allow students/fellows to design their own projects or do you prefer to assign projects?
- How often do you collaborate with other research groups?
- What process do you use to evaluate your students and fellows? How often does this occur?
- How many former students and fellows have you mentored, and where did they go after leaving your research group?

QUESTIONS ABOUT YOUR POTENTIAL ROLE IN THE RESEARCH GROUP:

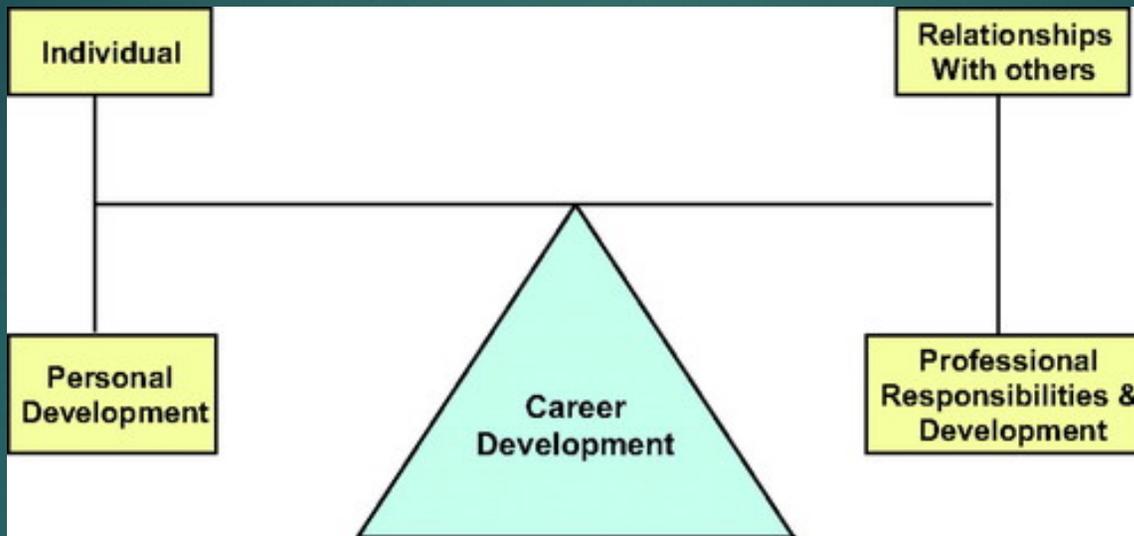
- What might I be working on here?
- What technologies, approaches, and model systems would I have the opportunity to learn and develop?
- Would I be able to take courses or participate in training programs?
- Would I be able to attend scientific meetings? How often?
- Would I have opportunities to give formal and informal research presentations?
- Would I be working on my own project or sharing a project with other members of the research group?
- Is there a specific person in the group that I could go to with day-to-day questions about laboratory procedures and supplies?

ADDITIONAL QUESTIONS FOR ADVANCED TRAINEES:

- If I joined this group, would I have the opportunity to train or mentor junior members of the research group?
- Do you allow students and fellows to co-author review articles with you?
- Do you allow fellows to pursue independent projects to take with them to their own faculty positions?
- What would you expect of me if I disagreed with your interpretation of results or even the value of a research project?

Questions they will ask you

- ▶ Why are you interested in research?
- ▶ Will you be pursuing research as a career?
- ▶ How much time will you be able to spend on the research in our program?
- ▶ What types of research ideas and questions do you have?
 - ▶ This is critical: don't be freaked out if you don't have good research ideas. This is usually stage-appropriate for junior investigators
 - ▶ If you're prepared and have read their work, you can ask them to talk more about a specific area that intrigued you
 - ▶ After discussing, offer to bring a list of ideas to the next meeting you have



Michael Bettmann. *Circulation*. Choosing a Research Project and a Research Mentor, Volume: 119, Issue: 13, Pages: 1832-1835, DOI: (10.1161/CIRCULATIONAHA.107.752683)

Mentorship Compact



- ▶ There are many examples out there of mentoring compacts for researchers
 - ▶ Lays out expectations for the mentee and the mentor both
 - ▶ Publications
 - ▶ Responsibilities
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EXAMPLE: UNIVERSITY OF PITTSBURGH TEAM MENTORING AGREEMENT

Clinical Research Scholars Program (CRSP) Team Mentoring Expectations

A critical element of the CRSP is the use of team mentoring. For this program, team mentoring means more than having multiple mentors working with the mentee; it means having mentors working together as a team to contribute to the mentee's career development. The concept was developed through the NIH Roadmap initiative, which found that "the scale and complexity of today's biomedical research problems increasingly demands that scientists move beyond the confines of their own discipline and explore new organizational models for team science." Today's research requires bringing together the perspectives of multiple disciplines to examine a research question right from the beginning. This multidisciplinary approach allows us to develop and conduct research projects that are new and innovative and that would not be possible using a traditional single discipline or multiple disciplines working individually with a mentee approach. It is the synergy created when investigators from multiple disciplines come together that will result in the development of new scientific approaches. This team mentoring model provides benefits for the mentee as he/she learns multidisciplinary methods of discovery and the mentors as they have the opportunity to bring fresh perspectives to the research question they are examining. The CRSP is promoting the development of this team science through the conduct of multidisciplinary research and the use of team mentoring for mentees.

Team Mentoring Goals

1. To enhance the supportive academic environment for team science for the mentee.
2. Working as a team and providing multiple perspectives, to facilitate the entry of mentee into the University culture, including the structures, processes, and interpersonal climate of the University.
3. To facilitate the development of appropriate clinical research skills and team science approaches related to the balance and evaluation of research, scholarship, and service.
4. To provide opportunities for developing and working on mentored and independent multidisciplinary research projects with a multidisciplinary clinical research team.
5. To enhance decision-making and other skills involved in working with a team related to the mentee's career development and advancement.

