Inclusive Mentoring

Bec Batchelor, Diana Acero-Allard, Anne Gold

Research shows that students with mentoring relationships are more productive, happier, efficient & successful

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Who are we?

Geolatinas mission is to embrace, empower, and inspire Latinas to pursue and thrive in careers in Earth and Planetary Sciences.

- Mentoring Initiative

Diana Acero-Allard
Geologist in Geothermal
GEOLATINAS

https://geolatinas.weebly.com/
Who are we?

Rebecca Batchelor
CIRES Education and Outreach

RESOURCES FOR RUNNING AN REU

Here you'll find resources for principal investigators and site managers on the essentials of running an REU. You'll also find some information for undergraduate students.

Topics include:
- Strategies for recruiting students
- Developing inclusive applications
- Training mentors
- Preparing for a conference
- Writing a résumé or CV

https://ncar.ucar.edu/what-we-offer/education-outreach/faculty-resources/geo-reu-resource-center
Who are we?

Anne Gold
CIRES Education & Outreach Program

https://cires.colorado.edu/outreach/reccs
Where are you at today?

1. Move cursor to top of screen to get toolbar.

2. Select Annotate and then Stamp.

3. Stamp the blob who most connects with you.
Why do you want to mentor?
Mentors don’t just advise...

... they open doors
What benefits do you get from mentoring?

1) Enter URL in browser

https://pollev.com/rebecabatch501

2) Type your response (two submissions)
MENTOR BENEFITS

- Skills
- Personal satisfaction
- Relationships
- Perspective
- Career
- New experience
- Influential
- Important
Mentoring is a two-way relationship
The key to being a great mentor is to help people become more of who they already are – not to make them more like you”

~ Suze Orman
“Old Style” Hierarchical Mentoring

- Creates the next generation in your likeness
- Advances mentors’ research and goals
- Focuses on “handing on” skills, expectations, and ideals
Inclusive Mentoring

- Is relationship centered
- Values new ideas and creativity
- Holds space for conversation and shared idea generation
- Empowers learning
- Supports bringing one’s full self and experiences to their work
Getting to know a science mentee

Mentee to mentor:

- What got you interested in your research?
- How do you spend your day?
- What do you enjoy most about your work?

Mentor to Mentee:

- What got you interested in science?
- What matters to you? What motivates you?
- What skills are you trying to develop?
Be human

What was challenging along your journey?

What do you wish someone had told you way back when?

What motivates you?

What do you do in your spare time?

What scares/ intimidates/ worries you?
Share your enthusiasm!

- Share your excitement for the project with photos, videos, news, articles.
- Ground the work in the big picture - why is this important?
- Why do you do and love this work?
- What are some challenges?
Ask curious questions

What has been successful for you so far?

What motivates you?

How do you like to receive praise?

What do you do in your spare time?

What scares/intimidates/worris you?
6 KEY ACTIVE LISTENING SKILLS

1. PAY ATTENTION.
2. WITHHOLD JUDGEMENT.
3. REFLECT.
4. CLARIFY.
5. SUMMARIZE.
6. SHARE.

https://www.ccl.org/articles/leading-effectively-articles/coaching-others-use-active-listening-skills/
4 minute break-outs:

Nominate a speaker - that person should spend 1-2 minutes talking about themselves. The other should practice “Active Listening”; you may use body language, but resist the urge to interrupt or respond.

In the next 1-2 minutes the listener may ask curious questions e.g. “Tell me more about …” “What …” “How…” “When you said …”
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How did that feel?
Getting to know each other

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Why is active listening important for inclusive mentoring?
5 minute break
Remember back to when you started research...

What worked (or didn’t work) for you?
Students as researchers

- Capable of doing independent (guided) research
- Infuse energy and new ideas
- Still figuring out their career paths and whether there is a place for them in STEM
- Can feel overwhelmed
  - You both benefit from structure!
- Can really blossom in a supportive environment

How do you eat an elephant?
One bite at a time!
Defining an undergraduate project

A great undergraduate project is one that:

- feels meaningful
- is appropriately scoped for the program timeframe (experience suggests a summer project could be done by an experienced researcher in about 1-2 weeks)
- provides early success (e.g. being able to make measurements or an interesting plot early in the project)
- offers some alternate end- or extension- options.

