



WSU Intermediate Mentoring Workshop
Session #1, 05/21/2025—Finding Your Place in a Mentoring Triad

Overarching Workshop-level Objective:

- Develop your STEM research mentorship practice by studying mentorship tools and case studies within a supportive learning community

Session Objectives:

1. Learn about tools for developing learning community and relationships and building confidence in the research ecosystem
2. Identify your place in “mentoring triads” by exploring case studies

ACTIVITY #1: ENGAGE—Use value affirmations in relationship building

Please prepare for a brief introduction:

- Your Name and research interest
- Identify one characteristic you value in a good mentor
- Why do you want to learn more about mentoring?

BEFORE we move on....What makes folks more likely to share honestly?

ACTIVITY #2: EXPLORE—Align Expectations in Learning Relationships

Community Agreements help to Align Expectations

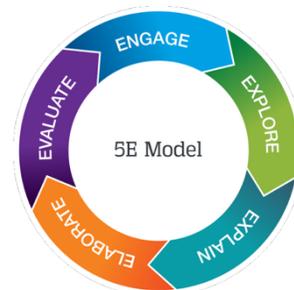
Facilitation Community Agreements
Any changes or additions?

We will...

1. Value everyone’s participation and be in choice to participate.
2. “Share the air” to encourage broader participation.
3. Help others take the risk to voice new ideas or raise challenging questions.
4. Listen to understand first, then consider making a response.
5. Trust others intentions, while naming the impacts of their statements.
6. Ground contributions to our own experiences with “I” and “me” pronouns.
7. Keep stories shared confidential, allowing lessons learned to leave the room.

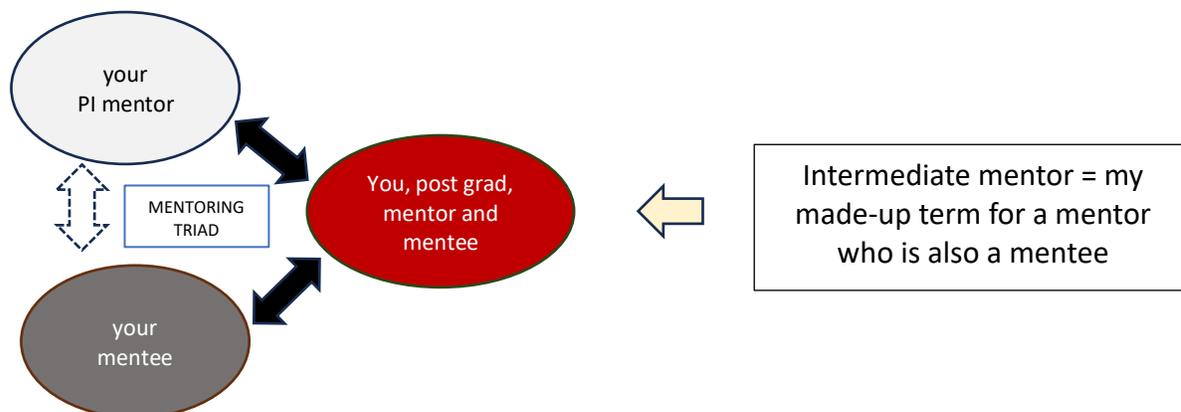


ACTIVITY #3: EXPLAIN: Finishing Introductions





ACTIVITY #4: ELABORATE—Use cases studies to introduce *mentoring triads*



Case Study #1

From “*Entering Mentoring,*” Center for Improvements in Mentored Experiences in Research

Case Study

The Slob

A graduate student mentor was frustrated because her undergraduate student mentee was not running successful experiments. While the undergraduate student had great enthusiasm for the project, each experiment failed because of some sloppy error: forgetting to pH the gel buffer, forgetting to add a reagent to a reaction, or forgetting to turn down the voltage on a gel box.

After a month of discussions, and careful attempts to teach the undergraduate student habits that would compensate for forgetfulness, the graduate student mentor was ready to give up. She spoke with her faculty adviser (the PI in the lab) and asked for advice, hoping that she could fix the problem. The adviser offered to work with the undergraduate student mentee. When the undergraduate student walked into his office the next day, the faculty adviser said, “I hear you’re a slob in the lab. You gotta clean up your act if we’re going to get any data out of you.” Seeing the crushed and humiliated look on the student’s face, he quickly added, “I’m a slob too—that’s why I’m in here pushing papers around and not in the lab doing the hard stuff like you guys!”

Guiding Questions for Discussion:

1. If you were the mentee, how would you feel?
2. If you were the mentor, how would you feel?
3. If you were the faculty adviser, how would you feel?
4. If you were the adviser, how would you have handled this situation?



Case #2: Absent Mentor is from “Entering Mentoring”

Learning Objective:

Articulate the ethical issues they need to discuss with their mentees. Manage the power dynamic inherent in the mentoring relationship.

Case Study Absent Mentor

A professor often mentored three or four students over the course of a summer, each one working on a different field project. Unfortunately, the professor was so busy with all of her projects that she rarely stayed at the field station, leaving her undergrads to “fend for themselves” in her absence. Her students often had to borrow items from other projects, broke equipment, or generally relied on other graduate students for support. One day, a few of us got fed up with the responsibility of dealing with her students, so we called a meeting with the students and explained some common courtesy rules for living and working at a field station. Of course, their mentor was not around at that time, but we were polite and tried to be effective and straightforward with the students. Later, we got an angry phone message from their mentor saying that we should focus on our own projects and leave her students alone.