Expectations of Mentors

1. The mentoring team must conduct regular and frequent team meetings with the mentee. There should be a minimum of one hourly meeting of the primary mentors and the mentee per week, and at least one hourly meeting per month of the entire mentoring team and the mentee. Consultants contributing to specific research issues should meet with the team when these issues are being discussed or decisions regarding these issues are being made.
2. The mentoring team must participate in the one-day team mentoring training retreat to obtain or enhance skills in team mentoring.

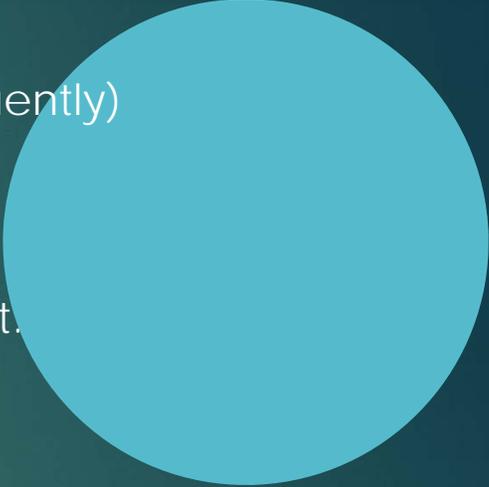
3. The mentoring team will develop, with the mentee, clearly delineated specific expectations of the substantive learning/skills to be achieved through the use of team mentoring in the program.
4. The mentoring team will develop, with the mentee, clearly delineated specific milestones and timelines for achieving program goals.
5. The mentoring team will attend meetings and seminars in which the mentee is presenting.
6. The mentoring team will participate in biannual evaluations and assessments of the team mentoring relationships. The Multidisciplinary Advisory Committee (MAC) reserves the right to change the mentoring team should difficulties continue for a sustained period of time.
7. The content of all exchanges between the team mentors and the mentee are subject to the expectations of professional confidentiality. Although this confidentiality is legally limited, the contents should not be discussed with anyone else without written permission from the mentee.

Expectations of Mentees

1. The mentee must conduct regular and frequent team meetings with the mentoring team. There should be a minimum of one hourly meeting with the primary mentors per week and at least one hourly meeting per month with the entire mentoring team. Consultants contributing to specific research issues should meet with the team when these issues are being discussed or decisions regarding these issues are being made.
2. The mentee must participate in the one-day team mentoring training retreat to obtain skills in working in a team science environment.
3. The mentee will develop, with the mentoring team, clearly delineated specific expectations of the substantive learning/skills to be achieved through team mentoring in the program.
4. The mentee will develop, with the mentoring team, clearly delineated specific milestones and timelines for achieving program goals.
5. The mentee will share career plans, recount initiatives on behalf of his/her professional development; ask for advice; reflect on the mentoring team's observations and inform the mentoring team about the results of the mentee's efforts.
6. The mentee must present the mentee's work to the MAC and at seminars with the mentoring team in attendance.
7. The mentee will participate in biannual evaluations and assessments of the mentoring team relationships. The MAC reserves the right to change the mentoring team should difficulties continue for a sustained period of time.
8. The mentee will keep the content of the team mentoring relationship confidential; the mentoring team may share personal information that they wish to be honored as confidential.

Individualized Development Plan



- ▶ Update this for your mentor regularly (ask them how frequently)
 - ▶ Spend time on it! This self-reflection is part of the process
 - ▶ Long-term goals are particularly important
 - ▶ Hold yourself accountable to the goals and milestones set.
 - ▶ If not met, understand why and say so
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Independent Development Plan for Clinical Research

Date: _____

GOALS:

Long-term

Mid-term

Short-term

RESEARCH:

Current grant funded projects:

Current research % effort distribution:

Other ongoing research projects:

Manuscripts published/submitted in the past year:

Manuscripts in draft form currently (list approx. timeline to submission, issues that you're having)

Other research activities including manuscript reviews, grant reviews, collaborations:

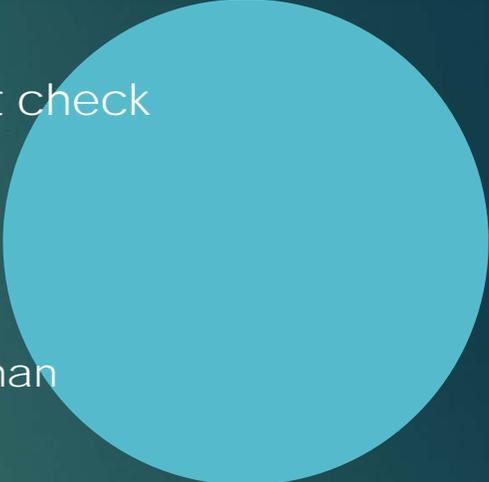
FUTURE DIRECTIONS:

Planned grant submissions

Brainstorming ideas for other grants:

To be done prior to our next meeting:

Other hints



- ▶ Writing: set dedicated times to write. Turn off email. Don't check clinical messages. Go offsite if need be.
- ▶ Discuss writing expectations with your mentor
 - ▶ In general, I prefer bulleted outlines and shell tables rather than complete paragraphs in first draft
 - ▶ Perfect is the enemy of good
 - ▶ I will shred it, regardless, so spend less time on the first draft and get it to me sooner

Protecting your time with mentor help

- ▶ Ask if you can refer/discuss requests for your time with them
 - ▶ An advocate mentor can be very helpful with requests made from chairs
- ▶ Never say yes to ANYTHING in the hallway
- ▶ Say no with alternatives, yes with caveats.
- ▶ Ask for help in prioritizing your tasks.
 - ▶ They likely don't know all of what you do