Projects should be authentic and offer the student a chance to feel ownership.
Consider the support network

You don’t have to do everything! Consider empowering others in your group for:

- Social support
- Computing help
- Writing/poster-making support

Can you connect your student with a cohort?
The first week matters

- Where will they work?
- Who will show them around? Have lunch with them?
- Do they have a computer? Is all the software available?
- What will they do on their first day?

Most undergraduates are still intimidated and wondering if they deserve to be there

Find ways to show them that they belong
Discuss expectations: yours and theirs

This clears a path for a smoother working relationship.

Work with the intern on making a:

- Mentoring agreement
- Communication plan
- Work plan
Mentoring Agreement

- Defines expectations
- Establishes boundaries
- Provides a fall-back if problems arise

Use these prompts to clarify mentoring expectations with your student:

1. As a mentor, what expectations do you have for your mentee? (Think about communication, effort, when to reach out for help…)
2. As a mentee, what expectations do you have for your mentor?
3. How often and when will you meet?
4. What platform will you use to meet? Who is responsible for scheduling the meetings?
5. How do you prefer to be contacted outside of these meetings? (Phone, email, chat…)
6. If you are having problems in your research, what should you do?
7. Beyond your research, what topics would you like to discuss (think about careers, academia, work/life balance…)? What are the ground rules for these discussions (e.g. confidentiality, openness, truthfulness etc.)?
8. If problems arise, how will they be resolved?

We will share these examples!
Communication Plan

- Shares contact info
- Which communication methods are preferred
- Sets expectations

We will share these examples!
Tool for supporting research progress

Helps your student learn the process of thinking through research - and reassessing the process as they learn

Ensures progress toward deliverables

Provides structure for weekly check-ins

We will share these examples!
Guiding the research

- Think out loud
- Ask questions that encourage diving deeper
- Check in frequently
- Remind them how/when to reach out when they hit a snag
- Provide frequent feedback (I noticed that…)

[Image of a person working on a laptop with books]
What do you find works when you’re guiding research?
Optimal learning zone

http://smallworldadventures.blogspot.com/2013/02/the-kayaking-learning-curve-find-your.html
Coaching Questions

Your aim is not to solve problems for your mentee - it’s to empower them to solve them themselves. Try:

- Clarifying questions to seek understanding
  - *When you say _____, what does that mean?*
  - *Can you tell me more?*
- Open-ended questions to explore options
  - What?
  - How?
  - When?
- Creative questions
  - Imagine what would happen if …
  - What outcome do you want?
Provide feedback

*Practice kindness!*

A feedback method that might be helpful:

- I noticed that {observe behaviour}
- When you do this it {explain impact}
- I would like you to {set expectation}

Try not to impose your own judgement or interpretation on other’s actions.
Recognize challenges

- Racism, microaggressions, bias, harassment
- Imposter syndrome
- Money issues
- Family and health issues
- Classwork, exams, time
- Uncertainty about the future

“Your best science happens when you can use your whole brain.”
Supporting yourself and your student

More than ever, our personal and professional lives are intertwined.

- Be open about the challenges of Covid-19 and social justice issues. This is hard for all of us, and it’s better to keep that in the open.
- Be flexible with work hours
- Check-in often
- Be prepared for someone getting sick
- Practice and encourage self-care!
Mentors don’t have to be Yoda or Lucy!

Encourage students to:
- Get support from friends, family, community
- Broaden their circle of mentors
- Provide resources for counseling
Mentoring is a key part of the braided river
Have Fun!
For more information

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GEO-REU Network Resources:
https://ncar.ucar.edu/what-we-offer/education-outreach/faculty-resources/geo-reu-resource-center