Guiding Questions:

1. What are the main themes raised in this case study?
2. How does this situation affect the research group environment?
3. If you were the mentor, how would you feel? If you were the graduate students, how would you feel?
4. If you were the undergraduates, how would you feel?
5. List three concrete strategies for dealing with this issue.

Bonus question for discussion:

1. Compare and contrast the mentoring in the case studies. What common themes emerge?
2. Which of the “mentoring triads” (numbered 1-8) would be best for inexperienced mentees?
 - For full story see: Ceyhan, Tillotson (2020) <https://doi.org/10.1187/cbe.19-09-0183>



FIGURE 1. UR mentoring triad structures. U, undergraduate researcher; F, faculty; and P, postgraduate. Lines represent a direct interaction (i.e., link) between members of the undergraduate student’s research experience team (Aikens *et al.*, 2016, p. 3).



ACTIVITY #5: EVALUATE—Readings and Tools for Building Mentoring Triads

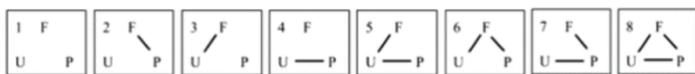


FIGURE 1. UR mentoring triad structures. U, undergraduate researcher; F, faculty; and P, postgraduate. Lines represent a direct interaction (i.e., link) between members of the undergraduate student's research experience team (Aikens *et al.*, 2016, p. 3).

A. Mentoring Triad studies:

Ceyhan, Tillotson (2020) <https://doi.org/10.1187/cbe.19-09-0183>



B. Heavier theory

Montgomery, Page “Mentoring beyond Hierarchies: Multi-Mentor Systems and Models”
<https://nap.nationalacademies.org/resource/25568/Montgomery%20and%20Page%20-%20Mentoring.pdf>

C. Tools for developing mentoring relationships and scientific identity. **At end of this PDF.**

1. “Prioritizing Research Mentor Roles”
 - a. Try the Graduate level tool as if you are the mentee
 - b. Try assigning the undergraduate or graduate level tool as the mentor
2. “Mentor Biography”
 - a. This is a tool for a mentee to interview a mentor
 - b. What would make you more comfortable using this in a mentoring team as the:
 - i. Mentee?
 - ii. Mentor?

What will you do before the next meeting? More stars is more recommended

- * Ceyhan, Tillotson (2020) <https://doi.org/10.1187/cbe.19-09-0183>
- Montgomery, Page “Mentoring beyond hierarchies...”
- ** “Prioritizing Research Mentor Roles”
- *** “Mentor Biography”

PRIORITIZING RESEARCH MENTOR ROLES

Undergraduate

Learning Objectives

Trainees will:

- ▶ Identify the different roles that research mentors can play and prioritize those roles based on needs.
- ▶ Establish and align expectations with a mentor(s).

Consider the different roles of research mentors listed below. Add additional roles that may be missing from the list. Cut out the boxes and rank these roles according to your priorities and expectations of a research mentor.

Teach by example
Train you in disciplinary research
Improve your writing and communication skills
Provide growth experiences
Help build your self-confidence as a researcher
Model and promote professional behavior
Inspire
Offer encouragement
Assist with advancement of your career
Facilitate networking with colleagues
Help build the bridge between research and application (i.e., industry, clinical work, etc.)
Provide guidance into future career options
Other:
Other:
Other:

Contributed by A. Bramson, C. Pfund, and A. R. Butz with information from Branchaw, J. L., Pfund, C., and Rediske, R. (2010). *Entering Research: A Facilitator's Manual*. New York: W.H. Freeman & Co.

PRIORITIZING RESEARCH MENTOR ROLES

Graduate

Learning Objectives

Trainees will:

- ▶ Identify the different roles that research mentors can play and prioritize those roles based on needs.
- ▶ Establish and align expectations with a mentor(s).

Prioritize the roles you expect your mentor to perform with #1 being the most important role. Consider whether your primary research mentor effectively addresses each of your top 5 priorities. List others who could serve these roles in during your graduate school training.

Role	Priority	Does your primary research mentor do this effectively?	Who else could serve this role in your training during graduate school?
Teach by example			
Train you in disciplinary research			
Improve your writing and communication skills			
Provide funding			
Provide growth experiences			
Help build your self-confidence as a researcher			
Promote professional behavior			
Inspire			
Offer encouragement			
Assist with advancement of career			
Facilitate networking with colleagues			
Other:			
Other:			

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MENTOR BIOGRAPHY

Learning Objectives

Trainees will:

- ▶ Begin to establish a positive relationship with a research mentor by getting to know them as a researcher and a person.
 - ▶ Learn about the diversity of experiences in research careers by comparing a mentor's experiences to their own.
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Interview your mentor using the questions below and at least three of your own questions. Take notes and write a two or three paragraph biography about your mentor that summarizes the information you learned in your interview.

Questions to Ask your Mentor

1. Where did you grow up and what was it like there?
2. Why did you decide to become a researcher?
3. What challenges or obstacles did you have to overcome in order to be successful in your field?
4. What keeps you motivated to do research?
5. Where did you do your training and why did you decide to attend those institutions? (undergraduate degree, graduate degree, etc.)
6. Why did you decide on your disciplinary/research area? Have you done research in any other areas? If so, which?
7. What classes do you currently teach, or have you taught? Which was your favorite and why?
8. Outside of your research responsibilities, what else do you do as part of your job?
9. What do you do when you are not at work?

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Your Questions:

- 1.
- 2.
- 3.

Write a two or three paragraph biography about your mentor summarizing the information obtained in your interview.