Effective Mentorship in Research

Troy Moon
Vanderbilt University Medical Center

Let us know how access to this document benefits you.
Follow this and additional works at: https://escholarship.umassmed.edu/liberia_peer

Part of the Family Medicine Commons, Health and Medical Administration Commons, Infectious Disease Commons, Medical Education Commons, and the Translational Medical Research Commons

Repository Citation

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in PEER Liberia Project by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.
Effective Mentorship in Research

PEER Liberia Research Workshop Series
Troy Moon, MD, MPH
Describe characteristics of a Mentor?

What is the difference between a Mentor and a Supervisor?
Why is mentoring important?

Enhances mentee productivity, self-efficacy and career satisfaction
(Garman et al., 2001; Feldman et al., 2010; Cho et al., 2011; Fleming et al., 2012)

Strongly influences (predicts) the success of research trainees
(Shea et al., 2011; Steiner et al., 2004)

Strengthens decision-making around academic persistence and degree attainment
(Gloria and Robinson Kurpius, 2001; Solorzano, 1998)

Improves retention of junior faculty in higher education
(Nagda et al., 1998; Daley et al., 2006; Ries et al., 2009)
What are the barriers?

1. Lack of experience and confidence
2. Lack of time
3. Lack of institutional rewards
4. Lack of financial rewards
5. Lack of classroom structure
6. ... misalignment with the faculty identity

Henderson and Dancy, 2007; Henderson et al., 2011; Brownell and Tanner, 2012
Five Skills for effective research mentoring

**RESEARCH SKILLS**
- Developing disciplinary research skills
- Teaching and Learning disciplinary knowledge
- Developing technical skills
- Accurately assessing mentees’ understanding of disciplinary knowledge and skills
- Valuing and practicing ethical behavior and responsible conduct of research

**PSYCHOSOCIAL SKILLS**
- Providing motivation
- Developing mentee career self-efficacy
- Developing mentee research self-efficacy
- Developing science identity
- Developing a sense of belonging

**DIVERSITY/CULTURAL SKILLS**
- Advancing equity and inclusion
- Being culturally responsive
- Reducing the impact of bias
- Reducing the impact of stereotype threat

**SPONSORSHIP SKILLS**
- Fostering mentees’ independence
- Promoting professional development
- Establishing and fostering mentee professional networks
- Actively advocating on behalf of mentees

**INTERPERSONAL SKILLS**
- Listening actively
- Aligning mentor and mentee expectations
- Building trusting relationships/honesty

Pfund et al. 2016
Some mentoring tips

1. Listen patiently and be constructive
2. Build a relationship and share yourself
3. Don’t abuse your authority or be overbearing
4. Nurture self-sufficiency
5. Establish “protected time” together
6. Provide introductions
Developing a mentoring philosophy
“Your mentoring philosophy is a statement that explains and justifies the way you approach personal and professional relationships with students as you guide their development into professionals.”

*Entering Mentoring, 87-88*
Common components of mentoring philosophies

Remember, every mentoring philosophy will be unique to the mentor’s own experiences, beliefs, and context. The following slides present suggestions for what to include in your own mentoring philosophy.
Mentoring philosophy components

<table>
<thead>
<tr>
<th>Personal approach</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is your personal approach to mentoring?</td>
<td>My personal approach to mentoring is flexible. With some mentees I am hands-on, with others I am hands-off.</td>
</tr>
<tr>
<td>Why did you choose this approach?</td>
<td>I chose this approach because I believe that every mentee has distinct needs, and requires varying degrees of guidance.</td>
</tr>
</tbody>
</table>
My overall goal as a mentor is to provide the support necessary for my mentees to flourish professionally and academically. I chose this goal because it is the responsibility of the mentee to define what professional and academic success is for themselves personally.
### Mentoring philosophy components

<table>
<thead>
<tr>
<th>Personal beliefs</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>How are your personal philosophies/beliefs similar to your mentoring philosophy?</td>
<td>My personal philosophy is to “treat all people with respect regardless of their background” is present in all aspects of my mentoring philosophy.</td>
</tr>
<tr>
<td>How do your personal philosophies/beliefs differ from your mentoring philosophy?</td>
<td>My personal philosophy to go out of my way to assist others must be put on hold in certain mentoring situations, as the mentee must learn to do for themselves.</td>
</tr>
</tbody>
</table>
### Mentoring philosophy components

<table>
<thead>
<tr>
<th>Barriers/Challenges</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do you personally identify as potential challenges and/or barriers to having a successful mentor-mentee relationship?</td>
<td>Potential challenges/barriers:</td>
</tr>
<tr>
<td>1) Lack of <em>communication</em> between mentee &amp; myself</td>
<td>1) Lack of <em>communication</em> between mentee &amp; myself</td>
</tr>
<tr>
<td>2) <em>Transparency</em> and <em>honesty</em> issues</td>
<td>2) <em>Transparency</em> and <em>honesty</em> issues</td>
</tr>
<tr>
<td>3) Failure to clearly define <em>roles/responsibilities</em> at the beginning of the relationship</td>
<td>3) Failure to clearly define <em>roles/responsibilities</em> at the beginning of the relationship</td>
</tr>
</tbody>
</table>
## Supervisor vs. Mentor

<table>
<thead>
<tr>
<th>Supervisor</th>
<th>Mentor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task-Oriented</td>
<td>Mutual relationship</td>
</tr>
<tr>
<td>Deadlines</td>
<td>Long-term development</td>
</tr>
<tr>
<td>Heirarchical</td>
<td>Planner</td>
</tr>
<tr>
<td>Limited until completion of the research</td>
<td>End goal is mentee independence from mentor</td>
</tr>
</tbody>
</table>
# Roles of Mentors and Mentees

<table>
<thead>
<tr>
<th>Mentor</th>
<th>Mentee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisor</td>
<td>Communicator</td>
</tr>
<tr>
<td>Teacher</td>
<td>Active Listener</td>
</tr>
<tr>
<td>Supporter</td>
<td>Planner</td>
</tr>
<tr>
<td>Sponsor</td>
<td>Learner</td>
</tr>
</tbody>
</table>
Where can problems arise in this relationship?

