Advice for Structuring the Mentoring Process

1. Preparing Phase

a) Encourage potential mentees to talk with people you are currently mentoring or have mentored in the past. These individuals can offer firsthand insight into your mentoring style.

b) Whenever feasible, both mentors and mentees should have a say in the match.[1,2] In a study of formal mentoring programs, mentors' and mentees' perceived level of input into the matching process was positively correlated with their ratings of mentorship quality and satisfaction.[3]

c) If you need to decline an invitation to become someone's mentor, be kind but also be clear so as to prevent misunderstanding. Explain why you believe the individual should seek a different mentor and suggest alternative sources of help. If you are referring them to another mentor, check first with that person to see if he/she has the time and interest to take on this role.[4]

2. Negotiating Phase

a) Mentees may not always know what they can realistically expect from their research mentors. Ask reflective questions or use a written tool, such as a mentorship compact, to elicit your mentees' expectations and delineate yours. Be honest about what you can offer a mentee and what performance standards you expect.

b) Consider asking your mentees to create an individual development plan (IDPs). IDPs prompt mentees to reflect on their goals and what they need to achieve them. Most IDPs include some type of self-assessment to elucidate a mentee's strengths, weaknesses, and potential challenges to meeting their goals. With this information in hand, you can work together to develop a personalized mentorship plan.

c) Make it a habit to revisit expectations, goals, and timelines with your mentees. It's unlikely these will remain static, especially during a more prolonged mentoring period such as graduate school. Trainees may need to adapt their goals in response to changes in the employment market or new research interests. Faculty members may need to adjust their timelines in response to changes in assigned duties, work environment, or personal life.

3. Cultivating Phase

a) Studies have found a correlation between frequency of contact and satisfaction with the mentoring relationship.[5,6] Although a lot of mentoring can happen in group settings such as research team meetings, these are no substitute for one-on-one focused time with your mentees.

b) Before a mentoring meeting, create some meeting objectives and share them with your mentee. Alternatively, consider asking your mentee to set the agenda. Clarify if any pre-work needs to be done ahead of time for you to get the most out of the meeting. For example, your mentee might prepare a list of goals for the next few weeks, or you might read a section of your mentee's manuscript.

c) Start the meeting with a personal and professional check-in to see what other issues might be impacting your mentee. Consider making topics such as work-life balance or satisfaction with the work environment a standing item for each meeting and for every mentee. Also, routinely invite feedback on your approach to mentoring.

d) Before the meeting ends, ask your mentee if there is anything else that would be helpful to discuss. This allows space for discussing unforeseen challenges or broaching more sensitive topics.

e) It is important to connect with your research mentees outside of formal meetings, be this emailing information about relevant opportunities or chatting at larger gatherings. Engaging with your mentees in public settings can help affirm your commitment to them and signal to others that you are invested in their success.

4. Closing Phase

a) At some point, the need for mentoring will be surpassed. Know when to let go of your research mentees. Their growth and independence is a sign of your success as a mentor. Nudge your mentees to move on when you've offered all you can and are confident in their readiness to advance. Some mentees will need your explicit vote of confidence to take the next step.

b) Keep an eye out for signals that there might be problems in your mentoring relationships.11 Ongoing 'check-ins' about the relationship and open communication between you and your mentee can help keep the relationship positive and productive.

c) Work with your mentees to develop a plan for finishing key projects (including publications) as they transition out of the formal relationship or training program. This will ensure that important knowledge about projects is not lost when the mentee leaves your research group. It is especially important to reach agreement on what aspects of your team's research (ideas, data, methods) will remain with you, and which your mentees can use and explore freely in building their own research program.

d) Discuss what types of assistance you are willing to provide in the future to your mentees (for example, letters of recommendation, periodic career advice, sharing of research resources). Continue to be their sponsor by forwarding opportunities that might be beneficial to your mentee. Maintain a relationship by periodically checking in with your former mentees at conferences, through email, or by exchanging holiday cards.

References

1. Yehia BR, Cronholm PF, Wilson N, Palmer SC, Sisson SD, Guilliames CE, Poll-Hunter NI, Sánchez JP. Mentorship and pursuit of academic medicine careers: a mixed methods study of residents from diverse backgrounds. *BMC Medical Education.* 2014;14:26.

2. Burnham EL, Fleming M. Selection of research mentors for K-funded scholars. *Clinical and Translational Science*. 2011;4(2):87-92.

3. Allen TD, Eby LT, Lentz E. Mentorship behaviors and mentorship quality associated with formal mentoring programs: closing the gap between research and practice. *Journal of Applied Psychology*. 2006;91(3):567-78.

4. Bonetta L, ed. *Training Scientists to Make the Right Moves: A Practical Guide to Developing Programs in Scientific Management*. 2nd ed. Chevy Chase, MD: Howard Hughes Medical Institute and Burroughs Wellcome Fund; 2006:97-112. http://www.hhmi.org/developing-scientists/making-right-moves. Accessed March 20, 2018.

5. Ripley E, Markowitz M, Nichols-Casebolt A, Williams L, Macrina F. Training NIH K Award Recipients: The Role of the Mentor. *Clinical and Translational Science*. 2012;5(5):386-393.

6. Wasserstein AG, Quistberg DA, Shea JA. Mentoring at the University of Pennsylvania: Results of a faculty survey. *Journal of General Internal Medicine*. 2007;22(2):210-214.