

Engaging Undergraduates in Research: Mentoring in ways that are equitable and inclusive

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In partnership with: MoES DEI Committee



“An essential and distinctive feature of award-winning undergraduate research mentoring is developing an authentic interest in the whole student (rather than just the research project).”



WALKINGTON, STEWART, HALL,
ACKLEY, & SHANAHAN (2019)

“...A SERIOUS, COLLABORATIVE INTERACTION BETWEEN THE FACULTY MENTOR AND THE STUDENT, IN WHICH THE STUDENT IS INTELLECTUALLY ENGAGED IN THE SCHOLARLY PROBLEM OR PROJECT. THE FACULTY MENTOR GUIDES THE STUDENT INTO DEEPER INTELLECTUAL ENGAGEMENT OVER THE COURSE OF THEIR COLLABORATION. THE FACULTY MENTOR’S ATTENTION IS EQUALLY FOCUSED ON THE STUDENT’S DEVELOPMENT AND ON THE RESULTS OR PRODUCT OF THE SCHOLARLY OR CREATIVE PROJECT”

Undergraduate Research Mentoring Defined

Osborn and Karukstis (2009)

**Destination 1:
Recruiting
and Selecting
a Student
Mentee**

Navigating PI approval

Creating a position

Recruitment practices

Selection processes

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Home > Undergraduate Research Program > Research mentors > Post a research opportunity

Post a research opportunity

POST AN OPPORTUNITY >

The Undergraduate Research Program (URP) is committed to helping students participate in the UW's world-class research enterprise under the guidance of faculty mentors. Listing your research opportunities or indicating your willingness to be an undergraduate research mentor is a great help in this work. Thank you for your dedication to undergraduate learning through research!

Frequently Asked Questions

I don't have any formal undergraduate research positions open but I am willing to mentor undergraduate students. Can I still post in the database? 

Research mentors

Post a research opportunity

Mentoring resources

Funding

Awarding credit

Easel requests

FAQ

COVID-19 FAQs FOR UNDERGRADUATE RESEARCH

Find answers to frequently asked questions related to undergraduate research during the COVID-19 pandemic.

Posting a Research Opportunity

What you'll need to post:

- > **Contact Info**
- > **Research/Project Name**
- > **Description or willingness to develop a project**
- > **Student learning benefits**
- > **Minimum requirements**
- > **Auto-remove Date**
- > **Location**
- > **Paid, Work study?**
- > **Research Areas (up to 4)**

**Destination 1:
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Destination 1: Recruiting and Selecting a Student Mentee

Navigating PI approval

Creating a position

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Selection processes



Breakout 1: You posted a research position on the URP database and three students reached out with interest. Review the 3 brief student profiles and use the guiding questions for your discussion.

**Destination 2:
Before
Meeting the
Student
Mentee**

Refining the project

Funding considerations

Prepare clear expectations

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Refining the project

Funding considerations

Prepare clear expectations

Funding opportunities for undergraduates



Mary Gates
Endowment



WRF/Levinson



Federal Work
Study



URP co-hosted
STEM Summer
Programs



Other Summer
Programs

**Destination 2:
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Meeting the
Student
Mentee**

Refining the project

Funding considerations

Prepare clear expectations

Communication & Work Plan

- > **Work schedule**
- > **Supervision & ongoing communication**
- > **Meeting schedule**
- > **Orientation & Onboarding**
- > **Record keeping**
- > **Learning Goals & Benchmarks**

Sample Mentoring Agreement

- > **What you expect from undergraduate researchers**
- > **What undergraduate researchers can expect from you**

Destination 3: Interacting with Mentees

**Personalized attention,
empathy, and allyship**

Professional development
and dissemination

Remote mentoring

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Remote mentoring

Considerations on Mentoring Remotely

- > Think of ways to structure opportunities for connecting with others in the research team.
- > Having multiple mentors can help build students' network, gain perspective, and get advice from different roles.
- > In a remote setting it's important students know when and how you would like to be able to reach them. What hours would you like them to be accessible online?

Strategies for Remote Mentoring

Developing Expectations

Mentors and students should set expectations of each other early on (refer to communications and work plan handout).

- Questions to consider: When do they check in? How often? Who do they check in with?
- Timeline with benchmarks

Strategies for Remote Mentoring

Mentor Communication & Availability

- Onboarding is key!
- Frequent 15-minute check-ins
- Provide space and time for students to reach out
- There should be a mentor they are checking in with regularly.
- Set up routine for students to send updates on their work progress.
- Use platforms other than email (e.g. Slack, Microsoft Teams)

Strategies for Remote Mentoring

Reading Literature

- Summarizing what you would like students to get from reading papers.
- Reading a scientific/technical paper together, explain how you approach it and summarize your takeaways can help demystify the process for students, and set them on the path of more independent reading.
- Having several students read papers together and discuss them as a journal club can be very beneficial, and good practice.



Breakout: Professional Development

What are some professional development topic areas you'd like to incorporate for students you work with?

Are there any resources that you know of that can support these topic areas?

What adaptations would you incorporate for remote settings?

Mentoring Tools

Make them your own!

- > Communications & work plan
- > Sample mentoring agreement
- > Sample Confidentiality agreement
- > Exit interview

“I lay out what I think are really important problems in the field, then ask what problem are you interested in solving? Together we sit down to try to design some research that tests that problem. And I think the critical feature is that **they have ownership of it**...they feel like it's their project, but... I've gently swayed them in a particular direction because I'm trying to get a program of research going too.”



“...when I am open with students about what I don't know about what I'm pursuing, the students get much more interested in that question themselves, so then we can kind of find out together.”



“I do have to say to them at the end of this week ‘what do you know how to do this week that you didn’t know at the beginning of this week?’ So, forcing that process of reflection on the students, not just about the outputs in terms of experimental data...”



Questions?

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If you want to be involved in MoIES Outreach contact Phuong Nguyen: nguyennp@uw.edu