1. Lack of experience and confidence
2. Lack of time
3. Lack of institutional and financial rewards
4. Overly personal or controlling mentor
5. Lack of classroom structure
6. Differences in beliefs, values, and practices

Henderson and Dancy, 2007; Henderson et al., 2011; Brownell and Tanner, 2012
Issue 1: Inaccessible Mentors

Mentors are inaccessible and seem to lack commitment. They do not respond to emails and regularly miss meetings.

Raise this issue with the mentor/other superiors. Remember that mentors have agreed to this level of commitment!

Propose to touch base in person or by phone, at regular intervals.

Other possible solutions
Issue 2: Unmotivated Mentees

The mentor thinks that the mentee lacks motivation and commitment to put in the grueling work required to succeed in academia, and has a real chance of failing.

Try to discern why the mentee seems to be lacking commitment – identify the underlying issue and help resolve it.

Other possible solutions
Issue 3: Inadequate Direction

The mentor provides **too much help**, which stalls a mentee’s independence or provides **too little guidance**, which causes the mentee to flounder.

- The mentee should talk to peers to get a better idea of the guidance they are receiving.
- After the mentee has a better understanding, they should raise their concerns with their mentor.
Issue 4: Ethical Concerns

Both parties have engaged in unethical, manipulative behavior (mentor denies mentee authorship, mentee engages in plagiarism, mentor/mentee falsifies data etc.)

Both parties should attempt to observe the Code of Ethics, as closely as possible

Both parties should undergo proper training to prepare themselves for their roles

(Weil, 2001)
Issue 5: Romantic Attraction

The mentoring relationship between the mentor and mentee is complicated by romantic and/or sexual attraction.

The mentor is an authority figure in the relationship and should ensure that the relationship remains professional.

Instances of sexual harassment should be reported to JFK leadership and addressed using the code of conduct.

(Morgan, 2008)
Best Practices to Resolve Mentoring Conflicts

1. Identify an appropriate space for discussion
2. Agree to ground rules
3. Clearly describe your perspective on the situation and your needs
4. **Listen** to the other person’s perspective
5. Be flexible in creating a solution that works for both the mentor and mentee
Common challenges to mentoring: inaccessible mentors, unmotivated mentees, inadequate direction, ethical concerns, and romantic attraction

It is essential to identify positive practices to resolve mentoring conflicts

Mentoring conflicts can be resolved through clear communication, flexibility, compromising, and setting clear goals and expectations
Fostering Independence in the Mentoring Relationship

Dr. Trevor Kaile and Dr. Selestine Nzala
Independence in the Mentoring Relationship

Throughout the course of the mentoring relationship, the mentor should foster independence in the mentee – encouraging them to work independently and gradually become fully autonomous, not relying solely on their mentors for support.

(J. Jones, 2017)
Role of Mentors in Fostering Independence

- Mentors should encourage mentees’ professional development
- Mentors should foster mentee professional networks and guide them to establish new relationships
- Mentors should actively advocate on behalf of their mentee
Mentor Traits that Promote Independence

**Trust:** Encourage and demonstrate trust in your mentee. When beginning different projects, do not treat them as your competitors but rather as colleagues.

**Foresight:** Identify milestones in the mentoring relationship that will eventually lead to mentees’ independence; set timely goals to help them achieve these milestones.

**Ability:** Gain experience, publish independent work in your own field, and develop professional networks that will later help your mentees. Serve as their role-model.
Mentee Traits that Promote Independence

**Persistence:** The most independent young researchers require tenacity, drive, and the willingness to hang in there (Hochella, 2007)

**Confidence:** Independent mentees “have seen success and believe that they can do it too” - they don’t worry too much or are easily intimidated (Hochella, 2007)

**Flexibility:** “The ability to handle ambiguity and uncertainty with some equanimity, even to embrace it, is really critical.” (Thoennessen, 2007)
# Milestones for Independence

<table>
<thead>
<tr>
<th>Time</th>
<th>Mentor Responsibilities</th>
</tr>
</thead>
</table>
| Beginning of relationship   | • Set expectations of the relationship  
• Include mentees in orientation  
• Share non-work-related aspects of lives to develop a relationship and better understand one another  
• Share strategies and provide feedback on observations                                                                            |
| Monthly                     | • Mentee shadows mentor in day-to-day activities  
• Regular monthly meetings with mentee                                                                                                 |
| Year Two                    | • Encourage mentee to lead meetings and take initiative  
• Continue frequent feedback                                                                                                           |
| Yearly & Until End of Mentorship | • Frequently revisit expectations and goals                                                                                                 |

(Camancho, 2015; Cambridge International Education Teaching and Learning Team, 2018; 2017-18 Teachers Handbook, Dallas ISD)